

The National College of Ireland

Author: Rachel Carter

Student Number: X19402832

Course: B.Sc. in Technology Management

Link to Final presentation:

https://studentncirl-my.sharepoint.com/:v:/g/personal/x19402832_student_ncirl_ie/EX1yiTgJAS5DnsMmifiyfNEBTDROKA4TBuhkdRIKMiJbfQ?e=5slvog

Link to my website:

www.myhr3.wordpress.com

Link to my midpoint presentation:

[video3628591793.mp4](https://www.youtube.com/watch?v=video3628591793)

Declaration Cover Sheet for BSHTM4 Project Submission

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Acknowledgements

I would like to give a special thanks to Francis Sheridan for all the help and advice she has given us this year in regard to this project. She made herself available any time we had questions and guided us through each step of the project. She was not only our lecturer for this module but my support throughout this time.

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I would also like to thank the managers of my part time job in Dunnes stores for being so accommodating with my college work this year.

Abstract

This is a business analysis project carried out on an application of my choice. The application I chose to create is called MyHR. During the project I will carry out requirements elicitation needed in the development process of the app.

Many applications were used in the project to ensure the elicitation techniques were carried out to their fullest ability. The project is essentially bringing technology into the human resources industry. Technology is currently overlooked within human resources and should be implemented. Many companies are creating their own apps or processes for rostering or leave requests, but an application that can be used for all companies of all sizes is lacking in this field.

By carrying out business analysis techniques allows us to gather all the requirements which are needed for the development of the app. These techniques allowed us to gather information from the potential users of the app to gain insight on what features they would like to see. They help to identify whether there are any vulnerabilities in the application that need to be addressed. By extracting this data, I was able to create a prototype of the app based on the information which I gathered.

There were two main goals to this project, the first being employees accessing their rosters online. These rosters would be uploaded from the employer's side of the app. The second one being users requesting time off through an app. This time off is received by the employers through the app where they can simply accept or decline the request.

This app is based on personal experience from the different jobs that I have been in and how they can improve this system. Most companies to this day are still lacking this technology advancement within their business.

The findings from this project will make it possible for this application to be implemented across businesses today.

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1. Requirements Elicitation & Analysis Planning

1.1 Introduction

MyHR is designed to be used by businesses to make their rostering and time systems easier. This project will require analysing, gathering, and documenting of the requirements. The reason for this project is to allow employees to access their rosters and request time off from anywhere. This app will allow employees to book holidays and request time off. This information will be used to create a roster automatically depending on each employees needs. Not all companies use an application system to show their rosters to their employees. These employees are they at a disadvantage to other employees in different companies. This app is designed to allow employees to have access to everything that they need from holiday requests to their availability.

the MyHR is being developed primarily to make it easier for employees to access their rosters and request time off. There are also many plans for the future of this project and many features that will become available. The users of the application will have the ability to input their availability, check their rosters from anywhere, request time off on their phone, see the time off they have left to take etc. this app is designed to move some of the human resources into technology. Although technology is huge, currently a lot of companies still lack an app like this.

1.2 Business need

Human resources are a huge sector of business today which lacks in the technology advances. Many Irish companies are still using the old fashioned printed rosters stuck on a notice board. This application is designed to bring technology advances to this sector. The application is designed to be easily accessible which makes it easy for people of all ages to use this app. Currently some companies have similar apps for their own companies, but I decided to create an app that can be used across the board for all companies. This means that any company can use this app for their own organization instead of having to make their own app themselves. This will make it easier for business to move with the technology advances without having to spend a lot of time and money creating their own app. With the old-fashioned ways of getting your roster employees can not access it unless they are physically in work. This means that if an employee had a few days off or were on holidays they would not be able to access the new rosters until they are physically back in work. Many companies still use leave request forms for requesting holidays and time off, these pieces of paper can be easily misplaced, lost, or misread. This application is designed to make requesting leave much easier; you will also have full access to your time off history and the time off you still have left to take all from a touch on your phone.

Approach:

Due to the possibility that the requirements may change and the many future plans for this app I think an agile approach would be best suited. This means that users can access the application in stages to ensure that the change process runs well. It will also allow stakeholders to add in any new requirements which they feel are necessary. I do not think the waterfall approach would suit this app as the requirements cannot be changed through out and it may be harder for the users to adopt to change when they are only given the final product and not eased into it like the agile approach.

1.3 The Business case.

After speaking to many companies and asked them for their feedback on the idea I have realised that companies are really lacking an application like this. There is a huge niche for this application. This app will be able to be used in companies across the globe not only just in Ireland. By speaking to many different companies and appointing the stake holders the requirements for the project will be decided on between them.

Before the project began developing the needs of the stakeholders must be clearly stated to avoid any challenges throughout the project. All requirements that are gathered must be clear and complete so that they are not misunderstood. If this project is not completely correctly it could lead to an unsuccessful app. It is extremely important that all requirements are discussed with each stakeholder before it begins developing.

The app must be easy to navigate as an app that is hard to navigate will be no use for its users. Before the app is released all users should be given a tutorial or workshop demonstrating the ins and outs of the app. Without this tutorial users may not be using the app to its full potential. Not only will the employee users need training but also the employers who will be editing and uploading the information. There are many risks if these are not given training for example uploading the wrong information to the wrong person, accidentally deleting valuable information etc. Training is crucial and must be given to all users of the application.

1.4 Stake Holder List & influence matrix

1. Human resources
2. Managers/supervisors
3. Employees
4. Recruiters
5. Investors
6. Employer
7. Contractors
8. Developer
9. Business analyst

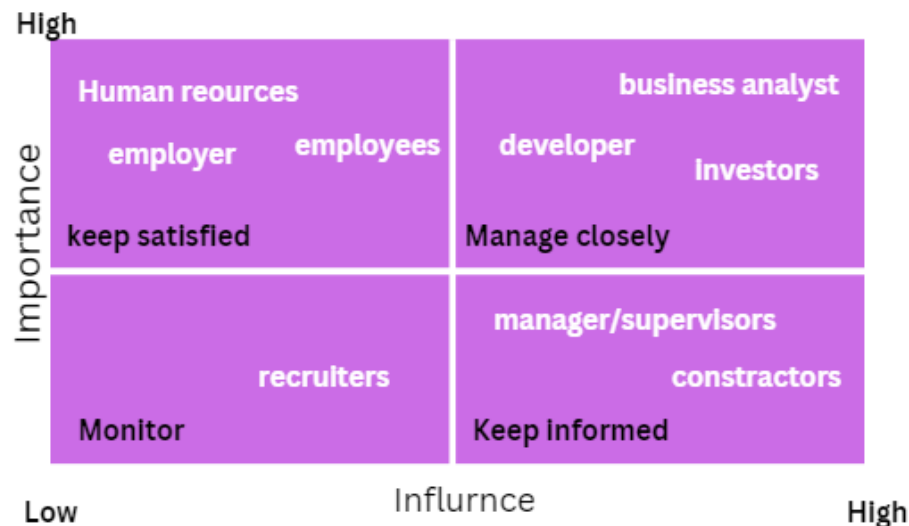


Figure 1: Influence Matrix

The importance or influence matrix:

This matrix shows where each stakeholder is ranked within the application. It displays how important they are and how much influence they have on the project.

As you can see from the picture above the three most important stakeholders for this app are the business analyst, the developer, and the investors. These should be managed closely as their opinions can extremely affect the development of the app. These are the most important as the investors are the ones supplying the funding for the app. If they are not managed closely they may not like where the app is going and pull the funding altogether. The business analyst is also in that top right quadrant as they need to have a great understanding of the requirements, without the business analyst the project could not go ahead. Lastly in this upper right quadrant you will see the developer. Essentially the developer is the one making the app, so their opinion is extremely valued. Without the developer the app would not exist. In the lower right quadrant, I have the managers or supervisors and the constructors. These only need to be kept informed as they do not have any importance or influence on the app they are solely just going to be within an organisation who will be using it. In the upper left quadrant, we have the human resources, employers, and employees. These hold high importance towards the app but have a low influence on it. These are the users of the application, so we solely need to keep them satisfied. Once they are satisfied enough they will use the application. In the lower left quadrant we have the recruiters these need to be monitored, although they are of importance and low influence their opinion can still matter as the people that they are recruiting could be using the app. This is why they have a low influence and low importance to the overall project.

2. Requirements Elicitation Techniques

2.1 brainstorming

Introduction:

Brainstorming is usually done in a group. It is when creative ideas are jotted down. Every member within the brainstorming session is encouraged to think out loud. All ideas are welcome and considered in a brainstorming session. It is essentially an informal way of solving a problem and although it can not be evaluated it is usually a huge success. The ideas that are contributed can then be transformed into creative solutions and features to a project. (Bernstein, 2017)

Objectives:

The main objectives we wish to gain from the brainstorming session is getting quick and easy access to ideas. It allows us to get ideas from outside people as it allows everyone to talk freely, and no idea inputted is a bad idea. By having a brainstorming session can allow you to see improvements that can be made. The main objective is to ensure that all ideas are taken account for as no idea can be lost. The different perspectives that you get from brainstorming can give you different outlooks on the project.



Figure 2: Brainstorming

For brainstorming I used an online tool in which I uploaded ideas onto virtual sticky notes. Although not all these ideas will be used in the end product they are all necessary to be shown. I asked people what they would like to see in their company's

employee applications, and these were the results that I have gathered so far. By creating this large number of ideas in a short amount of time it allowed me to get creative about my project. The collaboration with people who are also employees opened me up too many opinions. It allowed me to see which features were given many times. These features that were given multiple times will be of higher importance as many people feel that they are needed. It helped me gather ideas from different perspectives and different age groups. From these ideas I will be able to elaborate and ensure that all the necessities are met. In Conclusion the brainstorming session was a success, and all these ideas will be considered consideration during the creation of the project.

