

Gaming Rating

FINAL REPORT

Student Name: Usman Akhtar

Student Number: x13358421

Student Email: x13358421@student.ncirl.ie

Course Name: BSc (Honours) in Computing

Course Specialisation: Data Analytics



National
College *of*
Ireland

National College of Ireland
BSc (Honours) in Computing (Data Analytics)

Declaration cover sheet for project submission

SECTION 1 Student to complete

Name: Usman Akhtar
Student ID: x13358421

SECTION 2 Confirmation of Authorship

The acceptance of your work is subject to your signature on the following declaration:

I confirm that I have read the College statement on plagiarism (summarised overleaf and printed in full in the Student Handbook) and that the work I have submitted for assessment is entirely my own work.

Signature: _____ Date: _____

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1 Overview

The purpose of this project is to allow the end user to browse through a large collection of games and gain as much information about them as possible. There are a vast number of people right now searching, watching and playing video games on many devices. These video games are being played on consoles, PC's and portable devices. There are people who spend hours researching games, watching trailers, reading the reviews, checking the ratings and they do all this on several websites. As far as I have seen online, there doesn't seem to be a website that combines all this valuable information in one. I plan on creating website that makes it easy and efficient for people to find the perfect game for them without wasting time researching on several websites. This report describes and evaluates many key aspects of my Gaming Rating website and detailed information on how I plan to make this in the most efficient way possible. People are on the go a lot more nowadays and it would make it seamless for the user to have an application like this to be available.

2 Requirement Elicitation & Analysis Planning

2.1 Introduction

Given my history with playing and researching video games and gaining a lot of experience throughout the years, I thought it was the perfect opportunity to create a website that would progress from existing websites and considering that i know a lot about the video game industry, there's a possibility that this website, if made properly would show great interest and might even be used in a real world situation. A lot of people worldwide including myself play video games and want to have the latest games as soon as possible. I wanted to create a website that not only would allowed users to see and read real time information about video games but also help them to see which games are currently trending, what people around the world are saying about the game and hopefully this will make

it easier for them to purchase the current best game so later on they have no regrets. Implementing Ratings, Polls and Leader boards within the website, I think this would be the most efficient way to display the data and make reading the data user friendly as possible. I know there are plenty of websites available online that allow users to gain information about current trending games but I personally think that they are very limited and could do with displaying the data in more ways than one. I plan to create a website that allows users to come to a one stop site to gain all the information required about the video game.

2.2 Aims

The website was aimed to allow the end user to view information about video games, see which games are trending and being able to interact with the web page. Also, it was to allow users to create an account and login to access functions that would give an overview of their games in terms of games that have been favorited by the user and will also display valuable data in forms of charts.

Other aims of this project are:

- User friendly design which will make it simple and easy to use
- Combine data from several websites into one
- Showcase the ratings and reviews of games
- Get live twitter feeds of the tweets that are relevant to the game
- Analyse the data with the help of visualisation

2.3 Technologies

The technology used to create this website will be the following:

- PHP
- HTML
- CSS
- JavaScript

- MySQL

2.4 Requirement Elicitation Techniques

2.4.1 Survey

Survey Participants:

20 Random People

Distribution Method:

I had sent the link to random people on social media with the survey attached.

Objectives of the Survey:

These surveys were designed to gather information from the general public regardless of their background. When sending the link I had no prior knowledge if they played games often, regularly or never. The surveys will be used to identify initial requirements and to discover demand levels for certain website features

Survey One (Gaming)

What is your gender?

- Male
- Female

What is your age?

- Under 18
- 18-24
- 25-34
- 35-44
- 45 or older

What kind of video games do you like to play? Please check all that apply

- Action
- Fighting
- Sports
- Racing
- Strategy
- Multiplayer
- Arcade
- Music/Dance
- Party
- Puzzle
- Other (please specify)

Which of the following have you experienced as a result of playing video games? Please check all that apply

- Accomplishment/Competitive spirit
- Distraction from the issues of social life
- Improved identification and computation skills
- Increased productivity
- More energetic
- Relaxed and less stressed out
- Relieved from boredom
- Sharper and more mentally focused

Which device do you play games on most often?

- Game Console (XBOX, PlayStation, Wii, etc.)
- Desktop/Laptop
- Mobile phone
- Handheld console
- iPad or other tablet
- Other (please specify)

How often do you search online to find information about games?

- Daily
- Often (weekly)
- Sometimes (not regularly)
- Rarely (can't remember the last time)
- Never

Which of the following reasons describe why you like a particular game? Please check all that apply

- Fun to play
- Challenging
- Lots of levels
- Provides a quick distraction
- Unique or unusual
- Had great graphics and sound
- Other (please specify)

Which websites do you search the most to get your video game information?

- IGN
- GameStop
- PCGamer
- Wikipedia
- Other (Please Specify)

When playing with others, who do you prefer to play with?

Please check all that apply

- Random people/Strangers online
- Spouse/Significant other
- Co-workers
- Family members

- Friends met online
- Friends in person
- Other (please specify)

How often do you do the following when playing video games? Please check all that apply

- Hunt for Achievements/Trophies
- Play through the game atleast twice
- Reach the highest multiplayer rank
- Finish to 100%
- Complete single player campaign

Survey Two (Gaming Rating Website)

After reviewing the design, how likely are you to explore the website?

- Extremely likely
- Very likely
- Somewhat likely
- Not so likely

Does the website appear easy to navigate?

- Extremely easy
- Very easy
- Somewhat easy
- Not so easy
- Not at all easy

What functionalities would you like to see in a website like this?

How professional is the look of the website?

- Extremely professional
- Very professional
- Somewhat professional
- Not so professional
- Not at all professional

2.4.2 Brainstorming

Brief Overview:

This brainstorming session was designed to obtain information about the desired features and the future layout of the Gaming Rating website.

Objectives of the Brainstorming Session:

During this brainstorming session participants will be outlining their ideas for the new Gaming Rating website, hence many possible features should be acquired during the meet. All ideas brought up on the day will be recorded and saved on a mobile device for later use. Any comments made by participants will also be clearly defined in a word document.

Participants:

1) Hammad Kazmi

- DCU (Dublin City University)
- Computer Applications

2) Adebola Akintonde

- DIT (Dublin Institute of Technology)
- Pharmaceutical Healthcare

3) Sabia Ajmal

- DIT (Dublin Institute of Technology)
- Accounting and Finance

4) Maddy Ayub

- UCD (University College Dublin)
- Social Science

5) Ruqaiyah Ahmed

- DIT (Dublin Institute of Technology)
- International Hospitality Management

6) Asifa Zuhera

- DIT (Dublin Institute of Technology)
- International Hospitality Management

Meeting Location:

DIT Aungier Street

Date of Meeting:

Wednesday 2nd November 2016

Time of Meeting:

4:00pm - 5:00pm

Brainstorming Session Rules:

- 1) Participants of the brainstorming session will be requested to avoid consulting each other for possible ideas prior to the meeting taking place on 2nd November 2016
- 2) All participants should arrive at least ten minutes before the meeting begins for some light refreshments and to ensure the meeting starts on time and is efficient as possible.

- 3) During the meeting when someone is talking all other participants must remain quiet and withhold any comments in relation to the ideas being expressed
- 4) Mobile phones must be switched off before to the meeting commences
- 5) This meeting must remain professional and all participants should stay focused on the tasks which are outlined in the meeting's agenda

2.4.3 Prototyping

Objectives of the Prototype:

The prototype is the first visual representation of the Gaming Rating website. My interpretation of each functionality that I wish to include in this project will be displayed in the prototype. The results of the survey and the brainstorming session will be used to develop the prototype of the Gaming Rating website. Once the prototype is complete I will hold an interview with one of my friends where I will ask him questions about the design and will also ask him to critique the website. He could request newly desired features or alter the prototypes design which could be of great use to me. A second version of the prototype will be constructed at a later date, based on the recommendations made by people who have tested the website.

Resources Required:

- Laptop
- Mouse & Keyboard
- PHP, HTML and CSS will be used to develop the prototype
- The results of the survey, the brainstorming session, and the interviews will be used to develop the first prototype of the Gaming Rating website

Prototype Development Checklist:

- ✓ Write up the requirements based on the results of the survey analysis

- ✓ Interpret the views during the brainstorming session
- ✓ Examine the interview results and incorporate features into the prototype
- ✓ Develop a comprehensive prototype for the requirements workshop
- ✓ Implement any necessary modifications to the prototype, based on the survey analysis, brainstorming and preferences expressed during the testing of the prototype

Prototype Due Date:

19th December 2016

Prototype Date of Completion:

15th December 2016

2.4.4 Interview & Testing

Participant:

Hammad Kazmi

- DCU (Dublin City University)
- Computer Applications

Interview Location:

DIT Aungier Street

Date of Interview:

Tuesday 20th December 2016

Time of Interview:

11:00am – 12:00am

Objectives:

This interview is designed to obtain information about the Gaming Rating website prototype. Therefore the desired outcome of this interview and testing is to

identify any issues that users are experiencing and to discuss ways in which these issues can be efficiently resolved or improved.

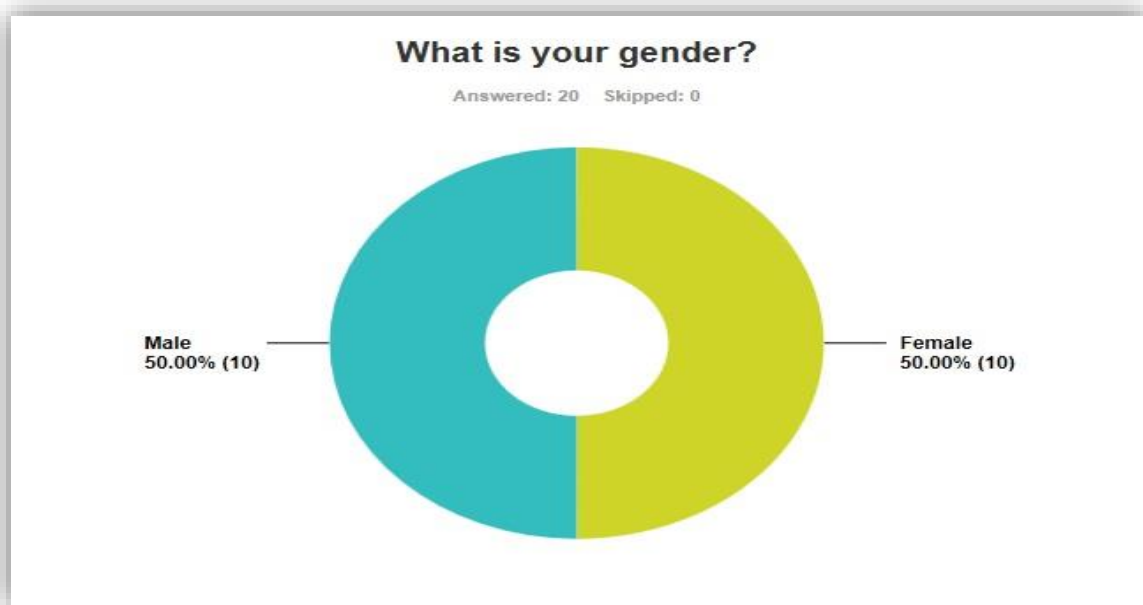
Interview Questions:

- 1) What do you think of the design of the website?
- 2) What are some of the key features, as well as design in this website?
- 3) What should I do to make this website better?
- 4) What will motivate you to begin using this website?
- 5) Are you interested in using this website?
- 6) By no means is this an innovative idea but can you agree the design is very user friendly?
- 7) What other pages would you like to see in this website

3 Requirements Elicitation & Analysis Results

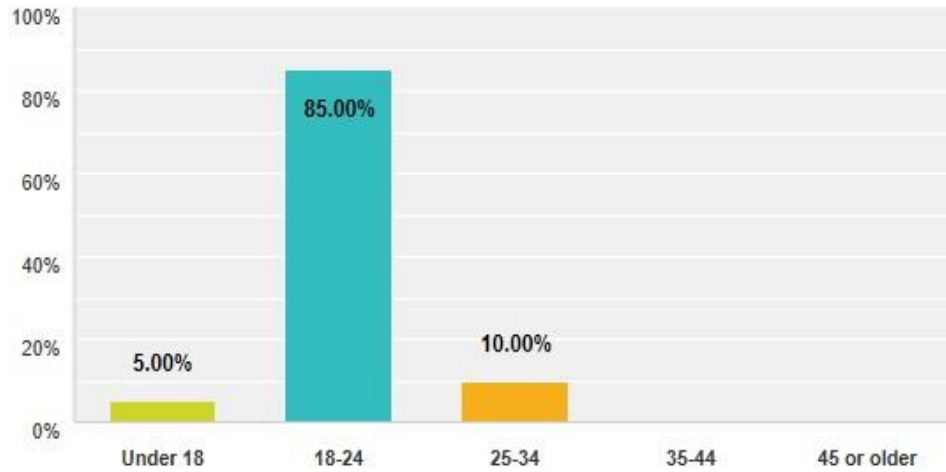
3.1 Survey

Survey One (Gaming) Results



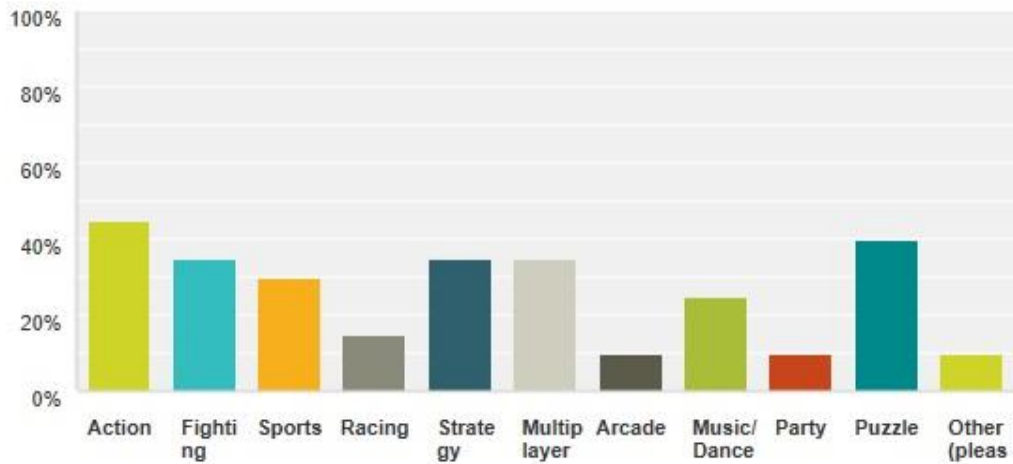
What is your age?

Answered: 20 Skipped: 0



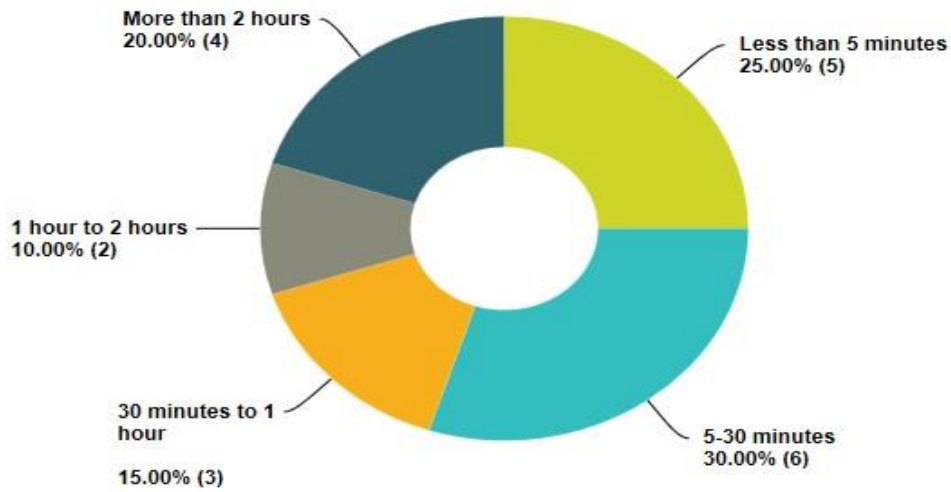
What kind of video games do you like to play? Please check all that apply

Answered: 20 Skipped: 0



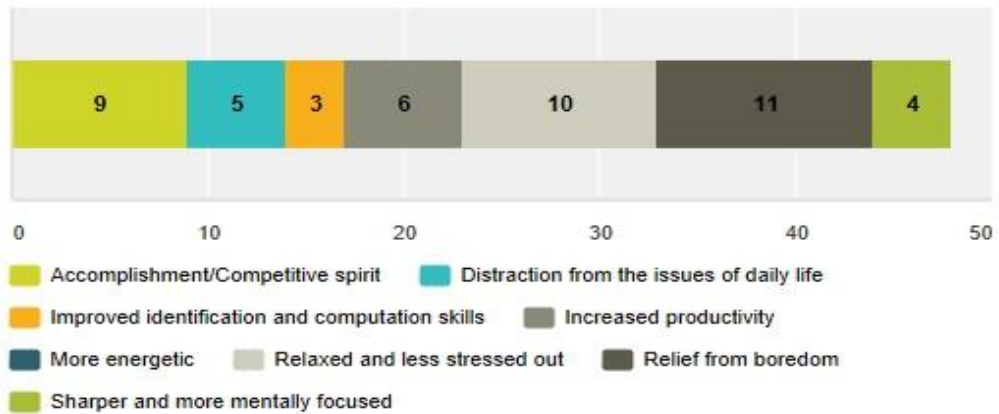
How many hours per week do you typically play games?

Answered: 20 Skipped: 0



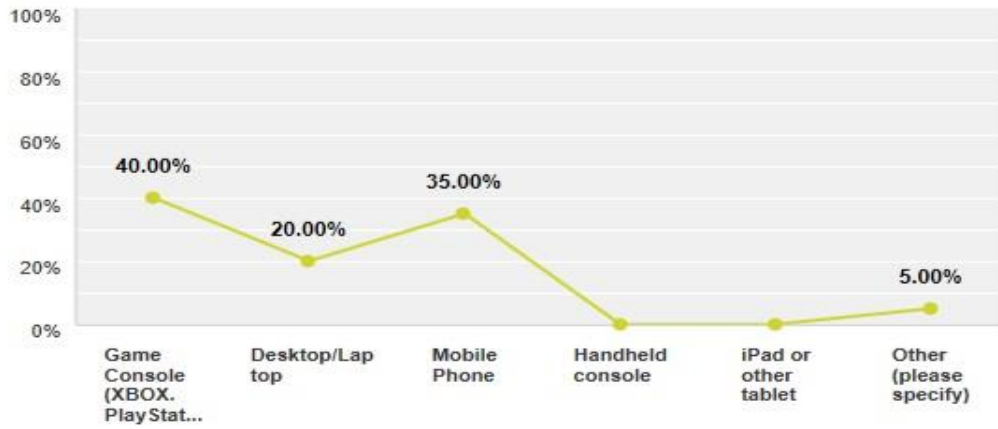
Which of the following have you experienced as a result of playing games? Check all that apply

Answered: 20 Skipped: 0



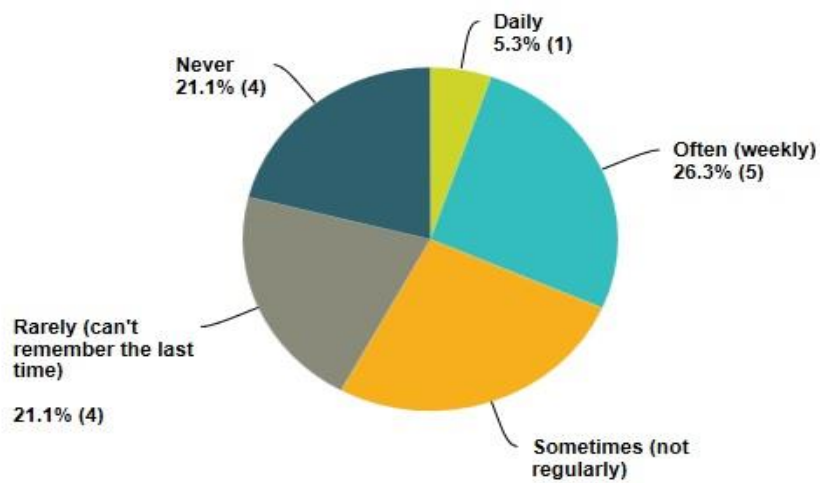
Which device do you play games on most often?

Answered: 20 Skipped: 0



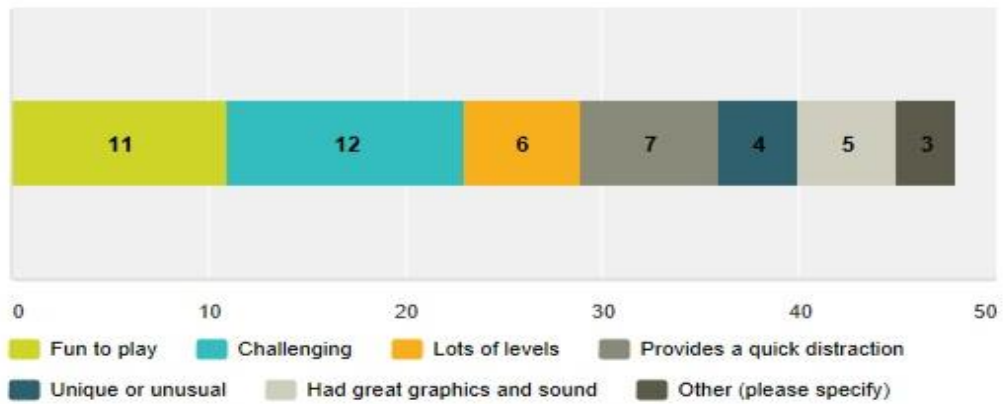
How often do you search online to find information about games?

Answered: 19 Skipped: 1



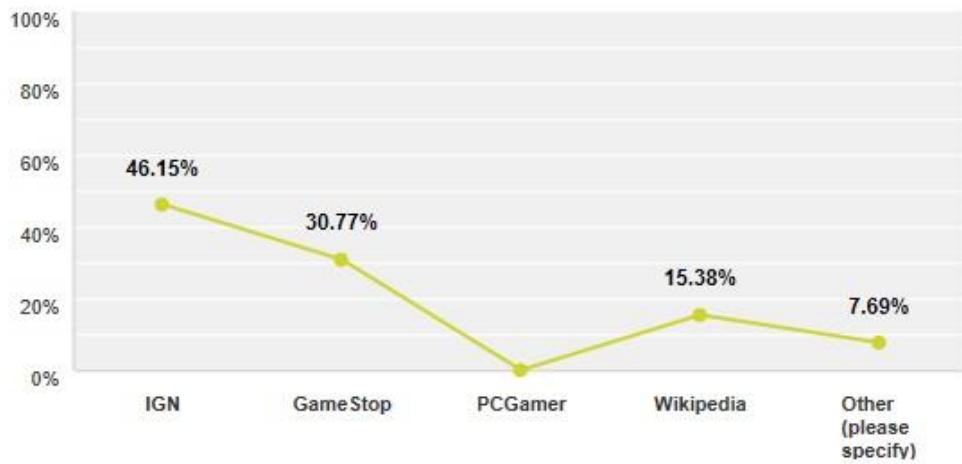
Which of the following reasons describe why you like a particular game? Please check all that apply

Answered: 20 Skipped: 0



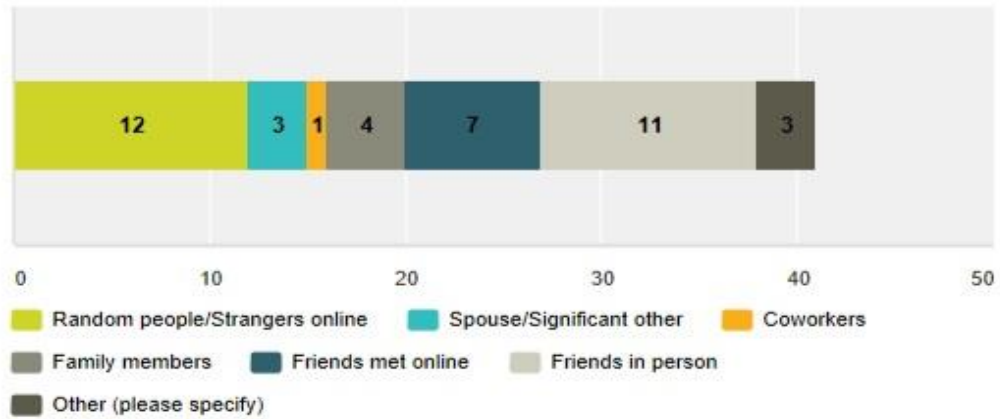
Which website do you search the most to get video game information?

Answered: 20 Skipped: 0



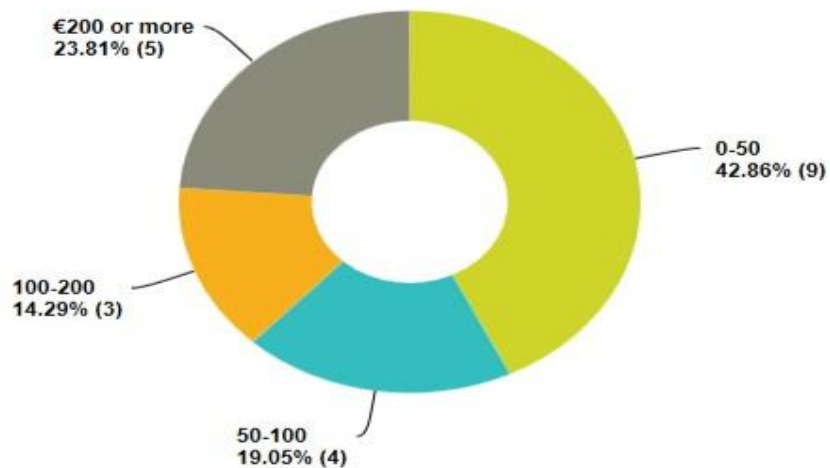
When playing with others, who do you prefer to play with? Please check all that apply

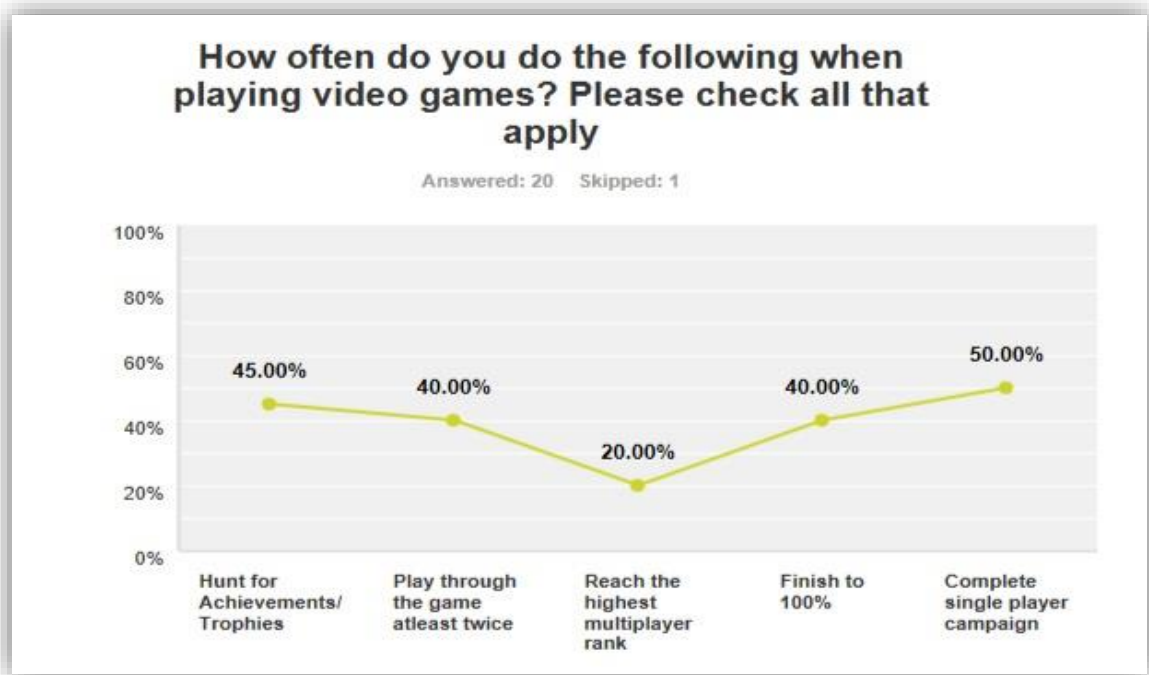
Answered: 20 Skipped: 0



How much do you spend on games per year?