Results from brainstorm:

After collecting ideas that I think would value my application I put them together for them to be considered during the creation process. The ideas that are not considered now will be considered during future upgrades of the project.

- Daily roster
- Availability
- Clock in/out
- Wellness
- Holiday requests
- Holiday hours
- Extra hours available
- Upcoming events
- Fellow employees' roster
- Swap requests
- Overtime
- Rewards (if there is any)
- News from the company
- Targets
- Sick day approval
- Staff perks
- Break times
- Sell holidays.
- Post shifts you do not want.
- Staff card or discount
- Staff id
- Bonuses
- Notice board

2.2 Requirements workshops

I contacted a small Irish computing business called Quest Computing; they allowed me to carry out a requirements workshop. Once I explained to them the project that I have been working on they were happy to help. During the requirements workshop in which I held the infrastructure manager was present along with the CEO, the software developer, a general employee, and the human resources team.

During this I found which of my features they deem as requirements. These features will be present in the final product of the project. By collaborating with the stakeholders, it allows me to get the information which is needed straight away. This allowed the stakeholders to give their input into my design. Once they were happy with the design I was then able to begin creating a wireframe along with their feedback.

In conclusion these were helpful to gain an insight from the main stakeholders of the project

2.3 Survey and results

Overview:

Surveying is essentially gathering information from a large population to be able to understand them as a whole. This is done by using relevant questions to the topic for which you are trying to get feedback. (*What is a survey (or questionnaire)?* 2022)

Survey participant's:

For me to get accurate information I needed participants of all ages and in different industries.

- Employees
- General public

Survey Distribution:

Unfortunately, due to covid hard copy surveys could not be passed out which is why digital surveys only could be used. Although this can be seen as a disadvantage there are many advantages, the response time was a lot quicker, and it was easier to organise and reflect on the answers that were received.

- 1) The survey was posted on various social media platforms such as Snapchat and Instagram.
- 2) The survey was given to fellow students in NCI. This was done by creating a link and sending it to the course group chats for them to answer.
- 3) The last method of distribution I used was passing the survey on to my family members who also passed it on to their friends and colleagues.

Objectives:

The main objective of my survey was to be able to find out how employees within different industries get their rosters for work. It also helped me see whether people would find an app beneficial. It also allowed me to get feedback on what features people would like to see in this app. The survey also gains insight on the demand for this app within businesses today. Another objective of this survey was to work out if the age and industry of a person would affect whether they would use an app like this or not.

The Questions:

Q1. What age are you?

- 16-25
- 26-35
- 36-45
- 46-55
- 55+

Q2. What industry do you work in?

Q3. What is your job title?

Q4. Currently how do you receive your roster for work?

- Notice board
- Online/app
- Message
- Other

Q5. How often do you receive your roster?

- Weekly
- Fortnightly
- Monthly
- Other

Q6. How do you request holidays or time off?

- Ask in person.
- Fill out a form.
- Online
- Message

- Other

Q7. How easy do you find it requesting time off?

- 1 easy
- 2
- 3
- 4
- 5 hard

Q8. Do you think an app for rostering and HR would be useful in your job?

- Yes
- No
- Maybe

Q9. If this app became available would you recommend it to your employer?

- Yes
- No
- Maybe

Q10. Are there any features you feel could benefit this application?

Link to Form:

<https://forms.gle/M7z7f1C6PGPctAWa6>

Question 1.

What age are you?

90 responses

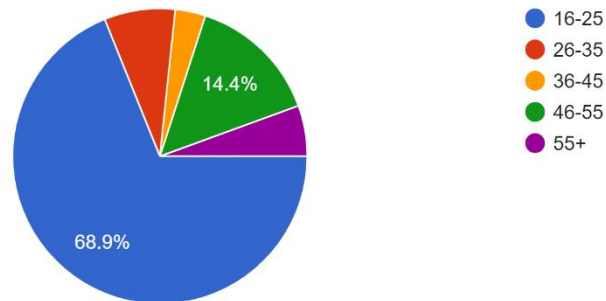


Figure 3: Pie Chart of responses by age category

Question 2.

What industry do you work in? *

Short answer text

Figure 4: Industry question

Breakdown of the answers for question 2 after I categorised them in excel:

Industry	Number of People
Retail	29
Hospitality	8
Health Care	13
Trades	7
Pharmaceutical	3
Beauty	3
Education	2
Transport	4
Animal Care	2
Media & Entertainment	4
IT	3
Business	6
Tourism	1
Other	5

Figure 5: Categorised breakdown of question by industry

Bar chart:

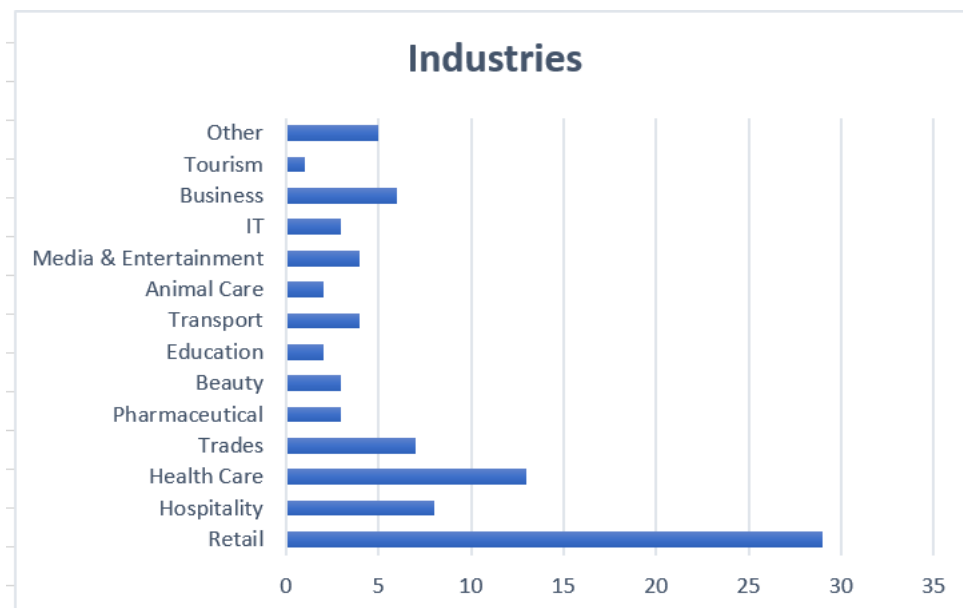


Figure 6: Bar chart breakdown by industry

Question 3.

What is your job title? *

Short answer text

Figure 7: Job title question

After receiving the responses for this question, I realised that it was not necessary as the industry that they worked in was enough. There fore I did not use the responses to this question in my findings.

Question 4.

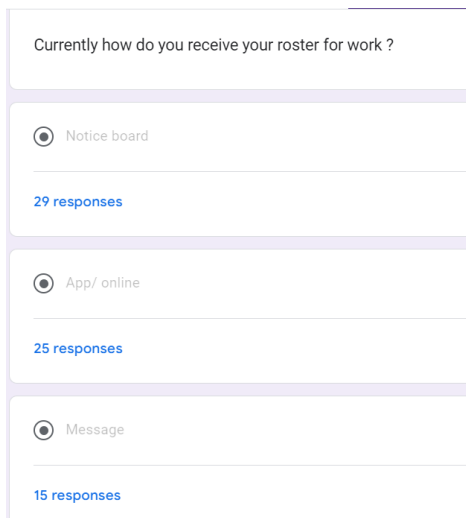


Figure 8: Rostered work question

21 chose to fill out the other section.

Question 5.

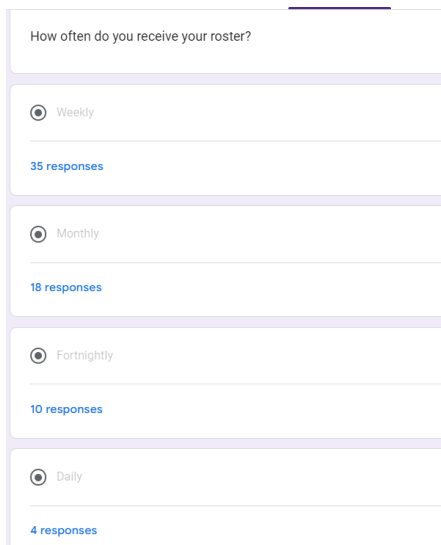


Figure 9: Frequency of receipt of roster

23 chose other as their roster never changes for example: they work 9-5 Monday to Friday.

Question 6.

How do you request holidays or time off?

Online
29 responses

Ask in person
24 responses

Fill out a form
24 responses

Message
5 responses

Figure 10: Holiday request question

The other 8 chose to answer in the other option as they either work for them selves or they had another form of holiday request for example holiday logbook.

Question 7.

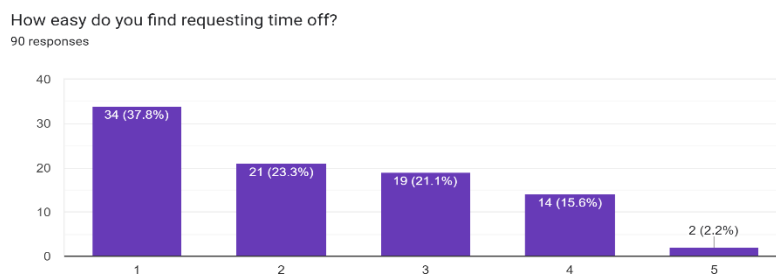


Figure 11: Ease of time off request chart

Question 8.

Do you think an app for rostering and HR would be useful in your job?