Answered: 21 Skipped: 0





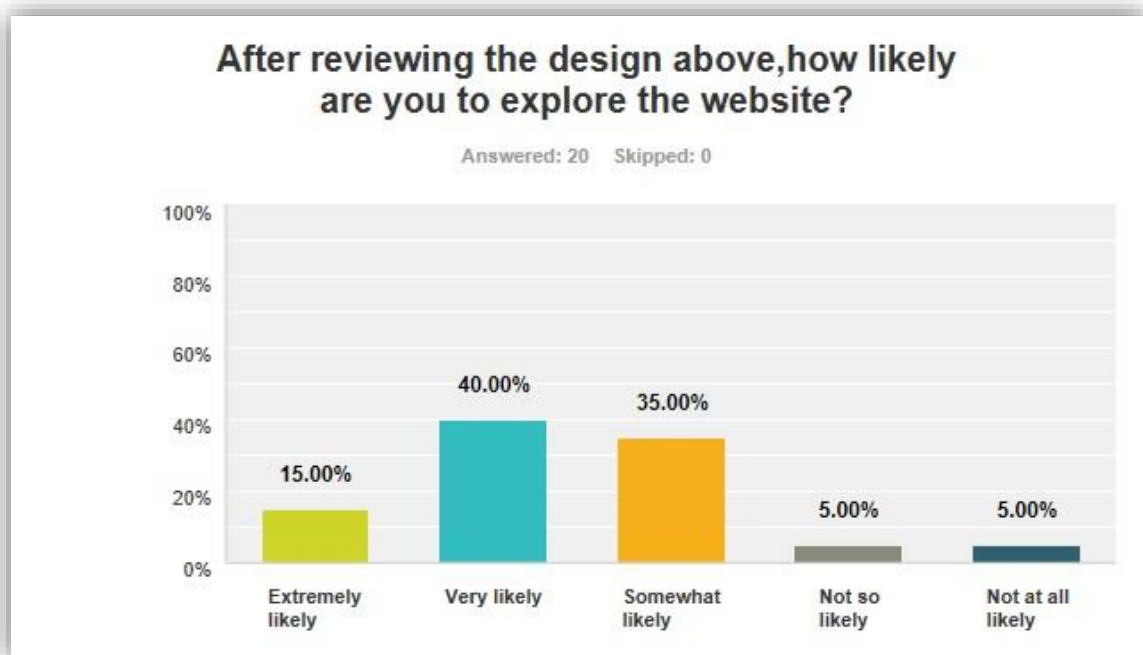
Survey One Conclusion:

The people who completed this survey vary in terms of their gender type and age group. Before sending this survey to random people on social media, I had no prior knowledge to whether these people played games. As a consequence, a wide variety of viewpoints were captured during this process, which was initially one of my objectives for this survey.

- After all, 20 people completed this survey, there was an even ratio between the genders, 50% each of male and female.
- The majority of people who completed this survey were between the age group of 18 and 24, 85% of participants to be exact.
- Games nowadays are being played on many devices and not to my surprise it was confirmed that the majority of people play on consoles and mobiles, 40% and 30% respectively.

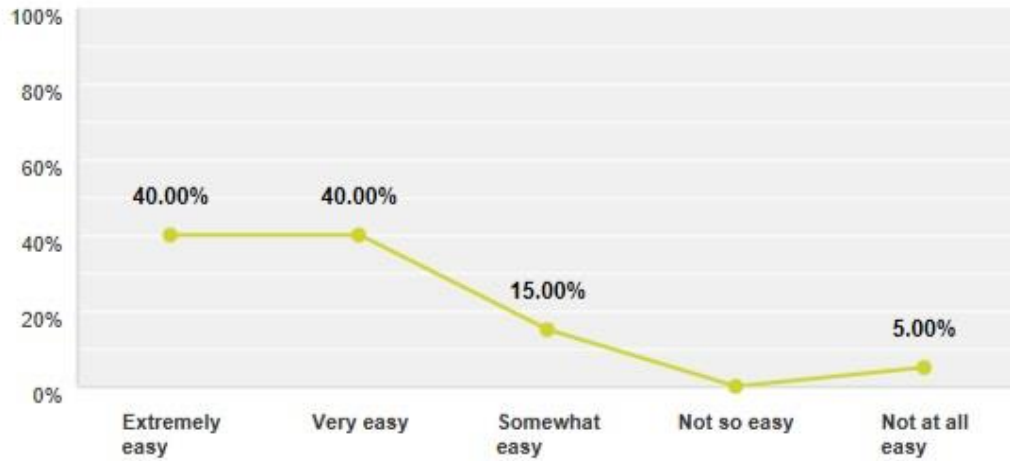
- Many people play games but I wanted to find out for what reasons they are being played by the public. According to the survey, the main reasons games are being played are because they are mostly fun to play and challenging.
- Finally, as my idea is mainly searching and browsing through a large collection of games I wanted to find out how often people search online to find information about games. Based on the results of the survey there was a really good response. More than 50% of the response was sometimes or often, 26.7% and 26.3% respectively.

Survey Two (Gaming Rating Website) Results



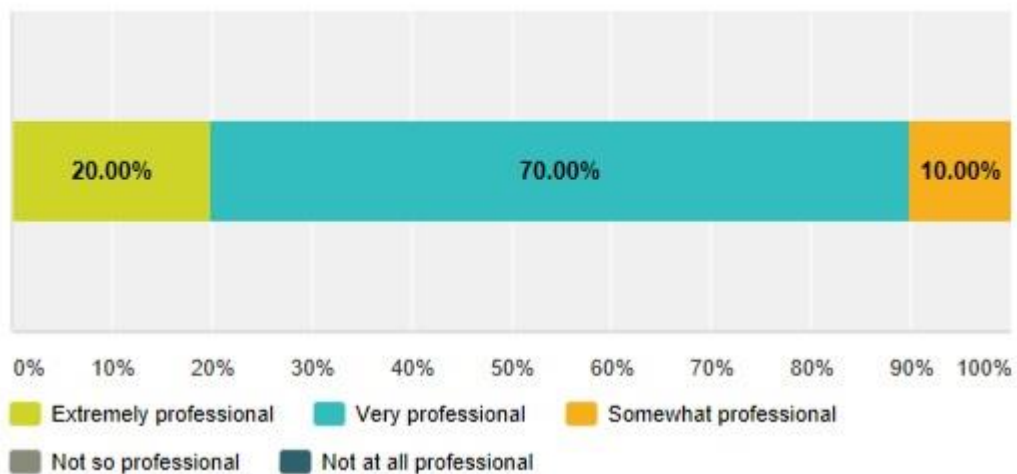
Does the website appear easy to navigate?

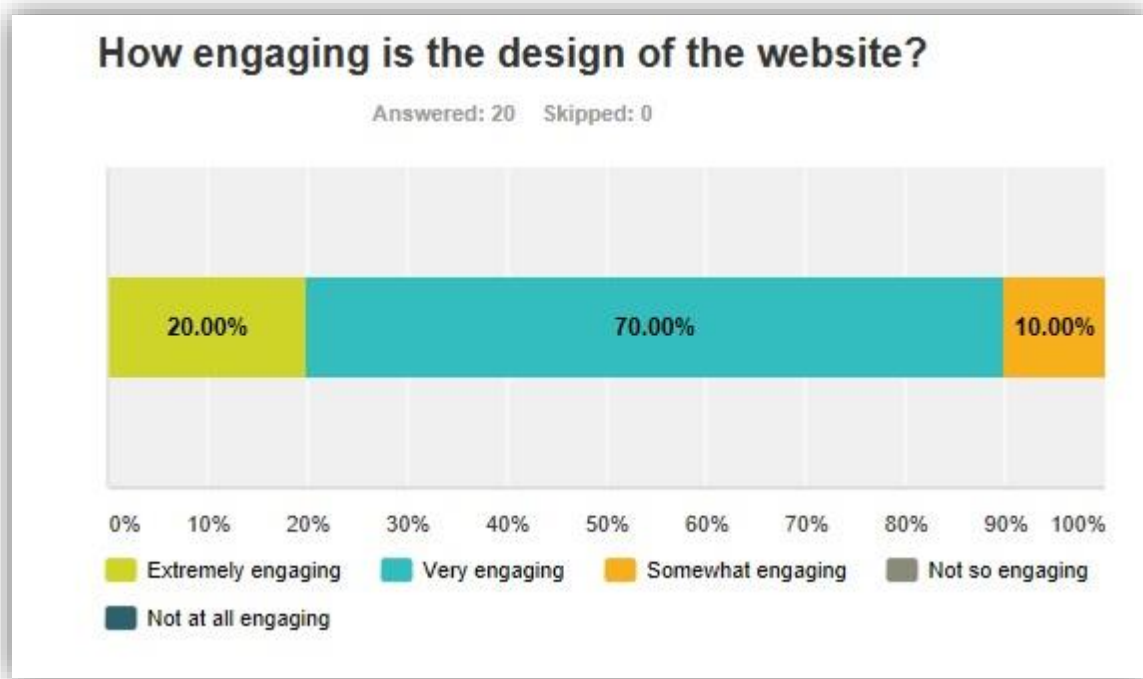
Answered: 20 Skipped: 0



How professional is the look of the website?

Answered: 20 Skipped: 0





Survey Two Conclusion:

The people who completed this survey vary in terms of their gender type and age group. Before sending this survey to 20 random people I had no prior knowledge to whether these people played games. As a consequence, a wide variety of viewpoints were captured during this process, which was initially one of my objectives for this survey.

- After reviewing the design of the very first prototype, 40% and 35% of people said that they are very likely and somewhat likely to explore the website.
- As my main goal was to make a very user friendly and navigable website, the results of the survey showed great promise. A total of 80% of participants said that based on the design of the website, it looked extremely and very easy to navigate.

- 70% of the people who took the survey said that the look of the website and how engaging it is, is very professional and very engaging respectively. Design wise, this was my main goal from the beginning, to make a website that looks professional, is very user friendly and easy to navigate.

3.2 Brainstorming

Brainstorming Session:

These brainstorming sessions are best when everyone is comfortable expressing any and all ideas that come to their mind, regardless of whether or not they are gold. Usually what happens is answering these questions opens up new insights and potential opportunities for the business.

Usman: How much competition is out there in this market?

Kazmi: In my opinion there is a good bit of competition out there. I know there's a couple of website that have the same features, just like those few that you mentioned there like IGN and GameStop.

Asifa: Only a lot! There seems to be a lot of websites and apps out there that provide similar features to what you just explained.

Adela: Competition is really much. We have apps like Origin, Steam, Ubisoft and other game developers that have a community platform to provide ratings. Game developers now have Youtuber's to do free marketing for them. They play the games live, give reviews and also give the developers feedback. Developers also have their own means of getting feedback.

Usman: What people would use this website or would be willing to pay for a premium account? Explain your ideal customer

Kazmi: The people who would mainly want to sign up for this and use this would be someone that is an intense gamer and who really likes to keep track of games and their game progress, so definitely someone that is a gamer and not someone that is a normal, average console player but someone that definitely plays it very regularly would be interested in it. Premium account wise, I don't know about that, well to be honest with you, there are people who are willing to pay 50 euros and buy some fake FIFA players, so people who are into the whole gaming experience would pay for a premium account.

Adebola: For the players, say you are a PC based player, you are the default part of a large community like Steam that has tons of reviews on it. There is no market in selling reviews. As a gamer, what we want is to be able to trade games and get game discounts.

Sabia: Customers who are actively and openly engaging with games on a regular basis. They are the best possible people to target for your website such as young people who are in college and who have time to play games. For premium accounts, the best one would be people who are competitive and require more information about specific games.

Ruqaiyah: Premium accounts would only be purchased by people who are die-hard fans of games and even the website would have to be exceptional for people to do that.

Asifa: I'm not a gamer but I do know a lot of young teenagers who would be willing to pay for a premium account on this website mainly due to the fact that people nowadays who play video games get so attached and consumed into the whole gaming experience that they need to have the latest and greatest technology and services.

Usman: Is there any way to alter the business plan to suit a niche market?

Sabia: Without a doubt, PC games market is becoming a niche. Relatively high costs of developing console games mean a steady supply of PC games coming as a low-cost alternative. However, in PC gaming niche, there is just so much quality competition. Thus locating a specific micro niche is essential for survival. You could locate your target market in certain forums online for example. By participating in forums you can find out what those target markets want, what they like about existing games in the micro niche, what they don't like and then build a better service for them.

Kazmi: Getting back to your main, you know like how u described your idea. Is this just an idea for information wise or are you actually going to be selling games on this, like what is your business model? Are you going to have the website for information purposes where players can see what games they have and that's all or is there going to be something more to it like if there's a new game coming out, are you going to be selling it or are you going to be basically promoting that game? If you are promoting it, you can promote it at certain stores and you can get revenue from that store because you're promoting it. If you have enough fan following I'm guessing.

Maddy: It's hard to widen scopes with major companies already competing to close any gaps available.

Asifa: I personally think you could partnership with other stores and gain competitive advantage by promoting their products on your website.

Adebola: Exploring the gaming market is getting trickier because the big companies are closing all the gaps. If you want to target a niche I would suggest children gaming. Target parents as to providing better, safer, more educative games for their kids aged 2-7. The review feature you want to do, try to focus on the parents for their kids and you shouldn't restrict yourself to gaming.

Kazmi: I think it's not about restricting, it kind of like his whole idea is generated behind gaming so I think it has to do something with gaming because if you change that then you're changing the whole idea basically.

Ruqaiyah: For niche market I absolutely love Adebola's idea because children need to be censored while playing games. I know it's something that I would want guaranteed for my child after seeing my little brother.

Kazmi: Like Adebola said children gaming is really big. If you put it that way, there's a time where I use to play a lot of games and that time has been over since like four years now. Coming back to the point, children do play a lot of games and that should be the target audience and kids are stupid enough to do things like that. Kids are in that age environment that they do things like that because of technology nowadays. They don't go out and play, they play video games. As I said, there is a suitable business plan that can niche the market but not with premium accounts. Premium accounts can come later down the line but not when you're starting off especially as a website. It needs to be free so everyone can use it because once its games recognition, like when you have loyal customers, subscribers then you can add that paid premium account feature but for right now the main revenue should be made from the ads.

Usman: If you were to create a website similar to this, what you do different to compete with the competition? How would you stand out?

Kazmi: If I were to create a website like this which was based on this idea, I would provide information and while providing information I would want to sell products there as well. I would generate money through stores promoting me so basically I'm a promoter for the store. If they go on my website, they can get discounted, so basically an example is if they are buying from GameStop, I'm promoting GameStop and in return they are paying me. That's how I'm making money and that's what a good business idea is as well as a good business plan.

Adebola: What I'd do different is to be better competition. First of all, I don't see a market in selling reviews. I would make the web pages more of an ad spot from games and gamers. The domain would be open to small game developers to test

run their betas and what not and for gamers they would learn about new games in the shadows.

Usman: What opportunities do you see for a website like this?

Kazmi: The opportunities, there is an opportunity but it's kind of like a needle in a haystack. You'll have to have a really good fan following and basically be putting in a lot of work, lot of promotions in order to get your website count up, like with the amount of visitors you have per day. It's going to be hard, there's already trusted websites like IGN and GameStop, there's so many more website like this that already have so much bad following so why would they come to you. So you have to do something totally different, something that stands out.

Adebola: There are a lot of games that are very good that people do not know about so if your domain would bring light to them I'm sure they'd be happy to reward your hustle but I wouldn't know how to put a price on this.

Usman: If we were to work together on creating this project, what are the outcomes you'd like to see?

Kazmi: The outcome I'd like to see for this would be to expand in a way that every game developer would be coming to your website and they would be asking you to promote it, asking you to actually publish their game first on your website. That would be a big achievement and that would be the outcome I'd like to see because what that does is, you're then in the big game and once you're in the big game your start earning the big bucks.

Sabia: I personally would like to see a web page where your visitors will be able to see the dynamics of your games, such as short videos of various games would be great to give an overall taste of your website to your customers as customers nowadays are presented with dozens of websites, thus fast efficient intro to your website would be crucial to attraction of customers. Also you could create a

mobile application of this website as customers are always on the go. This would provide more efficiency as they would be able to access it anywhere.

Usman: How will you manage the success of the website in comparison to others like GameStop and IGN?

Kazmi: I remember when IGN when they were really small and they had just a website. Now if you look at them they have videos, they have everything. They literally are huge. They are everywhere. So how would you manage that would be something similar or even better to IGN because if you look at them they have stars reviewing their games and people telling you about the games and new updates, they have first-hand information. I know sometimes others might not even have that information and they have it on their website first. So how you want to manage it would be being first and getting it out there.

Usman: What are the risks for the website not to make any progress?

Kazmi: The risk is quite obvious, like if it makes no progress it's going to go down. I mean there's going to be no usability and honestly it will be a lot of your effort going down the gutter. That's what it's going to be and also the money spent on the domain will also be wasted.

Usman: What do you think are the long term and short term goals of this website?

Asifa: The short term goals would be to make people aware of this website and its existence and have a large target market. Long terms goals would consist of getting people to pay for the website and set up a membership plan etc.

Kazmi: Yes, like Asifa said make people aware of the website and also it should be to reach enough daily views on your website. You would require to get enough followers to get your website up and running. The long term goals should be looking ahead, like making it as a big business and having a revenue that you can live off from. Promotions, getting paid from other stores or game developers. These would be the long term goals of this website.

Usman: What makes businesses similar to this already out there work and stand out?

Kazmi: What makes businesses out there already work and stand out is they've been in the game for a long time. There wasn't much competition before that's how they stood out because there were only a few websites but now there's loads. What makes them stand out is they've been there since the start and since they are already so big it's easy for them to be out there and dominate any environment. They stand out because they got the money and their content is better.

Asifa: Brand Essence! It's all about the brand and what feedback people give about a specific product or Brand and also what they link themselves with.

Usman: Why are some websites doing poorly?

Kazmi: Some websites are doing poorly due to the reason they are lacking activity on the website. Like they are not really analysing the website properly. So why they are doing poorly is someone would click on the website, they are overlooking the fact that if they are clicking on it, where is the part they are exiting, where is the part they seem like they are not interested. One thing great about Google is, they monitor everything. So when you click on something, they see where you left off, they see everything. So they are monitoring you knowing, like okay you don't like this feature, you like this feature. So that's one thing that is

done poorly by some websites which is why their websites aren't up and running to its fullest form.

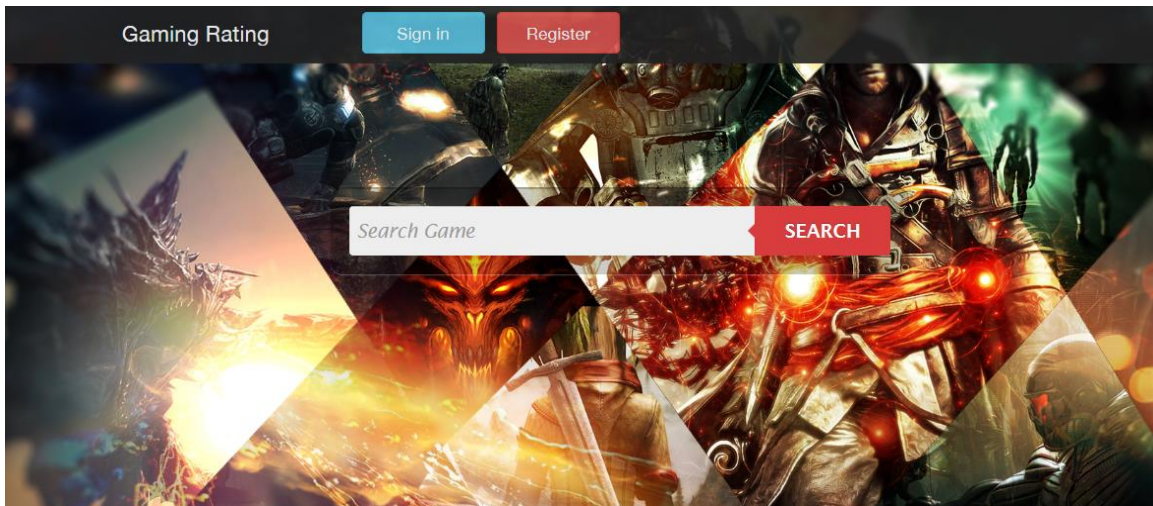
Usman: What features do you look for when browsing a website?

Kazmi: I would love for the basic features. I don't like a website that is too designed where it's almost complicated to use. As long as it's simple and provides the functions like dropdown menus, scrolling through stuff and read through stuff. Just as long as it's not too complicated and not terrible as well. It just needs to be in between. In my opinion a website doesn't need to be over the top because sometimes over the top can be a down turn, it gets a little confusing.

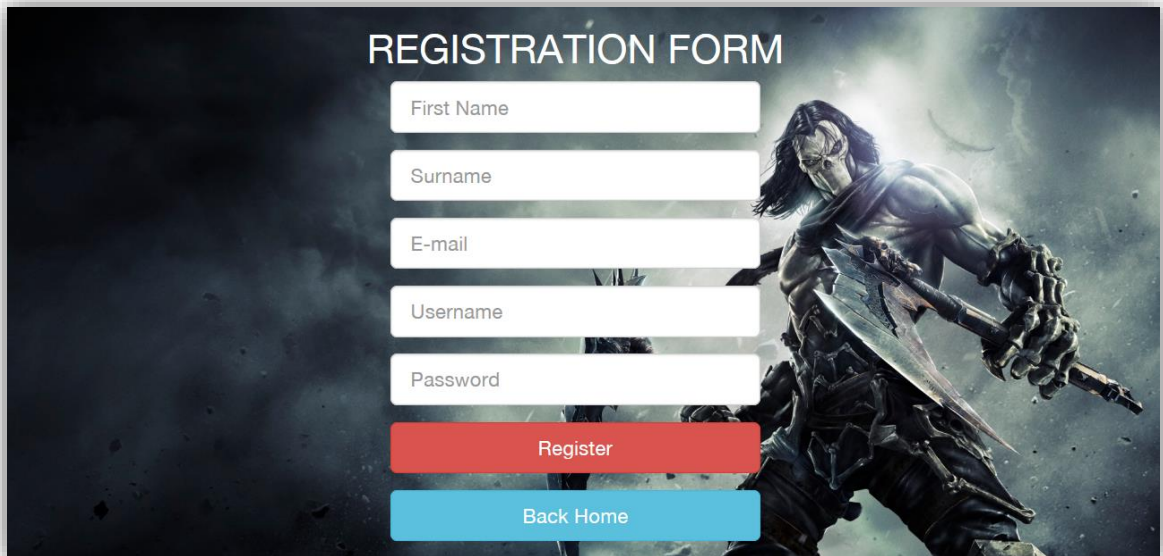
3.3 Prototyping

Prototype One:

Home



Registration



REGISTRATION FORM

First Name

Surname

E-mail

Username

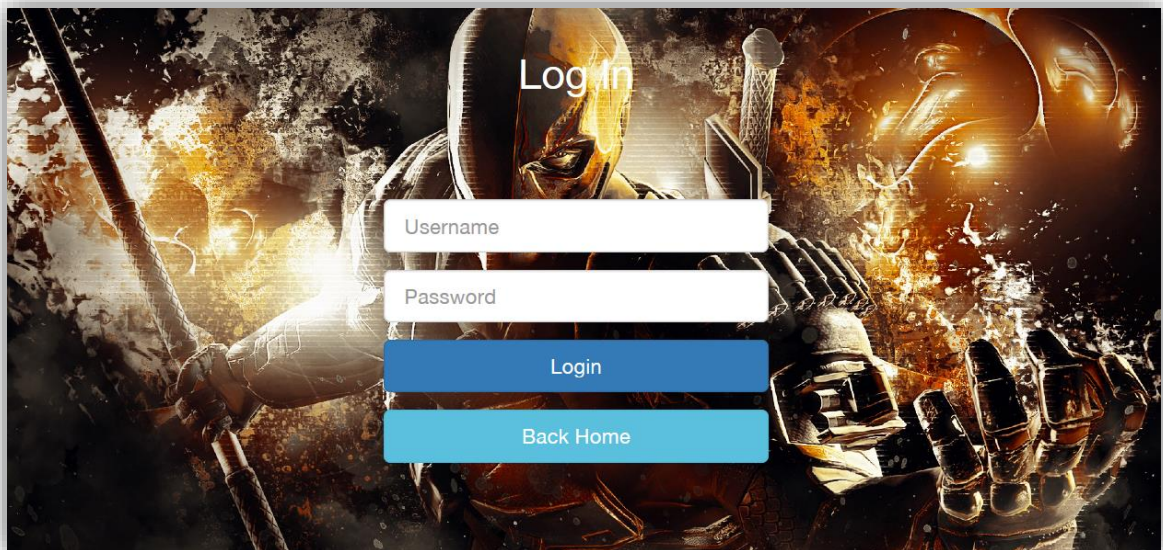
Password

Register

Back Home

The registration form is overlaid on a dark, atmospheric background featuring a character with long dark hair and a sword, possibly from a video game. The form consists of six white input fields stacked vertically, followed by a red 'Register' button and a light blue 'Back Home' button.

Login



Login

Username

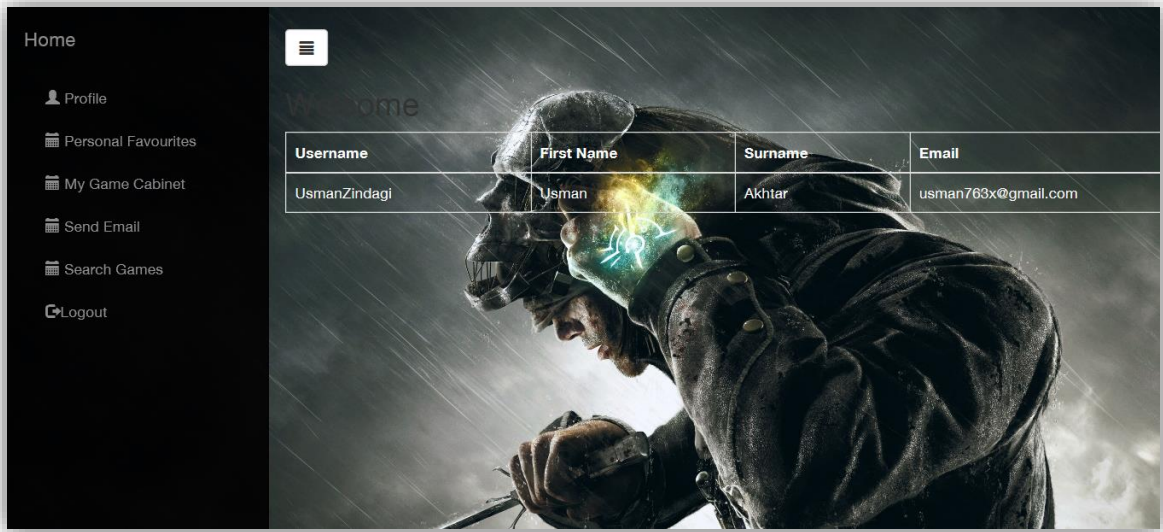
Password

Login

Back Home

The login form is overlaid on a fiery, action-packed background featuring a character in golden armor, possibly from a video game. The form consists of two white input fields for 'Username' and 'Password', followed by a blue 'Login' button and a light blue 'Back Home' button.