90 responses

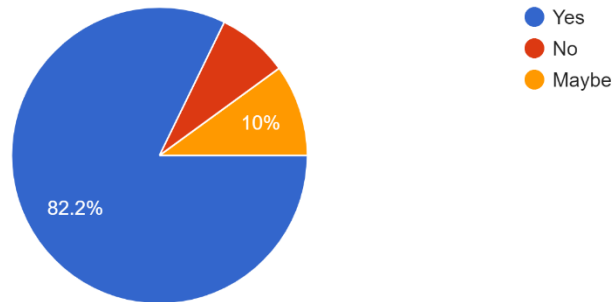


Figure 12: Usefulness of rostering and HR app

Question 9.

If this app became available would you recommend it to your employer?

90 responses

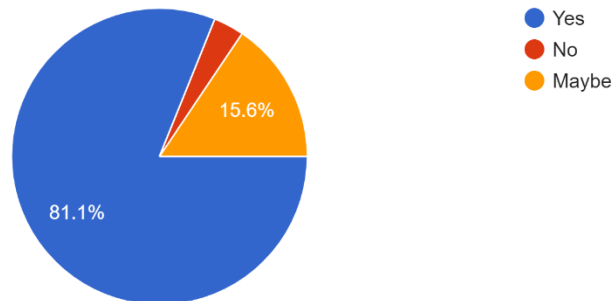


Figure 13: Recommendation of app

Question 10.

Is there any features that you feel this app could benefit from?

Long answer text

Figure 14: Additional features that could improve the app

Survey conclusions:

This survey was conducted through an online link due to the affects of the current pandemic. The survey was conducted in a one-week period as the online link was extremely easy to use. After sending out this survey I managed to get 90 responses which will give me a good variation of answers this is extremely helpful to get a good insight from many different perspectives. By having this large response rate ensures that my survey is nonbiased, and I could get more accurate findings.

From the responses we can see the different variation in the age groups which answered.

- 16 - 25 = 68.9%
- 26 - 35 = 7.8%
- 36 - 45 = 3.3%
- 46 – 55 = 14.4%
- 55+ = 5.6%

Once of the main objectives was to determine weather the industry people work in would affect whether they would use the application. In the end the retail industry made up most of the responses from the survey. The retail industry is one of the leading industries in Ireland. After the completion of the survey, I came to the realization that “what is your job title?” was not needed therefore I did not use the responses to this. This is because the industry that they worked in gave me enough information that I needed. 32.2% of the responses receive their rosters through a noticeboard, 27.7 receive them online or through an app and 16.6% are through message. The other 23.3% said that their roster never changes. This means that the majority of the candidates’ employers have not moved their rostering systems to online platforms and are still using outdated methods. The responses for how often rosters are received were 38.8% received them weekly 20% receive them monthly, 11.1 % receive them fortnightly and 4.4% chose to write daily. This means that the majority oof the people get roster updates on a weekly basis. The rest of the responses consisted of people whose roster never changes. When it comes to requesting time of 32.2 % can do this online 26.65 have to fill out a form and another 26.6% must ask in person. The others that responded either work for themselves use a holiday logbook etc. this is like the responses of how they receive their rosters the majority of the candidates are still requesting time off in an old-fashioned way. 37.8% find it extremely easy when it comes to requesting time of, 23.3% find it easy, 21.1 % find its averagely easy to difficult to request time off, 15.6% find it fairly hard and 2.2% find it hard. My application is aiming to make it even easier for them to request time off. 82.2% of the responses show that they would find this app useful for their job, this shows that there is a need for this app, 10% of the responses said maybe this could be

down to having to see the app up and running before they make the decision and the other 7.8% of the responses said no. Of these no responses mainly came from those who work for themselves or whom hours never change. After asking the candidates if they would recommend this to their employer the majority said yes. This majority made up 81.1% of the responses followed by maybe which had 15.6% of the responses. The other 3.3% of the responses actually work for themselves so they said no as it is not needed for them. For the features that the candidates would like to see I took the responses into close consideration and some I even think are extremely good. Having your payslips on the application is one that I thought was good and may even be a feature of the app in the future. A shift swap or extra shift option was also a feature which stood out to me. This feature was inputted by at least 15 of the responses. These features will be considered in the future of the project. But over all I feel from these responses this app would be extremely successful especially for those who do not work the same shifts every week. But for those who do work the same shifts it would be extremely successful for requesting holidays or time off. From the responses I feel like the age of the candidates did not make a difference into whether they would use this application or not and therefore it is suitable to all ages.

Results of the survey:

After analysing the survey this is the conclusions I came to:

- Age is not a factor that will affect whether they will use the app.
- The majority of industries still do not have an application like this.
- The retail industry would find this application the most useful.
- Employees with no changing shifts would still find it useful for requesting time off.
- The majority of the candidates would recommend it to their employer.

2.4 Interviews

Overview:

Interviews allow you to gather information from people to gain for useful conclusions. This is done by asking chosen people relevant questions. This method gets more detailed conclusions than any other research method. (George, 2022)

My HR app is designed to help those working in the human resources industry. It is to make rostering and time off requests easier to handle therefore they can spend more time focusing on the other elements of human resources. By moving to an online platform will not only make it easier for them but also for their employees. Technology is a huge part of life today and there for should be used to the best of its ability in all areas of life.

Interview question for people involved in human resources and rostering:

I chose to use the same questions for all three interviews for me to be able to compare the answers.

Question 1

what organisation are you working for?

Question 2

What industry is it in?

Question 3

How many people work for the organization?

Question 4

Do you find it difficult creating rosters for your organization?

Question 5

Is it time consuming creating these rosters?

Question 6

Is it easy for you staff to access these rosters?

Question 7

How does your staff request time off?

Question 8

How easy do you think it is for your staff to request time off?

Question 9

If this app were available to you organization would you use it?

Question 10

Are there any features that you think would benefit this app?

2.4.1 Interview one

Date: 25th of April 2023

Time: 14:00

Place: Dunnes Stores, North side shopping centre

With Whom: Kerri Hr

Question 1

What organisation are you working for?

Dunnes Stores

Question 2

What industry is it in?

Retail

Question 3

How many people work for the organization?

100

Question 4

Do you find it difficult creating rosters for your organization?

No, but it is hard to ensure that everyone's availability is up to date and ensuring everyone's rosters are made according to their contract for example full time and part time staff, daytime, and night-time staff, under 18s etc.

Question 5

Is it time consuming creating these rosters?

Yes it can take up to 4-6 hours depending on the week.

Question 6

Is it easy for you staff to access these rosters?

Yes they are on a notice board beside the locker rooms. If the staff member is not in work they can ask someone to take a picture and send it to them.

Question 7

How does your staff request time off?

They can fill out a time off request form or ask us in person.

Question 8

How easy do you think it is for your staff to request time off?

Easy enough as they can just ask or fill out the forms, if there are no forms available they can write it down and hand it to us.

Question 9

If this app were available to you organization would you use it?

Yes I think it would be beneficial to our organization.

Question 10

Are there any features that you think would benefit this app?

A notification system sent out to employees when an extra shift is available, and the employees can accept it if they want.

Interview one conclusion:

The purpose of this interview was to get an understanding of whether this app would be suitable for this organization and how it could benefit this company.

Although they do not find making the rosters difficult they do find it hard remembering who works which shifts and different people's availability. They must also assign shifts according to the laws of the country for example anyone under the age of 18 must not work past 10pm. They find making these rosters extremely time consuming and can take up to nearly a whole day just for one week's roster. Employees can only access the roster if they are in the building which can make it hard for employees to access it at home unless they take a photo of it. If they are not in when it is posted on the notice board they must wait for their next shift to see it or ask someone who is in work to take a picture and send it to them. When it comes to requesting time off them must fill out a form and hand it to them. This can lead to forms being misplaced and employees being unhappy if they are not granted their time off due to this. They may also ask in person, this can lead to miscommunication as its not in a hard copy format. Although this is generally easy it may lead to these flaws. This application would be extremely helpful for this organization as employees would be able to do all of this on their phones. I will also take their feature of a notification for an extra shift into consideration for future upgrades we could make to the app.

2.4.2 Interview Two

Date: 20th of April 2023

Time: 12:00

Place: Over the phone

With Whom: Amy department Manager

Question 1

what organisation are you working for?

Tesco

Question 2

What industry is it in?

Retail

Question 3

How many people work for the organization?

13 thousand across 64 stores

Question 4

Do you find it difficult creating rosters for your organization?

No, the difficulty level depends on the store and how many employees and departments the store has.

Question 5

Is it time consuming creating these rosters?

This depends on the size of the department; smaller departments do not take as long as bigger departments, but it can range between a minimum of 3 hours to almost 8 hours.

Question 6

Is it easy for you staff to access these rosters?

Yes, there is a hard copy online and some employees can even access it online.

Question 7

How does your staff request time off?

Time off requests are taken verbally or written down on a time off request form.

Question 8

How easy do you think it is for your staff to request time off?

Very easy

Question 9

If this app were available to your organization would you use it?

We currently have an app in progress called my Tesco, it is still not fully launched but its being worked on. This app is solely for rosters and not time off requests.

Question 10

Are there any features that you think would benefit this app?

I feel that the app should have the policies of the organization along with the employees' rights. I also think that opportunities that are available within the organization should be featured on the app.

Interview Two conclusion:

The purpose of this interview was to get an understanding of whether this app would be suitable for this organization and how it could benefit this company.

Although these currently have a roster app in progress they are having difficulty launching it. Although they could not disclose what the difficulty is due to privacy reasons there are many reasons I could think of for example employees not receiving proper demos or training, not using the right methodology to introduce the application. The app which they are trying to launch is just for the employees' rosters although they will have an app employees will still have to verbally request time off. This means that although they are launching an app it will not be as useful as the MyHR app.