Personal Profile



Username	First Name	Surname	Email
UsmanZindagi	Usman	Akhtar	usman763x@gmail.com

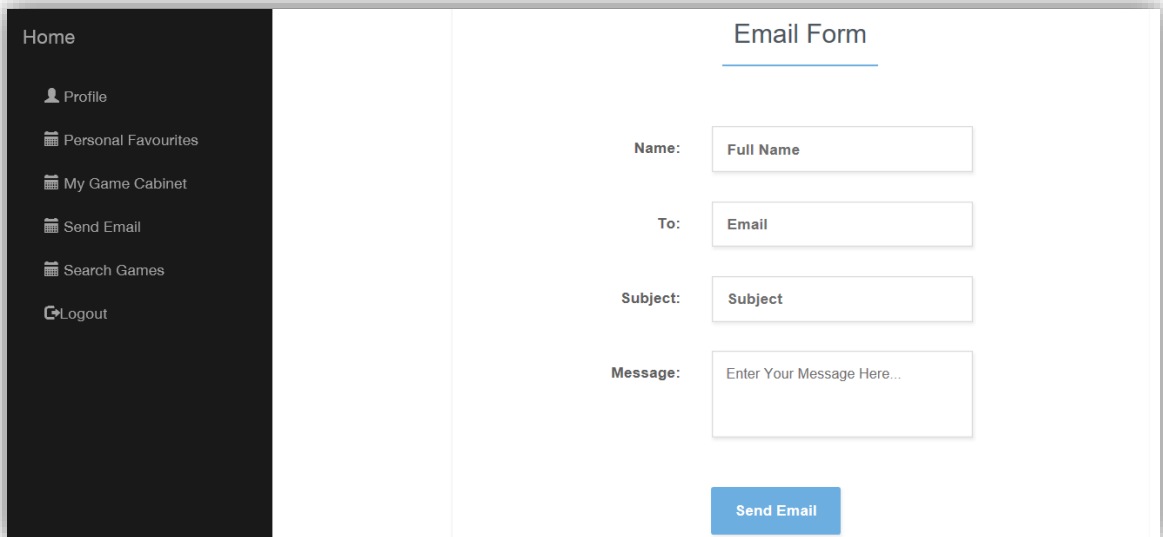
Favourites



Games Cabinet



Email

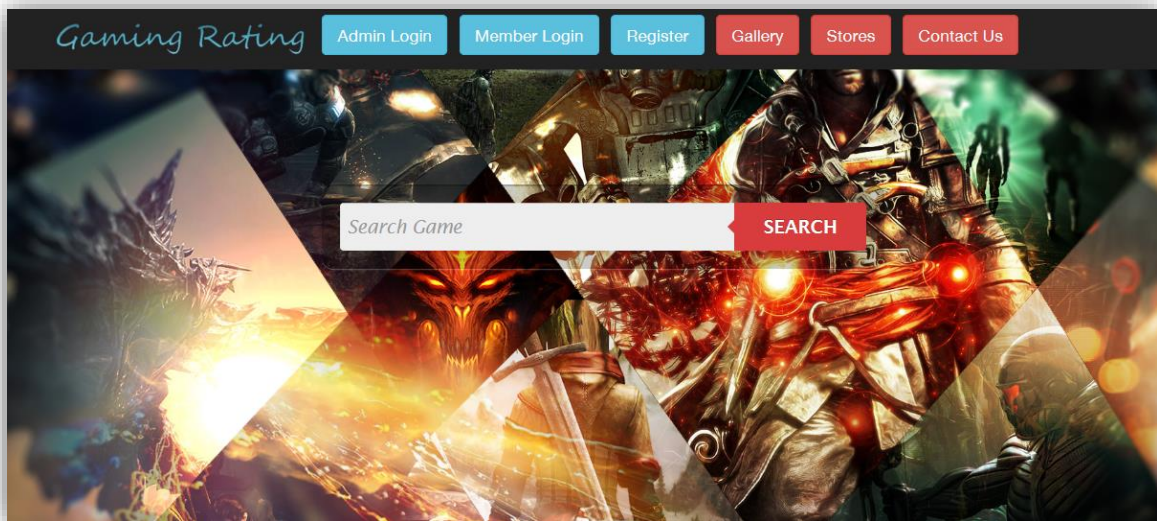


Prototype One Conclusion:

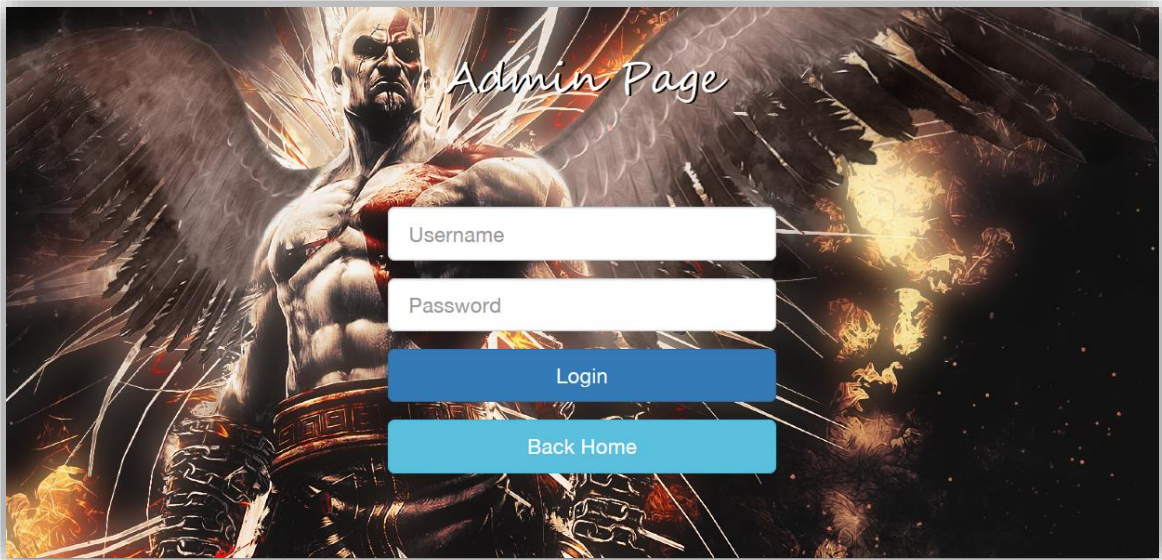
The prototype of the Gaming Rating website contains seven pages. This prototype was developed using the results of two elicitation techniques, these consisted of a survey and a brainstorming session. This prototype will be used for testing where it will be critiqued by participants during another survey, another brainstorming session that I will be conducting and also an interview, where the participant will test the product and also answer questions that I will lay out regarding the design and features of this prototype. Upon the completion of testing the prototype, the design and layout, along with the features within the prototype will be modified to match preferences made by the participants.

After analysing the results of the survey one, I developed the layout of the pages based on the preferences of the people. The survey results and ideas brought forward in the brainstorming session contributed toward this design and these features being incorporated into the first prototype of the Gaming Rating website.

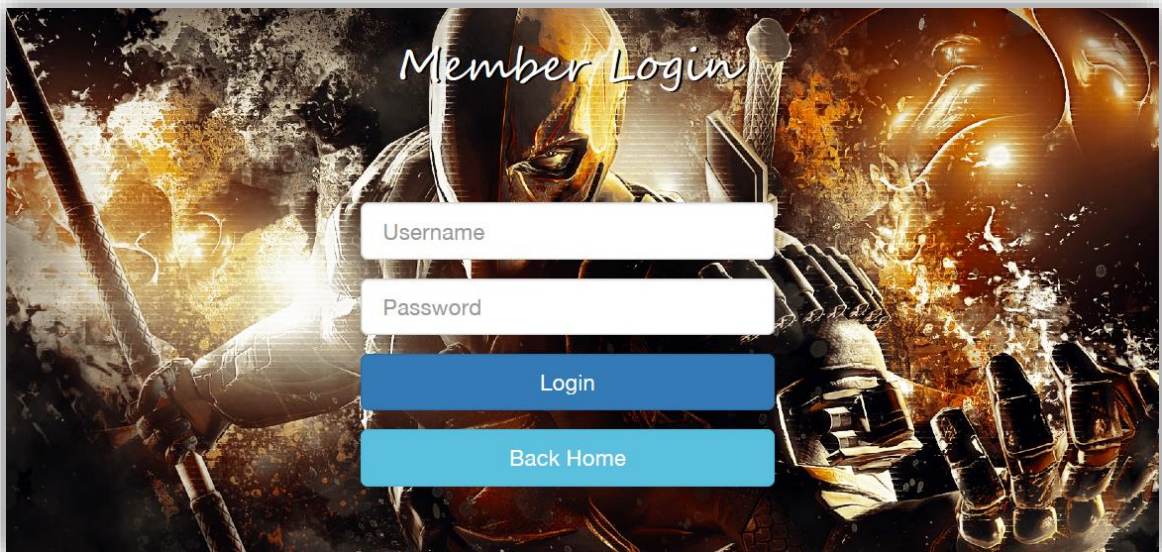
Prototype Two: Home



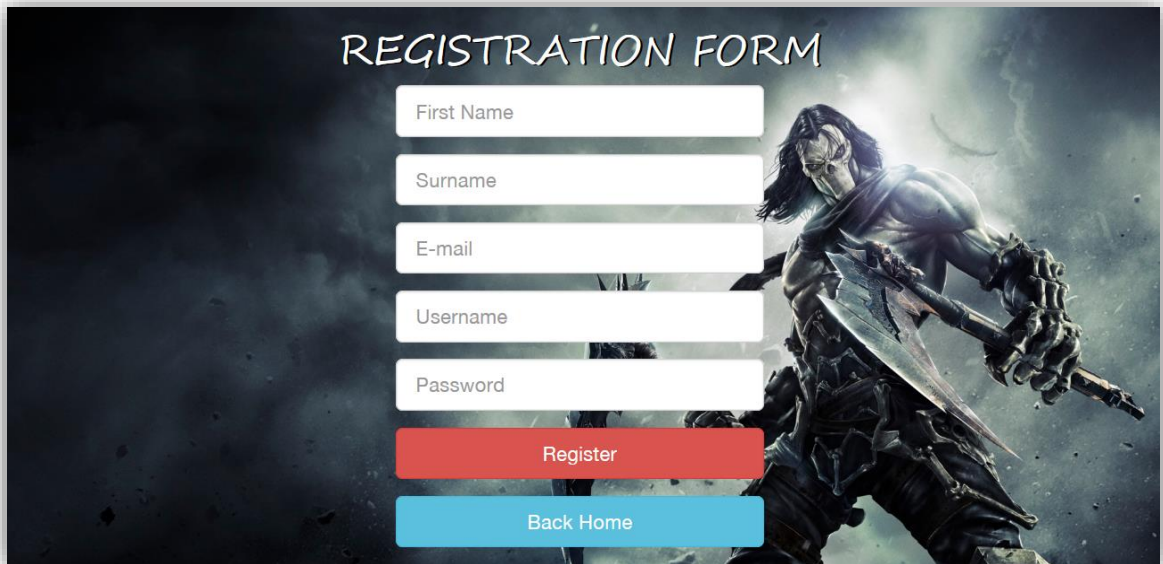
Admin Login



Member Login



Registration



A registration form titled "REGISTRATION FORM" is displayed against a dark, atmospheric background featuring a character from a video game. The form includes several input fields and two buttons.

REGISTRATION FORM

First Name

Surname

E-mail

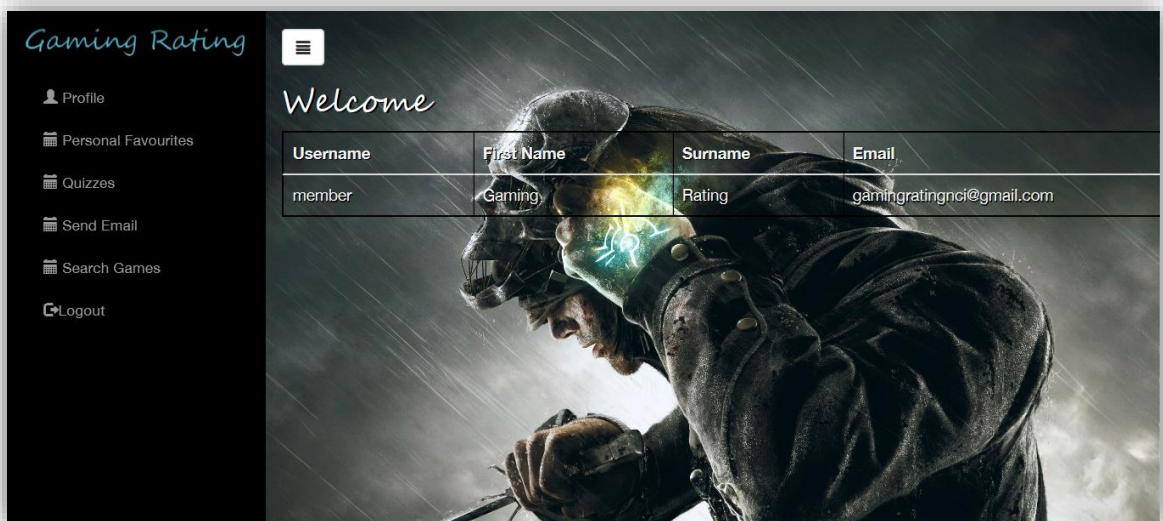
Username

Password

Register

Back Home

Personal Profile



A personal profile page for "Gaming Rating" is shown. It features a dark sidebar with navigation options and a main content area with a "Welcome" message and a user information table.