2.4.3 Interview three

Date: 2nd of April 2023

Time: 10:00

Place: Zoom

With Whom: Peter

Question 1

what organisation are you working for?

Quest

Question 2

What industry is it in?

Software/ IT

Question 3

How many people work for the organization?

46

Question 4

Do you find it difficult creating rosters for your organization?

Yes

Question 5

Is it time consuming creating these rosters?

yes

Question 6

Is it easy for you staff to access these rosters?

No

Question 7

How does your staff request time off?

Email request and leave form.

Question 8

How easy do you think it is for your staff to request time off?

At present there are no issues

Question 9

If this app were available to you organization would you use it?

Possibly subject to review

Question 10

Are there any features that you think would benefit this app?

Sync option with Microsoft calendar

Interview conclusion:

Although this is an IT company they are still using old fashioned ways of leave forms and emailing any time off requests. They find it difficult creating rosters and find it very time consuming considering they only have 46 employees. This shows that no matter the size of the company creating rosters can be extremely time consuming. The feature they recommended to me is good and I will consider this in the future of the project.

2.5 MoSCoW analysis

Overview:

Moscow analysis is essentially a prioritization technique which is used in business analysis. It helps you and your stake holders to understand the importance of each requirement which you have in your project. It outlines the must have, should have, could have, and will not have requirements within our project.

Objectives:

The main objectives of MoSCoW analysis are to prioritize your requirements of the project efficiently. Below you can see the visualisation made from this MoSCoW analysis.

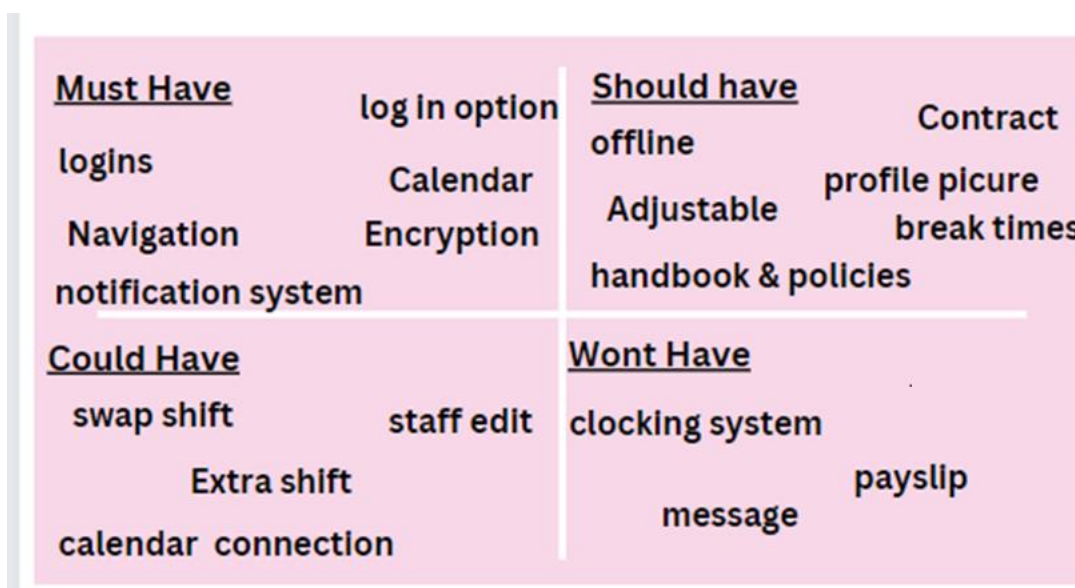


Figure 15: Moscow analysis quadrant

Must have:

Title	Description
Log in option	A separate login for employee and employer is needed. This is needed because the employer and employees' access within the app will be different.
Logins	All users will need to be given their own log in to access the app.
Notification system	A notification system is needed to update employees on roster changes and to inform users whether their time off requests were approved or denied.
Calendar	A calendar is the main feature of the app it will display the user's roster and any upcoming time off that they have.

Navigation	The navigation of the app must be easy for it to be accessible for everyone. It must be straight forward.
Encryption	Encryption is necessary as there will be personal details and important information stored within the app.

Should have.

Title	Description
Offline	There should be an offline mode so that users can check their rosters without being connected to the internet.
Profile picture	Each user should have a profile picture so its easier to visualise for the managers
Adjustable	It should be adjustable to all types of devices like apple windows, android.
Contract	Each user should have access to their contract for when ever they may need it.
Handbook & policies	Each user should have access to their employee handbook if there is one and their organizations policies and their rights within the company.
Break time	The user should be able to see the length of the break they get according to their shift and what time it should be taken at.

Could have

Title	Description
Calendar connection	Having the rosters connected to an external calendar like Microsoft teams or apple calendar
Staff edit	Users could edit and update their personal details, password etc giving them a sense of customization to their app.
Shift swap	The option to request a shift to be swapped and approved.
Extra shift	An extra shift notification sent out to employees where they can accept or decline.

Will not have.

Clocking system	Users having the option of being able to clock in or out through the app.
Payslip	Being able to access your payslip through the app.
Message	Message system where users can message through the app.

2.6 interface analysis

Overview:

Interface analysis is essentially used to find out what, where, why, when, and how the information is exchanged between the components of the application. It helps to determine the requirements to ensure all components interact efficiently with one another. It essentially helps you to determine the requirements for how the components interact with each other. By doing this early in the project allows the business analyst to provide a reason for adding more stakeholder requirements.

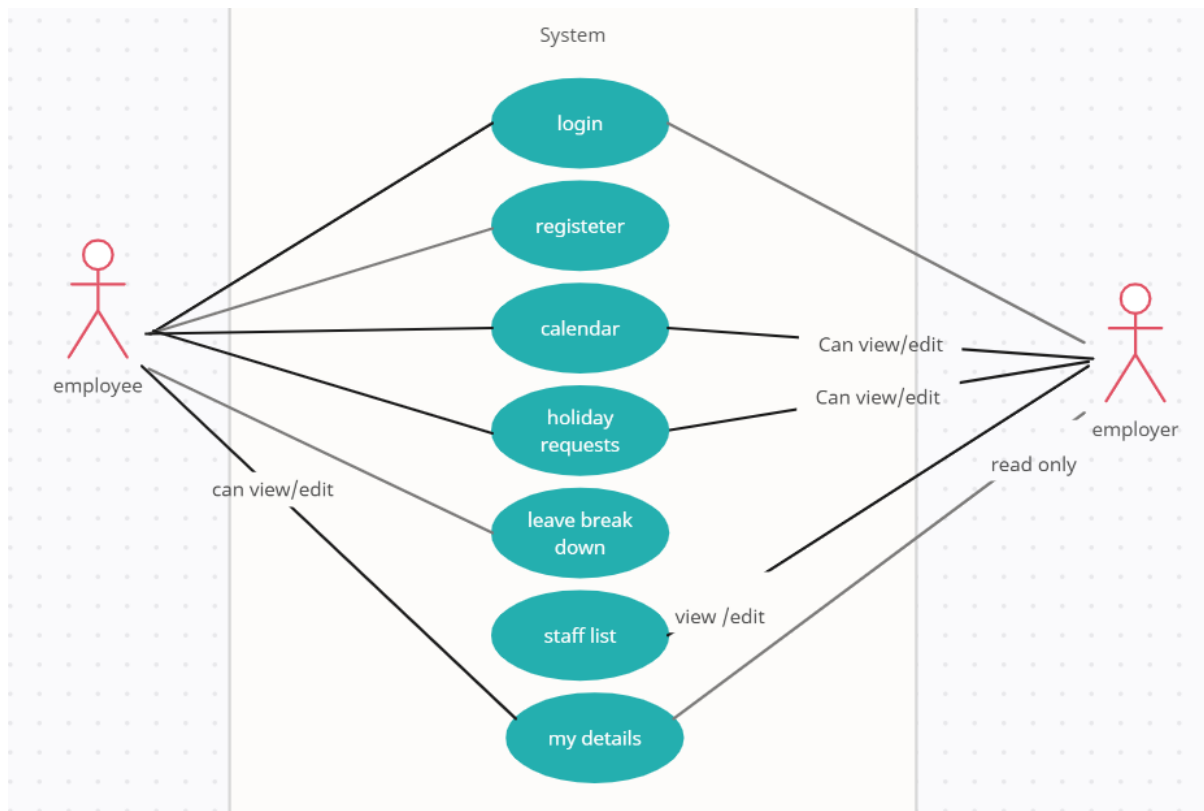


Figure 16: Interface analysis diagram

The use case diagram shown above demonstrated the main flow of interaction between the users and the application. This includes login, register etc. this use case diagram shows what each user can do.

The employee user has access to the login, register, calendar, holiday requests, leave breakdown and my details. Whereas the employer user can access the login, calendar, holiday requests, staff list and my details. The employee user can edit my details page whereas the employer cannot. The employer can edit the calendar that the employee can see. The holiday requests the employee sends in, the staff list when new staff come, and other staff leave. Although they can access the my details of employees they can not edit them.

2.7 Prototype

Overview:

A prototype is the first version of the application which is used to make all the other versions. It allows you to see what needs to be changed and any improvements that need to be made before the final product is launched. It is a simulation of all functions and patterns that will be happening in the app. It defines your requirements before you any real commitments in developing the app. This is the next step after wireframes are made and this prototype is made based off the wireframes that were created. Prototype is an easy addition to the development and does not cost that much. Although it does not cost a lot it can save the company money in the future by having a working first draft before completing the final draft. It is essentially proofing the concept to ensure that the application will be worth pursuing. (Agency, 2023)

Based off the wireframes which I made I could make a rough prototype to show what my app would look like when its functioning.

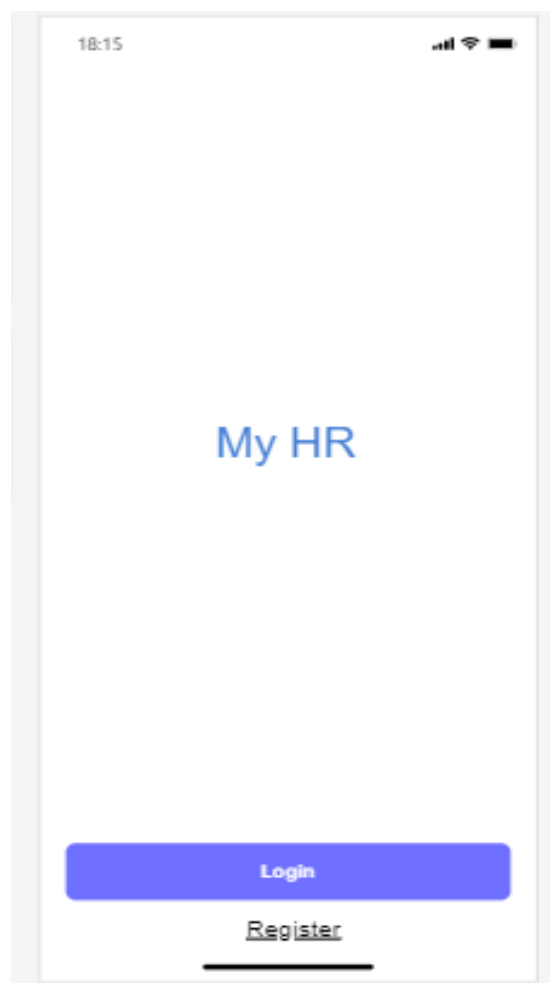


Figure 17: App default landing page

The first page that the user will see when they go onto our application is shown above. This is a generic page where the apps name is displayed along with a login and register option. This ensures the user is aware that they are entering the application and they can choose which option that they are looking for.

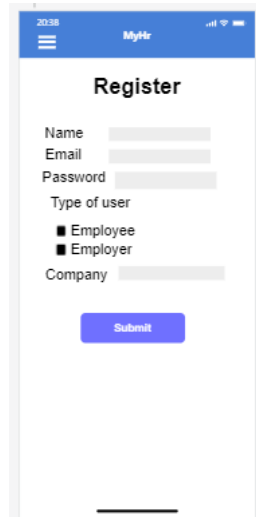
The image shows a mobile application registration form. At the top, there is a blue header bar with the time '20:38' on the left, the app name 'MyApp' in the center, and signal, Wi-Fi, and battery icons on the right. Below the header, the title 'Register' is centered. The form contains several input fields: 'Name', 'Email', and 'Password'. Below these is a section titled 'Type of user' with two radio button options: 'Employee' and 'Employer'. At the bottom of this section is a 'Company' input field. A blue 'Submit' button is positioned below the 'Company' field. The entire form is set against a white background with a light gray border.

Figure 18: register page and options

If the user chooses to register they will be asked the following questions above to make an account. It must be a real email address and a password that includes at least one uppercase letter and a special character.

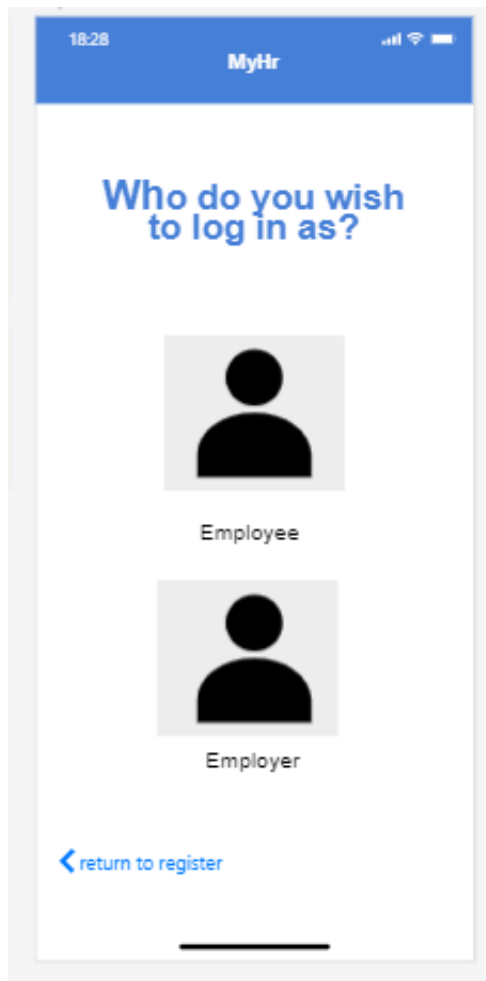


Figure 19: Login options

When log in is chose the user will be given two different login options. The employee and employer are the two options that are given. This is because both users have different features within their login. The user must choose who they wish to sign in as or they can return to the previous page to register their account.

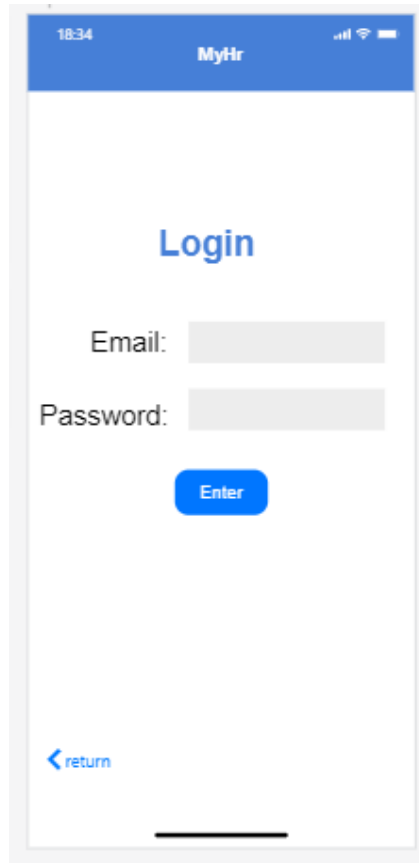


Figure 20: Login details

Once the user has chosen who they wish to log in as they can enter their log in details. This will be a work email address that is given to the employees and employers to be used in this app. The username and password must match the accounts that are made for the users. If they do not have a log in they have the option to return to the previous page and change their choice.

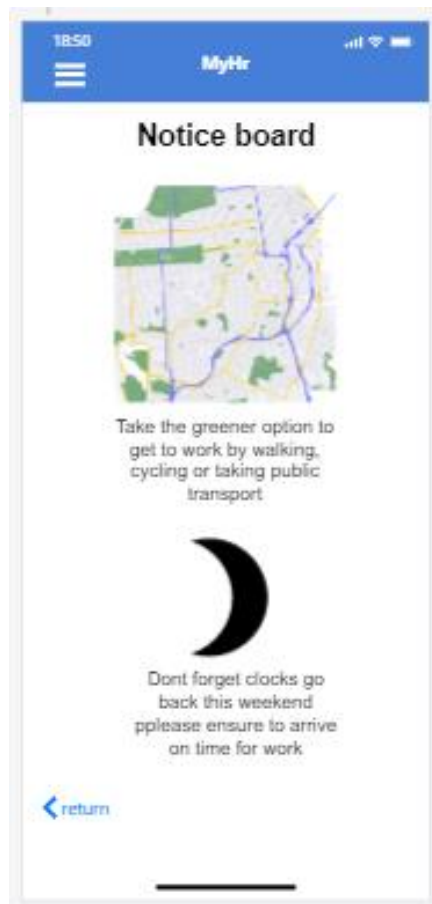


Figure 21: Login home page notice board

The home page will consist of a notice board that has any updates or news that can be shared with the company. users can scroll through this as they please. This allows the organisation to share information with its employees.

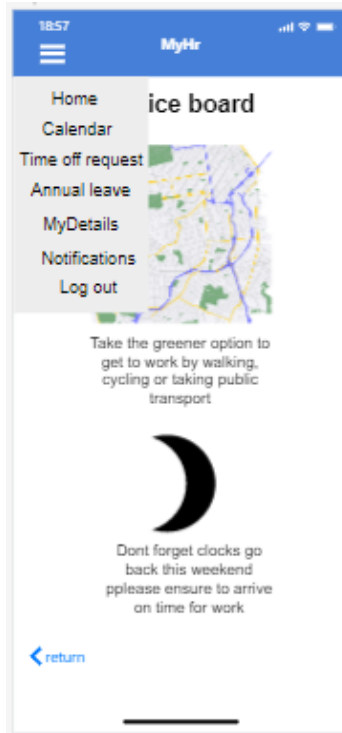


Figure 22: Employee Navigation options

Each user will be given options within the app which they can navigate through and find exactly what they are looking for. The options that are available to the users now are home, calendar, time off request, annual leave, MyDetails, notifications and log out. Each link will bring them to a different page depending on which they choose.



Figure 23: Calendar by month

The calendar page will display the shifts that have been posted by the month. The user can navigate through the months by clicking the arrows. They will be able to see previous completed shifts or the future shifts in the next months. Their time off will also be posted in these calendars for them to reference to. Different colours will be used to show the difference between shift and time off. They will also be able to view their shifts in a list to ensure that it is extremely clear. This makes it easier so that users can just scroll through their shifts as they please.

The screenshot shows a mobile application interface for 'MyHr'. At the top, there is a blue header bar with the time '18:33', a hamburger menu icon, the text 'MyHr', and signal, Wi-Fi, and battery icons. Below the header, the title 'Time Off Request' is displayed in a large, bold, black font. The form consists of several input fields: 'Date:' with a light gray text box, 'Time:' with a light gray text box, 'Number of hours:' with a light gray text box, and 'Type of leave:' with three radio button options: 'Day off request', 'Holidays', and 'Time owed'. Below these is a 'Reason:' label followed by a large, empty light gray text area. At the bottom of the form is a blue rectangular button with the text 'Submit' in white. The entire form is enclosed in a light gray border.