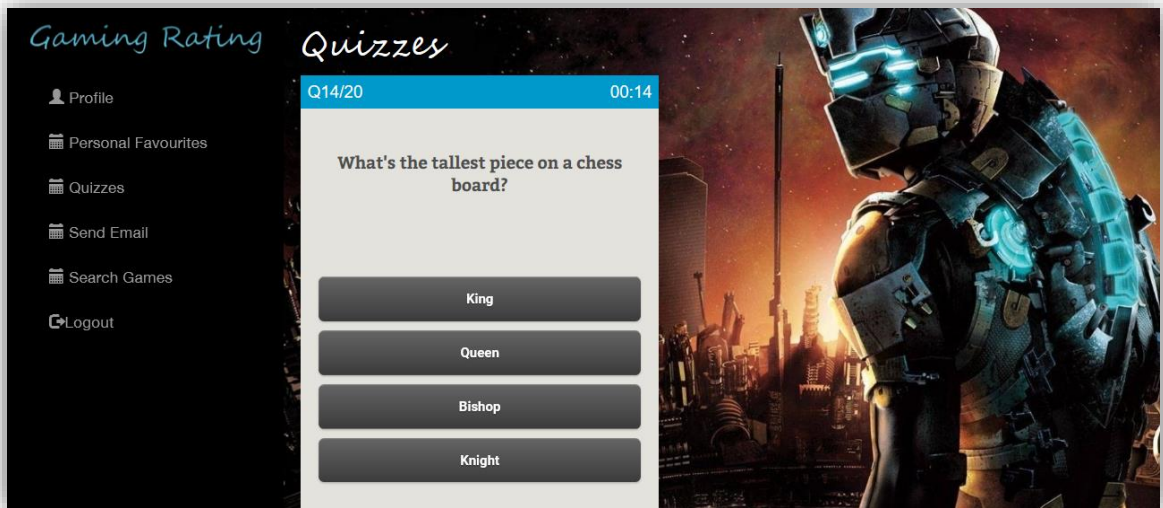
Gaming Rating

- Profile
- Personal Favourites
- Quizzes
- Send Email
- Search Games
- Logout

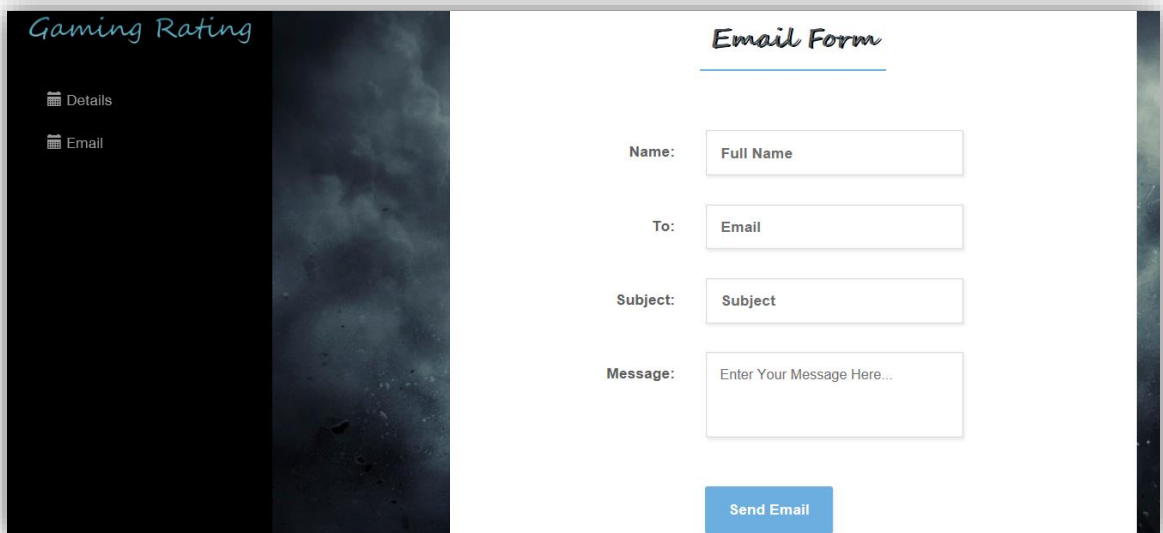
Welcome

Username	First Name	Surname	Email
member	Gaming	Rating	gamingratingnci@gmail.com

Quizzes



Email Form



All Members

Gaming Rating

- Admin Home
- All Members
- Add Quizzes
- Send Notification
- Logout

Welcome, admin

Name	Surname	Username	E-mail
Ady	Sajid	AdySaj	AdySaj@gmail.com
Gaming	Rating	member	gamingratingnoi@gmail.com
Hammad	Sajid	HammadSaj	HammadSajid@gmail.com
Khurram	Farooq	KhurramFarooq	khurramfarooq@gmail.com
Razwan	Akhtar	RazAkhtar	RazwanA@gmail.com
Tayyib	Majahid	TayyibM	TayyibMajahid@gmail.com

Add Quizzes

Gaming Rating

- Admin Home
- All Members
- Add Quizzes
- Send Notification
- Logout

Add quizzes

Quizname

Embed Code

Submit Quiz

Prototype Two Conclusion:

This prototype was developed after the interview and testing took place on 20th December 2016. A number of alterations have been in contrast to prototype one of the Gaming Rating website. Now, the Gaming Rating logo is on the top left of each page and clicking this logo will bring users back to the home page. At first, the home page was too plain, there wasn't much happening. Based on some feedback that I had gotten during the interview, I added more pages and now the links to them are in the navigation bar on the home page. Another new feature added to prototype two was the addition of quizzes. Administrators can add quizzes using embed codes and they will then be displayed on the quiz page in the member's login. Other than this there were minor alterations from the first prototype. The participants while testing seemed very satisfied with the design and layout of the Gaming Rating website. Pages such as the login pages, member profile, registration and most of the email form page remained unchanged. This is solely due to the positive feedback that I received when I conducted the elicitation requirement sessions and the interview.

3.4 Interview and Testing

Participant:

- **Hammad Kazmi**
 - DCU (Dublin City University)
 - Computer Applications

Interview Question and Answers:

Usman: What do you think of the design of the website?

Kazmi: Loving the design. It brings out the gamer effect, though user should be given option to change themes of the website. Design is well constructed; it seems simple yet so edgy which I like.

Usman: What are some of the key features, as well as design in this website?

Kazmi: The features of this website from what I'm looking at would be the search bar and how it searches. When you search a game what shows, that's the main key feature. Secondly it would be for your subscribers, the user interface. So how is the profile set up, like settings, profile and all these other things that would be the biggest key feature that you should be doing very well on.

Usman: What should I do to make this website better?

Kazmi: Design wise I don't think there is anything in the website that I would want changed. I really like the design and I like the features on the website that you've shown in the prototype, so design wise for anything to make the website better, there needs to be no change. One thing that you might need to change would be the theme, so like if I'm a user and I log into my account, I would like an ability to change the theme because if I'm liking this certain game and I like the theme of that, I'll select that theme.

Usman: What will motivate you to begin using this website?

Kazmi: Free time. When exams are not here and I have all the free time in the world and I'm off work. I probably won't play games, I mean if I was 12 I'd play games and I would definitely put all my time and effort into this website.

Usman: Are you interested in using this website?

Kazmi: Yes I'm interested in using this website. As I said and as many people will tell you this has a certain age group that you would be targeting. The target audience would be young teenagers that are either in their primary or secondary education but not college. The age group would be 5 to 16 I'm guessing. If I was that age I might just be really interested in it.

Usman: Can you agree the design is very user friendly?

Kazmi: This website is very nice design wise. Based on the prototype, it looks very user friendly. It's quite simple and easy to navigate. For example, if I want to sign up, sign in or search for a game, it's quite basic enough to navigate through. The website design I think so is quite innovative and very user friendly.

Usman: What other pages would you like to see in this website?

Kazmi: Another page I would like to see in this website would be the contact form where you could have like a 24-hour live chat or you could have some sort of contact connection. If someone wants to contact you with a query, they can do that. That should be there.

Interview & Testing Conclusion:

This interview with was very informative and a vast amount of pros and cons about my Gaming Rating website prototype were obtained from the participant. He expressed his satisfaction about the design of the website several times during the interview. The design was something I was really excited to share as compared to other websites, I think Gaming Rating is a very user friendly website. The interview delivered some valuable information about the Gaming Rating website. The website will be improved using the recommendations which were made by the participant during the interview. A contact page will be incorporated into the website, as it was suggested and I personally think it's a

great idea as it would help users to ask a question about any gaming topic to our team. A news page will also be installed within the website outlining all the latest and trending news in the gaming world. The next phase of this project is to finalize the layout and design, as well as features of the website.

4 System

4.1 Purpose

This website will allow users to browse through a large collection of video games and view important information about them. The games on this website will be consisting of both the latest trending video games as well as old favourites. In order for there to be live reviews of the selected games, I will be pulling data from social media sites such as Twitter to see what the public think of the game so users of the website can know the reviews of real people. When a specific game is selected, there will be live tweets in regards to what the public think of the game. If users are unsure about what to purchase or are having second thoughts about a video game they can easily check the reviews and ratings of the game and see if it's worth buying. As the list gets bigger and games get better the users might want to know what game was best on a specific day in a specific year. Allowing the user to select a date and in return showing a leader board of the games that were trending and which had the highest rating in that time will be a very efficient way to gain more knowledge about games in that time. People always want to play the best and greatest game there is so I think this is a perfect way to make that happen.

4.2 Project Scope

The scope of this project is to develop the Gaming Rating website using various different languages. I have planned on adding several functionalities to this

website to make it as user friendly as possible, including ratings, leader boards, calendars, quizzes etc.

Schedule: The website will be made within a period of a few months which will be broken down into several steps such as, the initial month will be spent planning and writing up the requirements. Then the implementation of the project will start up until near the end where testing will be done followed by the release of the website in the end.

4.3 User Requirements Definition

The objectives of the website from the user's perspective is the ability to gain knowledge about specific video games by browsing through a large collection of them. Browsing and searching through games and finding out how much they are selling for, reading about the rating and reviews in the eyes of the public, being able to see all this information in one place saves the user time and effort as they don't need to go to different sites to see more information. All the necessary information about the game that the user requires will all be in one place. Seeing reviews from people who have played the game, by pulling data from Twitter and other social media sites will give the end user a better knowledge of the game.

4.4 Definitions, Acronyms and Abbreviations

User: A person that may interact with the website but this person cannot be the developer of the Gaming Rating website.

Administrator: A person that may login and make changes to specific sections within the Gaming Rating website.

4.5 Functional Requirements

4.5.1 User Class one – User

Functional Requirement 1.1

Identification Code:

FR1

Title:

Gaming Rating Logo Link

Description:

The Gaming Rating logo will be displayed at the top of each page throughout the website. When clicked, it should bring the users back to the home page of the website.

Location:

All Pages

Reasoning:

The link will allow users to quickly and efficiently go back to the home page from any page within the Gaming Rating website.

Priority:

Must Have (High Priority)

Functional Requirement 1.2

Identification Code:

FR2

Title:

Contact Page Link

Description:

This link will be displayed on the homepage of the website. When this link is clicked it will bring the user to the contact us page of the website. This link will be displayed as text labelled 'contact us'.

Location:

Home Page

Reasoning:

The purpose of this link is to allow users to get in contact with Gaming Rating. If one of our users has a query about certain topics, it's always helpful to have some sort of contact connection between the business and user. This feature was suggested by a participant in the interview I conducted.

Priority:

Must Have (High Priority).

Functional Requirement 1.3

Identification Code:

FR3

Title:

Gallery Page Link

Description:

This link will be displayed on the homepage of the website. When this link is clicked it will bring the user to the Gallery page of the website. This link will be displayed as text labelled 'Gallery'.

Location:

Home Page

Reasoning:

The link aims to draw the user's attention to a look into what this website has in store. When users of this website view a few images and videos of what this website is about then maybe they'll get motivated to explore the remainder of the website. This idea was brought up in the brainstorming session I conducted as part of the elicitation techniques for requirements.

Priority:

Must Have (High Priority)

Functional Requirement 1.4

Identification Code:

FR4

Title:

Nearby Stores Link

Description:

This link will be displayed on the homepage of the website. When this link is clicked it will bring the user to the nearby stores page of the website. These stores will be shown on a Google maps widget. This link will be displayed as text labelled 'Stores'.

Location:

Home Page

Reasoning:

The users of this website might want to know what stores are nearest to them in order for them to purchase a game. After searching the Gaming Rating website users might get motivated to play the game. The idea to show the closest game stores depending on your location was brought up during the brainstorming session I conducted as part of the elicitation techniques for requirements.

Priority:

Must Have (High Priority)

Functional Requirement 1.5

Identification Code:

FR5

Title:

Social Media Links

Description:

Clicking on the social media icons will bring them to the Gaming Rating account on Facebook, Twitter and Instagram respectively. They will be displayed as clickable logos on the home page. These will be located in the navigation bar on the top right of the home page.

Location:

Home Page

Reasoning:

These links will allow users to easily access the Gaming Rating social media accounts. This is where they can view the recent news and updates, while also being able to interact with Gaming Rating very easily.

Priority:

Must Have (High Priority).

Functional Requirement 1.6

Identification Code:

FR6

Title:

Quizzes Link

Description:

This link will bring users to online quizzes which have been created by QuizFactor for people of all gaming knowledge levels. These links will be displayed as clickable logos in the quizzes page.

Location:

Quizzes Page

Reasoning:

These quizzes will allow the users of Gaming Rating to test their knowledge about games they have played in the past and some they've never heard of, test their knowledge of gaming in general. Gaming Rating believes that users of our website should learn more and advance their knowledge in gaming. These QuizFactor quizzes are quick, fun and very informative about games.

Priority:

Must Have (High Priority)

Functional Requirement 1.7

Identification Code:

FR7

Title:

Calendar Widget

Description:

The calendar widget will display the video games that have been released and are releasing soon. The calendar widget will be located in the stores page next to the Google maps widget that will show nearby stores.

Location:

Stores Page

Reasoning:

The calendar widget idea was brought up in the brainstorm that I had conducted as part of the elicitation techniques for requirements. This feature should appeal to a lot of users because it's always nice to have knowledge about when games are releasing so they could be the first few to purchase and play them.

Priority:

Must Have (High Priority).

Functional Requirement 1.8

Identification Code:

FR8

Title:

News and Results Updates

Description:

Users want as much information as possible about games, upcoming releases, discounts and more, so, when a user signs up for Gaming Rating, the email they use will be registered for a weekly newsletter.

Reasoning:

This feature allows the members of Gaming Rating to keep up to date with all that is going on in the gaming world. They will never miss out on any important information as on a weekly basis they will get an email with the latest information.

Priority:

Must Have (High Priority).

Functional Requirement 1.9

Identification Code:

FR9

Title:

Contact Form

Description:

This contact form feature will allow users to send an email to Gaming Rating by simply typing in your name, email and the message in the contact form. After pressing the send button, your email will be immediately placed into Gaming Rating's inbox.

Location:

Contact Page

Reasoning:

During our brainstorming session a participant suggested a contact form in order to receive messages from people. It would be the easiest way to talk and would save a lot of time.

Priority:

Must Have (High Priority).

Functional Requirement 1.10

Identification Code:

FR10

Title:

Game Images Slideshow

Description:

A slideshow like this would be useful to showcase both the latest and trending games as well as the greatest games of all time. This feature should allow users to navigate through images at their own pace.

Location:

Gallery Page

Reasoning:

This slideshow is mainly designed to motivate users to begin using and exploring more of the Gaming Rating website. This slideshow feature was suggested during the interview by the participant when he was asked 'What features would you like to see in this website?'

Priority:

Must Have (High Priority).

Functional Requirement 1.11

Identification Code:

FR11

Title:

Gaming Videos

Description:

The gaming videos will consist of the latest game trailers. These videos will be embedded at the bottom of the gallery page and they will be displayed in horizontal order.

Location:

Gallery Page

Reasoning:

During the brainstorm a participant suggested a page where it would show the trailers of the latest video games. These trailers will be showcased in the gallery page of the Gaming Rating website.

Priority:

Must Have (High Priority)

4.5.2 User Class Two - Administrator

Functional Requirement 2.1

Identification Code:

FR12

Event:

Administrator Login

Dependency:

Before an administrator can make any changes or apply updates do the site, they must sign in into the Gaming Rating website. The updates may consist of upcoming game information, release dates, trailers etc. The administrator must provide an acceptable username and password in order to implement any modifications to the Gaming Rating website.

Outcome:

After successfully logging into the website, an administrator is allowed to make changes to specific aspects of the Gaming Rating website. An unsuccessful login will cause an error message to appear labelled 'incorrect username or password'.

Functional Requirement 2.2

Identification Code:

FR13

Event:

Manage Gaming Pictures/Videos and Contact Details

Outcome:

An administrator of Gaming Rating is entitled to add, edit or remove many information and media aspects of the website. The contact details which are displayed throughout the website can be modified by the administrator. The gaming pictures and videos that are displayed on the galley page may also be modified if deemed necessary by the administrator. A unique username and password will ensure that these permissions are only granted to the administrators of Gaming Rating.

Functional Requirement 2.3

Identification Code:

FR14

Event:

Manage Game Leaderboards

Outcome:

An administrator can add, edit or remove games from the leaderboards. The leaderboard will consist of current trending games. A unique username and password will allow only administrators to make changes.

Functional Requirement 2.4

Identification Code:

FR15

Event:

Manage Calendar Widget

Permissions:

Inter-club team managers.

Outcome:

The administrator will be able to update the calendar which will be displayed on the stores page of the Gaming Rating website. Upcoming video game release dates will be shown on this calendar.

4.6 Non-Functional Requirements

4.6.1 Security Requirements

Identification Code:

FR12

Event:

Administrator login

Reasoning:

The usernames and passwords of the administrators are controlled by Gaming Rating. These profiles must complement each person's level of control, which is mainly associated with setting restrictions on applying updates to the website.

4.6.2 Performance Requirements

Identification Code:

FR9

Title:

Contact Form

Reasoning:

When a user sends a message to Gaming Rating in the contact form they should be notified immediately if the message was successfully delivered. The contact form should automatically refresh within a few seconds of the user sending the message. If the message fails to send, an error notification should appear on the webpage.

Identification Code:

FR12

Event:

Administrator login

Reasoning:

When an administrator attempts to login into the Gaming Rating website, they should be notified immediately if the username or password is incorrect. If the administrator's login details are correct, the admin should be logged in without error and should be capable of applying updates immediately. When an update is submitted by an administrator it should update the changes on the Gaming Rating website immediately.

4.6.3 Availability Requirements

Identification Code:

FR12

Event:

Administrator login

Reasoning:

An administrator will be capable of logging into the Gaming Rating website to make changes throughout the year. The administrator may add or delete users from the database and modify user permissions when he deems it necessary.

4.6.4 Usability Requirements

Identification Code:

FR9

Title:

Contact Form

Reasoning:

The contact form located on contact page of the Gaming Rating website will be relatively easy to use. The name and email address of the user must be clearly specified prior to sending the message to Gaming Rating. This feature should be available to all users at any time. When a message fails to send, an error message should appear indicating the potential problems.

4.7 Implementation

I assigned values to the variables required to connect to a database, **\$dbhost**, **\$username**, **\$password** and **\$dbname**. It was a lot more efficient to type out the names of the variables than the actual results when writing the code for the **mysqli_connect** function.

- `$con = mysqli_connect (“$dbhost”, “$username”, “$password”, “$dbname”);`

```
<?php
$dbhost = 'localhost';
$username = 'root';
$password = '';
$dbname = 'gamingrating';

$con = mysqli_connect (“$dbhost”, “$username”, “$password”, “$dbname”);
?>
```

Adding Information to the Database:

Once the required information is in the database, members will be able to login into the Gaming Rating website and access the functions available.

Part 1: In order for the database to be linked so the information could be added, the include tag was used to add connection.php. After the submit button is clicked, it checks if the form has been completed properly by checking if all the required fields are not empty. The results are then assigned to a variable. Depending on the name of the variables, the code could be as follows:

- `$username=$_POST['username'];`

```

<?php
    ini_set('display_errors', true); error_reporting(E_ALL);

    include('includes/connection.php'); // Create connection

    if(isset($_POST["submit"])) {
    if(!empty($_POST['fname']) && !empty($_POST['lname']) && !empty($_POST['mail'])
    && !empty($_POST['username']) && !empty($_POST['password'])) {

        // enters details into the database
        $fname=$_POST['fname'];
        $lname=$_POST['lname'];
        $mail=$_POST['mail'];
        $username=$_POST['username'];
        $password=$_POST['password'];
    }
}

```

Part 2: I used the `mysqli_query` function to select all the information from the members table relating to a specific username. I wanted to make it so if a username had already been used, it would give an error message and registration would not be successful. Therefore, I assigned the `mysqli_query` function to a variable, `$query`. After that I used `$query` as a result for the `mysqli_num_rows` function and then assigned it to a variable, `$numrows`.

- `$numrows = mysqli_num_rows ($query);`

If the number of rows in the members table with the same username were equal to 0, then only will the registration be completed by inserting all the provided information into the members table in the database.

```

$query = mysqli_query($con,"SELECT * FROM members WHERE username='".$username."'");
$numrows = mysqli_num_rows($query);
if($numrows==0){

    $sql="INSERT INTO members(fname, surname, email, username, password)
    VALUES ('$fname', '$lname', '$mail', '$username', '$password')";
}

```

Part 3: Based on the results if all the information provided is correct, it will give an alert saying “Account Successfully Created” and the system will be redirected to the homepage of the website. If this does not happen it will display an error message. These errors could be the username provided already exists or not all required fields are filled in.

```
$result = mysqli_query($con,$sql);
if($result){
    echo '<script language="javascript"> alert("Account Successfully Created");
    document.location.href="index.php";
</script>';
}
else{
    echo
    mysqli_error($con);
}
else {
    echo '<script language="javascript"> alert("Account Already Exist")
    </script>';}
}
else {
    echo '<script language="javascript"> alert("All fields required")
    </script>';
}
}
?>
```

Pulling Data from the Database:

Part 1: In order for the data to be pulled the database, the include tag was used to add connection.php. After the submit button is clicked, it checks if the form has been completed properly by checking if all the required fields are not empty. The results are then assigned to a variable. Depending on the name of the variables, the code could be as follows:

- `$username=$_POST['username'];`

```

<?php include('includes/connection.php'); ?>
<?php
    if(isset($_POST["submit"])){

        if(!empty($_POST['username']) && !empty($_POST['password'])){
            $username=$_POST['username'];
            $password=$_POST['password'];

```

Part 2: I used the **mysqli_query** function to select all the information from the members table relating to a specific username. I wanted to make it so if the username inserted was not in the database, it would give an error message. I assigned the **mysqli_query** function to a variable, **\$query**, then i used **\$query** as a result for the **mysqli_num_rows** function and then assigned it to a variable, **\$numrows**.

- `$numrows = mysqli_num_rows ($query);`

If the number of rows in the members table with the same username were not equal to 0, then only will login be completed provided all the required information is inserted.

```

$query = mysqli_query($con,"SELECT * FROM members WHERE username='".$username."'");
$numrows=mysqli_num_rows($query);

if($numrows!=0) {
    while($row=mysqli_fetch_assoc($query)) {
        $dbusername=$row['username'];
        $dbpassword=$row['password'];
    }

```

Part 3: Based on the results if all the information provided is correct, the system will successfully login and the system will be redirected to member.php. If this does not happen it will display an error message. These errors could be the details provided are incorrect or not all required fields are filled in.

```

if($username == $dbusername && $password == $dbpassword) {
    session_start();
    $_SESSION['sess_user']=$username;
    header("Location: member.php");
}
} else {
echo '<script language="javascript">
    alert ("Incorrect Details Please try again")
</script>';
}}
else { echo '<script language="javascript">
    alert("All fields required")
</script>';
}
}
?>

```

The Database:

The database used to store all the information for the Gaming Rating website was phpMyAdmin.

The screenshot shows the phpMyAdmin interface for a database named 'gamingrating'. The 'members' table is selected, and the SQL query 'SELECT * FROM `members`' is executed. The table contains 6 rows of data. The interface includes a sidebar with a tree view of databases and tables, and a main area with a toolbar and a table view.

	id	fname	surname	email	username	password
<input type="checkbox"/>	8	Ady	Sajid	AdySaj@gmail.com	AdySaj	password
<input type="checkbox"/>	4	Gaming	Rating	gamingratingnci@gmail.com	member	password
<input type="checkbox"/>	7	Khurram	Farooq	khurramfarooq@gmail.com	KhurramFarooq	password
<input type="checkbox"/>	9	Tayuib	Majahid	TayuibMajahid@gmail.com	TayuibM	password
<input type="checkbox"/>	10	Razwan	Akhtar	RazwanA@gmail.com	RazAkhtar	password
<input type="checkbox"/>	11	Hammad	Sajid	HammadSajid@gmail.com	HammadSaj	password

Sending Email:

- After the submit button is clicked, the system check to see if there are any null values in the required fields. If a null value is present a message will appear saying “Fill All Fields”.
- If email does not match the required criteria it will also give an error message saying “Invalid Email”.
- If all required information is provided and is acceptable, the system will return a message saying “Email Successfully Sent!”

```
<?php
if(isset($_POST["submit"])){

if($_POST["ToEmail"]==""||$_POST["Subject"]==""||$_POST["Message"]==""){
    echo "Fill All Fields...";
}else{
    $ToEmail=$_POST['ToEmail'];
    $ToEmail =filter_var($ToEmail, FILTER_SANITIZE_EMAIL);
    $ToEmail= filter_var($ToEmail, FILTER_VALIDATE_EMAIL);
if (!$ToEmail){
    echo "Invalid Email";
}
else{
    $subject = $_POST['Subject'];
    $message = $_POST['Message'];
    $headers = 'From: GamingRating'. $ToEmail . "\r\n";
    $headers = 'Cc: GamingRating'. $ToEmail . "\r\n";
    $message = wordwrap($message, 70);
    mail($ToEmail, $subject, $message, $headers);
    echo "E-Mail Successfully Sent!";
}
}
}
?>
```

Validating Email:

The following JavaScript code will check the users entered email for any inconsistent values, if they are found the system will return an error message saying “Invalid Email Address please re-enter”.


```

function checkEmail(myForm) {
  if (/^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/ .test(myForm.mail.value)){
    return (true)
  }
  alert("Invalid E-mail Address please re-enter")
  return (false)
}
}

```

```

if($username == $dbusername && $password == $dbpassword){
  session_start();
  $_SESSION['sess_user']=$username;
  header("Location: member.php");
}
} else {
echo '<script language="javascript">
    alert ("Incorrect Details Please try again")
</script>';
}}
else { echo '<script language="javascript">
    alert("All fields required")
</script>';
}
}
}
?>

```

4.8 Testing

I researched many websites and looked for what functionalities they had and did not. I held a brainstorming session as one part of the elicitation requirements techniques and asked many questions about what they look for in a gaming website and what functionalities they would like to see. After speaking with the participants about my website idea and getting mainly positive feedback, I began gathering information on features that would be of interest to the users in a website like this. After the prototype was completed, taken that to begin with it

didn't have that many functionalities. I held an interview with a participant where I asked him to test out the website and critique it. The feedback that I got was generally positive and the information he provided on how I could improve the website and what new features to add proved very useful.

4.9 Further Development or Research

With more resources, where could the results of this project lead to?

I think with more resources, this project could go cross-platform i.e. iPhone and Windows. Many applications and devices can be linked to this project which will give the user more choice to track their games. Yes, there is already similar websites out there, but I believe with a user-friendly user interface and amazing functionalities that this project provides, this would really work in the real world. I intend to spend more time and effort on this project and continue to improve its functionalities.

Learning Curve:

I have worked on websites before during previous projects but it is safe to say this is the most challenging task I have taken on. I believe that this website will be beneficial because of its commercial potential, particularly given the amount of people that have laptops and smartphones.

5 References

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6 Appendix

6.1 Project Proposal

6.1.1 Objectives

- **Search game** – Being able to search through our large collection video games that we provide within the website
- **Favourite games** – Ability to keep track of your games. Once a game has been favorited it will be placed into the favourite section of the users account.
- **Store location** – Gaming stores nearby to the user will be shown on a map so they know where to go if they are interested in purchasing the game.
- **Calendar** – Showing upcoming release dates for video game. This will allow users to keep up to date with the games and learn more information about new games.
- **Image slideshow:** Allowing users to get an inside look into the type of games this website provides.
- **Leader boards:** Having leader boards that show the latest trending games will allow users to gain more knowledge about the top games and hopefully this will motivate them purchase some of them.