Figure 24: Time off request

The time off request forms that can be submitted is shown above. The users must enter the dates they wish to book off. The number of hours that they require off as it could be a half day or full day. The type of leave is also needed so that the company can accept it accordingly. There is a text box for users to give a short reason as to why they are requesting this time off.

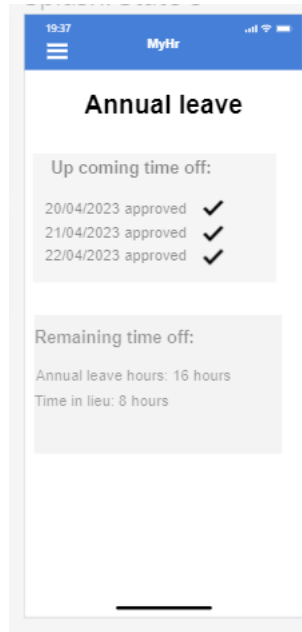


Figure 25: Annual leave history and request approval

On the annual leave page users will be able to see the history of the time off that they have requested and whether it was approved or denies. They will also be able to see how much time off that they are owed and if they are owed any time in lieu. Users will be able to check this before they apply for time off to see how much they have left and whether they have enough left for what they are requesting off.

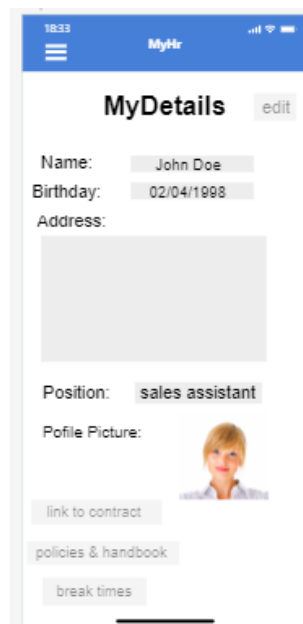


Figure 26: MyDetails profile page

The MyDetails page consists of the name of the user, their birthday, their address, and their position. This information is simply on file for the organization to check this. On this page they will also be able to see their profile picture along with access to their contract, employee’s handbook and organisations policies and their entitled break times.

From the employer's perspective the app is slightly different

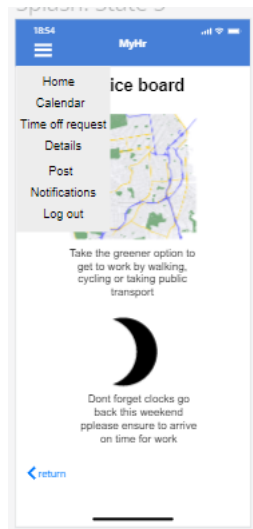


Figure 27: Employers menu options

The employer's navigation menu is slightly different to the employees. It contrasts the pages that they have access to. As you can see from the picture above the different options available to this user are Home, Calendar, Time off requests, Details, Post, Notifications and Log out.

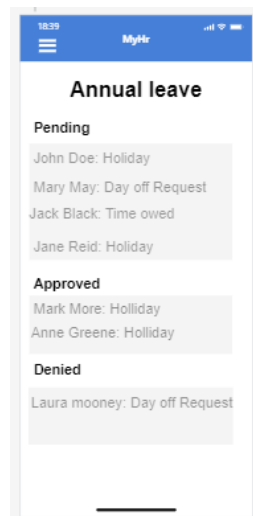


Figure 28: Employees leave request view

The employees will have a list within their annual leave page where they can see everyone who has requested time off, time off already approved and the history of denied time off. They can then choose a request to look at in further detail.

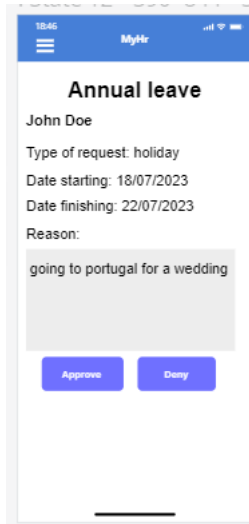


Figure 29: Leave request

When they choose a time off to look at as above this is John Doe request. They can see the above information and approve or deny the request.



Figure 30: Notification of time off request

The employer user will get a notification every time someone request time off which they can investigate. The notifications for this are stored on the notifications page.

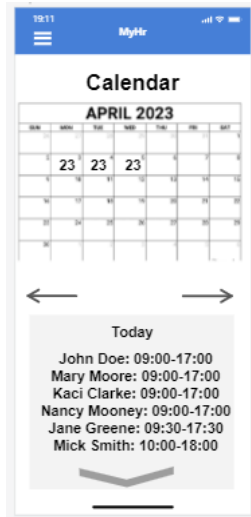


Figure 31: Employer calendar with employee rostering

The employer calendar is slightly different they can see quickly how many employees are rostered each day, and a break down of who is rostered and what times for a particular chosen day.

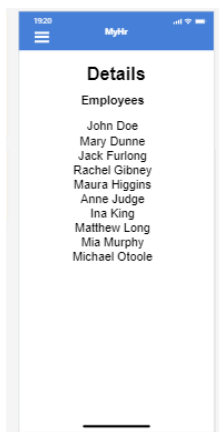


Figure 32: Employers list of employees

On the employers' details page, they have a list of their employees who they can choose from to see their details.

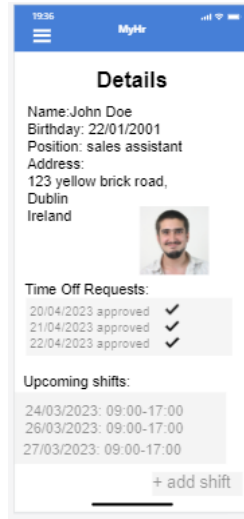


Figure 33: Employee details

When an employee is chosen this is what will appear to the employer user.

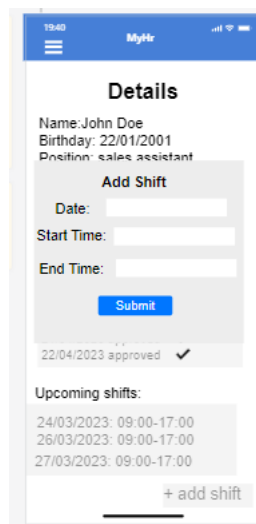


Figure 34: Shift details

If an employer decides to choose add shift a pop-up box will appear to add a shift to the chosen employee's roster.

There are only a few differences between the employee and employer user prototypes, but this is regards to the access each user has.

Conclusion:

Prototypes are a great way to visualise what your app will look like when it is fully developed. It can help you spot any missing pieces or improvements which should be added.

3. Wire Frame

Overview:

Wireframes are essentially a preview of what you wish your app or website will look like. It displays the functional elements of the application and how each page is linked to each other. It shows how you would display particular information on your app. I made two sets of wireframes; the first set was just a rough sketch which is known as a low-fidelity wireframe, and the second set which is a high-fidelity wireframe went more in depth of what I wish my app to look like. (Affairs, 2013)

The first wire frame created.

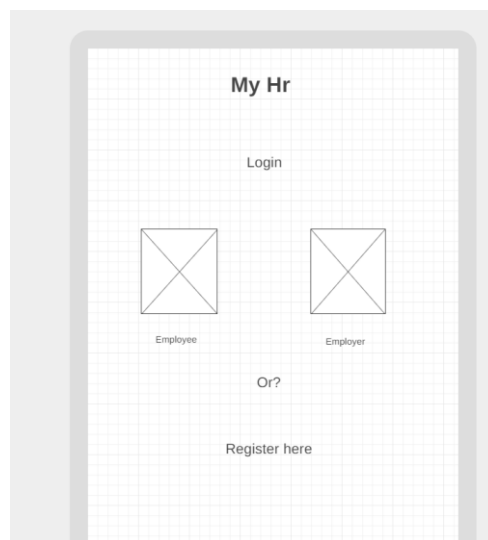


Figure 35: Wire frame login options page

The user will be given two different login options to choose from. The options they have are employee and employer. This is needed because they both have different function in the app.

The login pages.

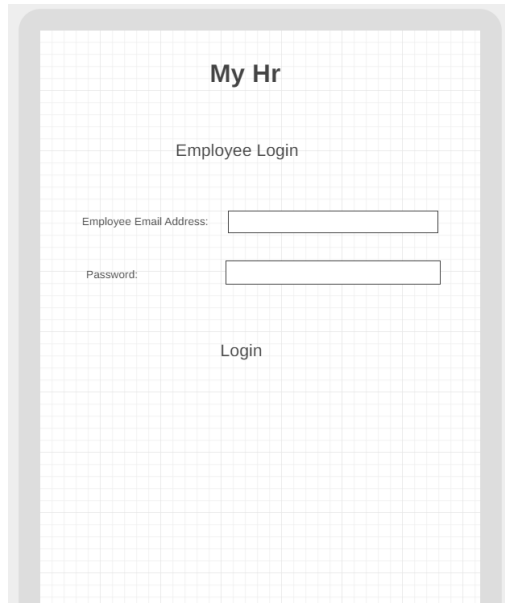


Figure 36: Wire frame login details page

Log in using their employee / employer email address which is registered to their company. the email and password much match and be in the system.

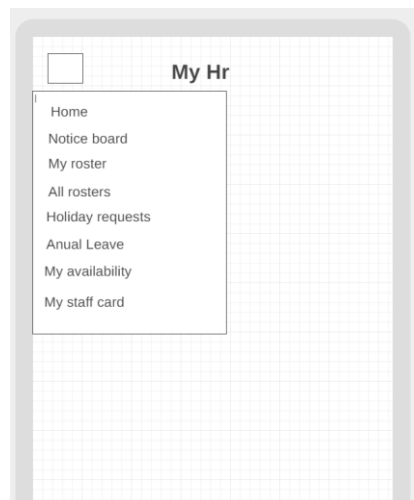


Figure 37: Wire Frame Navigation options

When logged in each employee will be given the following options through which they can navigate.



Figure 38: Wire frame calendar by month

They will be given access to their rosters once uploaded by employers.

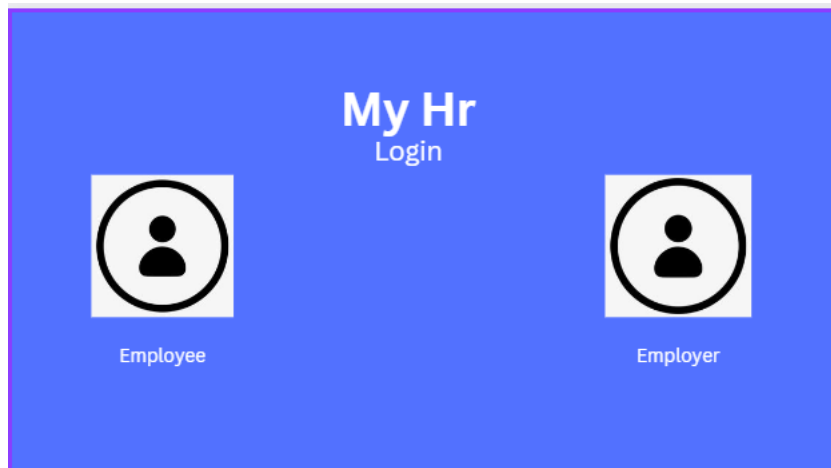


Figure 39: login options wireframe

The user is asked to choose which type of user they are.

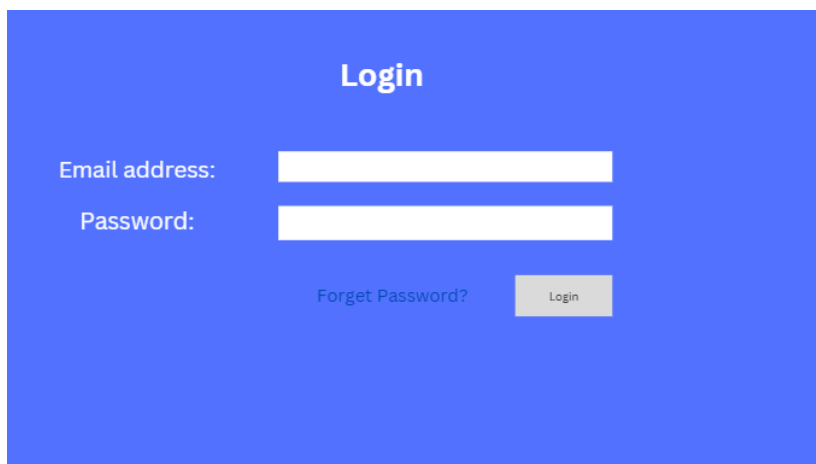


Figure 40: login page

Then they are asked to log into their account

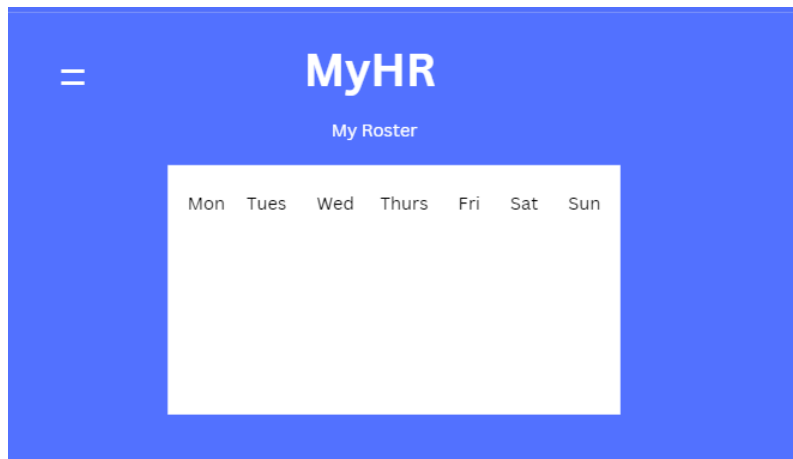


Figure 41: Calendar page

They can view their roster.

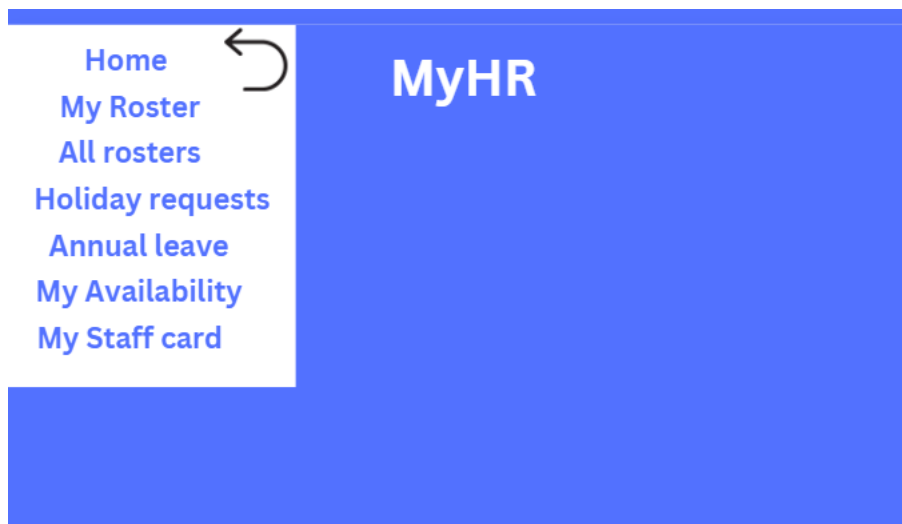


Figure 42: different pages displayed

This is the different options that were agreed upon in the requirements workshop.

4. User stories

User story title	Description	Acceptance criteria
Updated rosters	As a user I would like to see new rosters when they are uploaded	<ol style="list-style-type: none"> 1.Notification system alerts when new roster is uploaded 2.New rosters appear immediately on the calendar
Time off requests	As a user I would like access to my time off requests	<ol style="list-style-type: none"> 1.time off requests available in pending once they are submitted. 2.Time off request history available in annual leave page.
Employees shift	As an employer user I would like to see staff members upcoming shifts	<ol style="list-style-type: none"> 1.All staff members shifts are available on the calendar page 2.Choose a particular employee from employee list to view their roster
Login	As a user I want to be able to log in securely	<ol style="list-style-type: none"> 1.Customised email given to each user. 2.Password only known by this user.
Shifts	As an employee user I would like to be able to see my shifts	<ol style="list-style-type: none"> 1.Shifts available in calendar 2.List of upcoming shifts available below the calendar feature
Requests	As an employer I would like to be able to access the annual leave requests	<ol style="list-style-type: none"> 1.New annual leave requests are in the notifications 2.Annual leave requests are displayed in the annual leave page.
Missing information	As an employer user I do not want annual leave	<ol style="list-style-type: none"> 1.Annual leave requests are not sent through unless submit has been pressed.

	requests missing information	1.Submit cannot be pressed unless all fields have been filled out.
Password	As a user I want to ensure my password is good	1.Must have at least one uppercase 2.Must include one special character

5. Technologies used.

5.1 Google Forms

Google forms was used during this project to create the survey. Google forms allows users to create all kinds of forms. It gives you a URL for people to be able to answer the questions which you are asking. Not only can google forms be used for surveys it can also be used for quizzes and is used in many learning industries for this. It allows you to get the results instantly making it extremely quick and useful. It will also summarize the information for you and will also put it into charts and graphs depending on what the answers collected were. This can all be done you are your phone or device of your choice. *(What you can do with forms)*

5.2 Wireframe CC

Wireframe CC is an online software tool which allows users to take their ideas and make them into wireframes. This tool was used in the project to make wireframe one. These wireframes are essentially attractive prototypes which can help the user to visualise their project and see what they need to add in to make it useful. They can create a link between their project and its pages that go along with it. Wireframes CC makes it easy for users to collaborate and work efficiently with teams all from this software. Each member of the team will be given access and rights to edit when collaborating. It is a great tool for beginners as there is a free option available and it also saves all states of the wireframes so if something is accidentally deleted Wireframe CC ensures that you can get this back with ease. *(Wireframe.cc 2023)*

5.3 Lucid chart

Lucid chart is a software tool used to create charts and diagrams. Lucid chart can also be used to make in depth wireframes which we can see in wireframe two where lucid chart was used. Lucid chart allows you to collaborate online with team members in real time. Lucid chart allows you to create sketches and diagrams and share them with people. It can be used for brainstorming or managing a project or creating wireframes. Due to the amazing number of different features of Lucid chart it can even be used to create use case diagrams. It is essentially known for its “intelligent diagramming”. *(Intelligent diagramming)*

5.4 Mural

Mural was used during the brainstorming elicitation. It is essential a tool which allows you to create online sticky notes which is perfect for brainstorming. It is mainly used for collaboration as this is what it was designed for. It creates engaging design visuals to make it appealing to the eye. It is easily adaptable to fit your collaboration needs. There are many adaptive features which allows you and your team to take your designs to the next level. It tries to make boring meeting fun and more collaborative for your team. (*What is mural?: Mural help center*)