6.1.2 Background

Everybody plays games nowadays, be it video games with friends or board games with family. Gaming is considered fun and therefore it is popular all around the world. The main reason I chose to create this Gaming Rating website is that I wanted the users of this website to know what are the best games out there and what games would be perfect for them. Knowing this information would make them spend less unnecessary time in the shops and more time actually

playing. I decided to focus on video games because I know they are the types of games that are most played nowadays. I know everyone has their own opinion on certain topics such as best game, best console and best company. People argue over this all the time. Having an opinion about something so small can be such a big deal to so many people.

6.1.3 Technical Approach

When I came up with my idea, I conversed about it with my supervisor and after him having liked the idea, he had given me some advice on how I can go about achieving my goals in this project. After that I began to work on my list of requirements that I would have liked to have included into this website. After this I began researching the languages that would be used to create this website. I selected on creating the website with PHP, HTML, CSS and MySQL. I also researched a lot on the topic of how to pull data from various gaming and social media websites such as IGN and Twitter respectively.

6.1.4 Technical Details

- HTML/CSS - Layout and design
- PHP
- JavaScript
- Java (used on NetBeans IDE)
- SQL Server

6.1.5 Project Plan

TASK	DAYS	START DATE	FINISH DATE	DUE DATE
Project Proposal	7	17 th Oct 2016	21 st Oct 2016	21 st Oct 2016
Requirement Spec	10	3 rd Nov 2016	10 th Nov 2016	11 th Nov 2016
Project Prototype			31 st Nov 2016	2 nd Dec 2016
Mid-Point Presentation	1		16 th Dec 2016	16 th Dec 2016
Showcase Materials			April 2017	April 2017
Final Project Hard Copies Documentation			May 2017	May 2017
Software & Document Upload			May 2017	May 2017
Project Presentation			May 2017	May 2017

6.1.6 Evaluation

I will initially be using a variety of requirements elicitation techniques as a basis for my final requirements specification document. These techniques might include surveys, interviews and a brainstorming session. These are the main techniques I am considering but other techniques such as document analysis and focus groups might also be used. Implementing these techniques will provide a great foundation toward creating a highly detailed and functional requirements specification document. The majority of the websites content and functionalities will be added once the requirements specification document is complete. After the midpoint & prototype presentation takes place on 16th December 2016, information will be added up until late April of 2017. Once the final project website is complete, I will arrange a meeting with my project supervisor to evaluate the

websites content and to discuss whether improvements could be made prior to the project showcase. During these meetings with my project supervisor we will evaluate the good and bad aspects of the website. I hope that both my project supervisor and my client are entirely satisfied once the project is complete.

7 Monthly Journals

7.1 Reflective Journal #1

Student name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: September

This month (September), my main goal was to come up with an interesting idea for my final year project, so I researched a lot, read through many ideas, thought of many ideas but yet there was none that I was comfortable doing a full project on. The few ideas that I had shortlisted ended up being not as interesting as I first had hoped as they were pretty basic for a final year project and there was enough work that could have been done to make myself satisfied. Unfortunately, after weeks of thinking, before the first presentation pitch I was still not settled on any idea. I had told the lectures sitting front of me about my basic ideas and it wasn't a shock to me that they weren't fully behind it which is why they recommended that it would be best if I waited for the approved list to be released and then choose one from there. I was finding it really hard to settle on an idea so I thought an idea from the approved list might be suitable for me. I was hoping the list would provide some fresh ideas and broaden my scope a little.

The approved list had been released a few days later. I had read through each and every idea and honestly most of them were very challenging as I would have expected. After looking through them all I had shortlisted five ideas that I was

interested in doing as my final year project. Out of these five there is one I would really like to take on and challenge myself in this project. I am now waiting until Monday so I can go and talk to the proposer of this project and ask if it is possible for me to do this project. I think no matter which project I get, no matter how complex it is, I will surely put a lot of time and effort into it because I'm a final year now. In final year I have noticed everything works many times faster, you constantly have something to do every week. If you slip up, if you miss out on a few days then you will surely be behind and it will be very hard to catch up.

My Reflection

I felt in some way it was a good thing that I didn't, or couldn't come up with an idea. The ideas I had thought about were mostly already out there in some sense and it would honestly have been nothing new, so I didn't see the point in that. When the list was released, it did broaden my scope. I started to think about all I could do with these ideas, all the possibilities. Right now I'm looking forward to talking to the proposer of this idea and getting the thumbs up so I can start my project. Next month (November) I intend to have my project idea finalised so I can start to work on my final year project. I look forward to thinking more about the project and coming up with new ideas for functionalities that I can add to the project.

Supervisor Meeting

As of now I have not settled on an idea so I have not yet had a meeting with my supervisor Keith Maycock. As soon as I'm settled on an idea I will organize a meeting and discuss more about the goals of the project.

7.2 Reflective Journal #2

Student name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: October

This month (October), after much deliberation I finally finalised on an idea. Last month I had shortlisted a few ideas from the approved list but the one I was really interested in doing was already taken by another student so I had to reconsider. I came up with an idea similar in some ways to what I wanted to do but with but with my own take on it. It was one that I was really excited by and it was perfect for me to do a final year project on.

My idea was basically a gaming rating website that allows users to see which games are trending, which games are worth buying and gets feedback from other players regarding various types of games. There is a lot I can do with this idea. For example, once a user searches a game they will be able to get an all in one Wikipedia of the game in a single webpage, YouTube trailers, Live Twitter tweets, Ratings and reviews will be a few additions to the page. There is a lot more functionalities that I plan to add to this project in regards to analysing data. I know there is many websites that show leader boards of trending games but as much as I researched there was none all in one, so to say. This website will allow users to get a broader view of the game and will answer any questions they have about it. This in return will make it easier for them to choose a game and will save them a lot of time in return.

After my supervisor having liked this idea and giving me advice on how to make it more appealing to the end user, I have been considering what languages to use to build this project. Doing the project proposal truly helped me and guided me on the best way to begin my project. The project proposal was efficiently finished and submitted on Moodle before the deadline. For the past couple of weeks, I have been doing a lot research to figure out how I can approach the project. I

also have begun my project requirements specification and is well on track to be completed before the deadline on 18th November.

My Reflection

After carefully inquiring about and talking about my project with my supervisor, he gave me many notes on how I can improve my idea. It did broaden my scope and opened the door to many more functionalities that I can include in my project. Right now I am very confident about my idea and think with more work and getting to know my idea more, I can make this a successful project.

Supervisor Meeting

Supervisor Name: Keith Maycock

Date of Meeting: 26/10/2016

Items discussed:

- Starting Project Idea and Project proposition.
- The most effective method to approach the project step by step.
- What programmes to use.
- How to achieve it.

7.3 Reflective Journal #3

Student name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: November

During November I completed the requirement specification document. This deliverable outlines the various functionalities that I will be including in my

website during this project. I feel that November was a productive month for me on this project. I have established the functionalities that I will be adding to this project. As it is right now, I'm not entirely happy with it so a lot more thinking needs to be done in order for this project to be more complex. Finishing the requirements specification helped me a lot and made me understand my project a lot more. The requirements specification was efficiently finished and submitted on Moodle before the deadline. For the past couple of weeks, I have been researching more on how I can tackle my project and make it as efficiently as possible. I also began to construct the website using Bootstrap in order to have a good layout and design for the prototype which will be showcased at the Mid-Point presentation. I also downloaded Wamp server and then created a phpMyAdmin account, this allowed me to create a database to store information about the login details. I found this part of the project not so challenging as I have used Wamp server before in previous college projects. Connecting the database to the website was completed with ease and was done very efficiently. Design wise, this project website is looking very nice, now I intend to start adding more functionality very soon. My Mid-Point presentation is next Thursday and I am getting ready to prepare myself to explain my project with ease and be ready to answer any questions they ask me.

My Reflection

I have been researching many similar websites and finding out how they approach projects like this. This has definitely helped me in more ways than one and opened the door to many more functionalities that I can include in my project. Right now I am very confident about my idea and think with more time and effort spent into this idea, I can make it into a very successful project.

Supervisor Meeting

I have a scheduled meeting with my supervisor (Keith Maycock) next week which I will be attending and talking further about my project. I have a lot to discuss as since the last meeting I have worked on many parts of the project and have gotten to know my idea very well within the last few weeks.

7.4 Reflective Journal #4

Student name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: December

This month (December), I uploaded the Mid-Point Technical Report document on time on 11th Dec 2016. This document contained all of the work that I've been doing since September 2016. This work included the Reflective Journals (Sep-Nov), the Project Proposal and explained in detail all the functionalities that I intend to achieve as of now by the end of this project. Before uploading, I had proofread the work that I had done to date on my final year project, also the work I had done throughout December, which was time-consuming but very effective.

During the beginning December I looked over and understood my Requirements Specification document, this allowed me to have a broader view of my project and allow me to understand what I intend to achieve at the end of this project. The Requirement Specification document contains a brief introduction along with specific details on the functionalities that I intend to use along with the prototype wireframes that I had created with Balsamiq Mockups. As of now, the functionalities that I have decided to apply consist of the following: Ratings, Leader boards, Twitter API and Sign In/Register. With more thought, I'm sure I'll think of more ideas ad functionalities that I can add to my project.

In January 2017, I have five college exams. This will considerably restrict the amount of time and effort I can delegate to this project during the first half of

January, but after the exams I intend on getting back into working on this project. After the exams i have approximately over a week off of college, during this time I intend to implement various functionalities within this project.

7.5 Reflective Journal #5

Student name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: January

Despite having five exams this month and spending most of the days studying, I certainly feel that I was very productive in January. The semester one college exams did affect my efficiency in the early stages of the month. Honestly, due to all the stress over the college exams, I did little to no work on the software project during this time period. After all the college exams were completed, I only focused on the final year project alone. Researching about how to integrate my many required functionalities into my project and using and experimenting with some code was very helpful. Although I did get many errors at the start, spending a lot of time and effort fixing it was worth it. The end of January was when some of my intended functionalities started to work and therefore my website began to get more complex.

I am aware that a substantial amount of work still needs to be done on this project. I will continue to work hard on this project over the course of the next few months. It's vital that I manage to achieve all my set objectives for February, as this will ensure that my project remains on schedule. If I manage to achieve all my set goals for February, which are adding more functionalities to the project and testing them to make sure they work, I will start working on my Final report throughout the month of March.

7.6 Reflective Journal #6

Student name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: February

This month (February), I made extensive progress on this project but I'm still fully aware of the amount of work that still needs to be done.

The month of March will be another very busy period for me on this project. I will be preparing for the project showcase in the early stages of the month. In the later stages of the month, I will start constructing the final year technical report, which is the main component of my project. My assignments for the other two modules, which consist of Data Mining and Advanced Business Analysis are the only barriers which exist during the month of March. I am beginning to make great progress on my final year project, which is a huge relief, but a lot more work has to be done over the course of the next few months.

During my next project supervisor meeting, we will discuss the approach that I should take for the techniques that I'm planning to utilize next. This will be followed by a brief discussion on how I should go about constructing the final year technical report.

7.7 Reflective Journal #7

Student Name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: March

During the month of March I was extremely busy with assignments for my two other modules, these consist of Data Mining and Advanced Business Data Analysis respectively. I studied for my final year exams as well, which take place

on the 19th April and the 22nd April respectively. These activities did restrict my progress on my final year project in the month of March. I finalised the prototype for the Gaming Rating website, I added more functionalities within the website. I proofread all of the work that I have completed on the project to date.

In April I must attend two college exams, for Data Mining and Advanced Business Data Analysis respectively, which will involve studying from the 1st of April until my exams end on the 22nd of April. This will leave roughly half of the month to finish off my final year project, prepare for the final presentation, and to create a poster for the project showcase on May 24th. Once my final year exams are finished I will begin the last component of my final year project. This will involve constructing a highly detailed Final Report for the Gaming Rating website.

I am pleased with my progress to date on this project, but I am fully aware that many more tasks must be completed immediately after my exams are finished on the 22nd of April 2017. These tasks include creating and preparing for the final project presentation, completing the final report, developing a poster for the project showcase, and finally printing off and handing in my final year project report and the showcase poster.

7.8 Reflective Journal #8

Student Name: Usman Akhtar

BSc in Computing (Data Analytics)

Month: April

After my final year college examinations finished on the 22nd April 2016, I started working on the final component of my project. This section consisted of a highly detailed final report document.

When this document was complete, I then began to create the project poster which will be displayed at the project showcase on the 24th May 2017. When I was fully satisfied with the poster and the requirements specification document, I

then started to complete the Final Project Report which must be submitted on or before the 10th May 2017. My overall objective is to complete this project report along with the project poster by the 5th May 2016. This means that I can get these parts of my final year project printed off well in advance of the project's deadline day.

When the project report and the project poster are completed and handed into the National College of Ireland, I will then start creating the final year project presentation slides. My presentation is due to take place from nine to ten on the 15th of May 2017, whilst the presentation slides must be uploaded before 23:55 on the 14th May 2017, as this is exactly the day before my presentation, I will have the slides completed and uploaded well before the deadline so I will have a few days to look over and prepare my presentation. The project website documents must also be updated. The project showcase, which will take place on the 24th of May 2017 at the National College of Ireland, will mainly consist of the project poster and the project website. When I have finished performing my final year project presentation, I will finalize my project website to ensure that it's appealing and fully up-to-date with the relevant project content. After my presentation i will have nearly ten days to prepare for the project showcase demonstration.

It is now May and my final year project is now almost upon completion and it's honestly really hard to believe that my time in NCI is coming to an end and how fast the time has gone by these past four years (2013-2017). My college examinations are now complete and when the project showcase is finished on the 24th May 2017 it will close off my time at the National College of Ireland. I have really enjoyed the challenges of college life and the friendships that I have built over the last few years. The last few parts of my final year project will be completed over the next few days.

I must complete the Final Project Report and the Project Poster by the 10th May 2017. My Final Year Project Presentation takes place on the 15th May 2017 and the Project Showcase day will commence on the 24th May 2017.