5.5 Canva

Canva is an online tool which allows you to create visualisations and designs which can be used and published anywhere you desire. Canva was used to create a visualisation representation of the MoSCoW analysis and the influence matrix that can be found in this report. (*About Canva*)

5.6 Figma

Figma is an online tool which allows you to create prototypes. It can also be used for brainstorming ideas and building solutions for what ever you please. It creates flows which represent how your user will interact with your designs. This was used in MyHR to create an interactive prototype. It validates and tests your ideas so that you can share it with your stakeholders. Once it passes all the checks you can then give it to your engineering team to create the final product based off this Figma prototype. (*Project, Figma prototype: What is it and why use it for design?*)

5.7 Excel

Excel is a tool powered by Microsoft which is used to create spreadsheets. Excel allows you to turn your spreadsheets into visualisations of your choice. It can be used to create tables, do calculations, and even has built in formulas. There are any uses for Excel which includes data entry, accounting, data management, charting and many more. (*Excel definition 2023*)

5.8 WordPress

WordPress is an online website builder where you can create and manage a website of your choice. It will create a URL for your website which can be accessed by anyone. You can choose from many of the themes and templates which are provided by WordPress to

make your website building easy and quick. Not only can you use the templates provided WordPress allows you to add your own code also. After your website is made you can download its full code if needed. There are different types of websites which you can pick from whether it's a blog or a shop its your choice. (nofarS, 2023)

5.9 Microsoft Word

Microsoft word is one of the most popular Microsoft tools. It allows you to create text documents, format and edit existing documents and much more. It is used in most businesses and learning institutes. You can add images, tables, and anything that you may need. It is great for report writing which is what I used it for in this project. You can save and share your document how ever you please. It detects any spelling errors and grammar problems in your document. (*Microsoft word*)

6. IEE requirements specifications

Purpose

The IEE requirements specification is being made to help the developers understand what exactly is needed to meet stakeholders' satisfaction. These requirements were sourced using many different requirement elicitation techniques for the MyHR app.

The following requirements were chosen by the business analyst to fit the app perfectly. These are to ensure that the features of the app will fit all the business needs.

Scope

There are 4 main features of the project that need to be addressed to meet the needs of the app and the businesses which will be using it. Each user will be able to access the times to their shifts and the dates for which they are rostered in.

The first being the calendar feature which is one of the main features of this app. It needs to be accessible to all users whether they are employees or employers.

The second feature of the app that is needed is the requesting time off form which users can use to send time off requests to their employers.

The next main feature is the details. These can be seen by all users but only able to be edited by the employee user.

Requirements:

Requirement one:

Title	Log in option
Description	When the user goes to login they will be faced with two options which they will have to choose from the employer and the employee. This is because they both have different set ups once inside the app. Certain features will only be available to each of the users. Once they have chosen which user, they are they can be directed to the right application set up.
Priority	Must
Location	This can be found on the log in page of the MyHR app.

Requirement two:

Title	Log ins
Description	For the app to be personalised to each different user they must be given their own logins; this can be with a work email address. This ensures that each user can only log into their profile and not anyone else's.
Priority	Must
Location	This can be found on the log in page

Requirement three:

Title	Notification system
Description	A notification system is used to notify users when a roster has been uploaded or if there are any changes made to their roster to ensure that the users do not miss. It will also send each user a notification if any update has been made to their time off requests whether they have been approved or denied.
Priority	Must
Location	This can be found in the notifications centre on the MyHR app.

Requirement four:

Title	Calendar
Description	The calendar is essentially the main feature of the app. All users will have a calendar personalised just for them. The calendar will display any upcoming shifts or time off they have. They can browse through the old calendars if they need to, and they can also look at future calendars even if no roster has been uploaded yet.
Priority	Must
Location	This can be found on the Calendar page of the MyHR app.

Requirement five:

Title	Navigation
Description	The users must be able to navigate easily throughout the app which means that the lay out must be extremely straight forward for it to be accessible to all users who may be using the app. The navigation must be clear and titled well for the users to understand exactly where everything is.
Priority	Must
Location	This can be found throughout the MyHR app.

Requirement six:

Title	Encryption
Description	Encryption is needed to keep the personal details of all users safe. The encryption ensures that no unauthorised users can gain access to any of the user's information. It ensures that the unauthorised users cannot get into our user's accounts.
Priority	Must
Location	This is stored online in the servers.

Requirement seven:

Title	Encryption
Description	Encryption is needed to keep the personal details of all users safe. The encryption ensures that no unauthorised users can gain access to any of the

	user's information. It ensures that the unauthorised users cannot get into our user's accounts.
Priority	Must
Location	This is stored online in the servers.

Requirement eight:

Title	Offline
Description	An offline version of the app should be synced onto the phone for the users to be able to gain access to their rosters even when they are not connected to the internet. This offline version should be synced to the phone or stored within the MyHR app for offline reading.
Priority	should
Location	This is stored on the MyHR app or synced to offline calendar.

Requirement nine:

Title	Profile picture
Description	A profile picture should be linked to all the user's accounts to make it visible who each user is. This makes it easier for employers to find the employees by simply looking at their profile picture.
Priority	should
Location	This is stored on my Details page in the MyHR app.

Requirement ten:

Title	Adjustable
Description	The application should be able to adjust to any screen size depending what device the users are accessing it on.
Priority	should
Location	This is stored in the coding of the app

Requirement eleven:

Title	Contract
Description	Each user should always have access to their contract for when ever they may need to look back on it or if their contract ever gets updated or changed.
Priority	should
Location	This is stored on the my Details page in the MyHR app.

Requirement twelve:

Title	Handbook and Policies
Description	Each user should always have access to their employee handbook and their organisations policies for when ever they may need to look back on it.
Priority	should

Location	This is stored on the my Details page in the MyHR app.
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Requirement thirteen:

Title	Break times
Description	Each user should always have access to their required break times for when ever they may be unsure on how long of a break they are entitled to as each organisation has different break entitlements for their employees.
Priority	should
Location	This is stored on the my Details page in the MyHR app.

Requirement fourteen:

Title	Calendar Connection
Description	The users could have the option to be able to sync their calendar to their devices calendar for easy access and to be able to view this offline.
Priority	could
Location	This is stored on the Calendar page of the MyHR app

Requirement fifteen:

Title	Staff edit
Description	Each user may be able to edit their own personal details. This includes changing the password if they ever forget it or updating any personal details that may have changed.
Priority	could
Location	This is done on the my Details page in the MyHR app.

Conclusion

In conclusion from the requirements that I have gathered and the information that I received I can say that it is evident that this app is needed in the HR world today. Not only from the responses to the questions in the survey is it extremely evident that an app like this is lacking, but also from interviewing people in this department. The interviews made it clear that not only can this app be used in a workplace where the employees shift change but also in an organisation where the hours remain the same for all employees.

The requirement elicitation techniques gathered all the information that was needed to successfully make this app. It made the app accessible to all and easy to use. This app can be implemented in any organisation to fit their needs of the company. Without the use of all these techniques the app would not be successful. By prioritizing the requirements this helped to ensure that all the necessary features were available on MyHR. The wireframes and prototypes made the development process extremely smooth and easy to facilitate. These prototypes and wireframes along with the interface analysis made the app smoothly sail through the whole implementation cycle.

This app will eliminate the miscommunication within the older human resources features by adding technology advances. This project was created because of my personal experience in different jobs as I felt like this was needed. As seen from my survey results and interview answers the majority of people can say the same.

An app like this is missing in today's world and MyHR is here to fill this niche.

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National College of Ireland

Project Proposal

Roster

31st of October 2022

Technology Management

Business Data Analysis

2022/2023

Rachel Carter

X19402832@student.ncirl.ie

X19402832

a) overview

This project will help businesses run smoother. It will cut out the middle person having to create a roster. It will also ensure that it has the correct number of staff on each shift. These are to try avoiding being understaffed or overstaffed which in the long run will save the business a lot of money.

We plan to achieve that each business will have its very own portal that is they can use to roster their staff. It will also be used for staff to submit their holidays or days off that they need. For the management of the business this application will allow them to compare sales from different days/ weeks/ months/ years.

Another objective of the project will be to allow people from the managerial side to accept or define submitted days off from its employees.

b) Background

I chose to undertake this project as when I was doing my internship at Dell I worked closely with the phone and chat line team. I realised that it took the manager a long while to work out the roster. He had to look at the time zones each employee lived in, the volume of calls and chats from the previous week, employees with holidays or employees that only worked certain days/ shifts.

The objective of this project will be met by keeping on top of the work and having a particular plan that we will stick to. We will have smaller milestones which will need to be met to ensure nothing is missed. This plan will be approved in advance by all stakeholders and dates will be put in place for them.

c) State of the Art

There are many applications like this one. This will be aimed to work for any business no matter the type. Although there are similar apps they all still require a middleman to essentially create the roster where the purpose of this one is to cut out the middleman. The application I am creating also looks at the sales or volume the business takes in and ensures the right number of staff is allocated. It is also aiming to save businesses money by not over staffing shifts unnecessarily.

It differed from other applications as it can be used at both employee and managerial roles. All important information will be held on this application. Managers will have more access than employees. They will have access to managerial options. Where employees can only see the employee options. It can be used to make important announcements to all staff.

The JD Wetherspoons has a similar app which allows you to clock in, see the roster and submit holidays. But the company still needs a person to physically sit there and make the roster going by everyone's requirements.

d) Technical Approach

There are many stakeholders within my project as this is aimed towards businesses. We have a plan to small interviews with the influencers of our project to engage whether they are a stake holder or not. We are also creating a project charter which will pinpoint who the potential stake holders are.

We will involve the stake holders through the project to keep them engaged with what is going on.

We will create a timeline for deadlines which will be agreed on by all our stakeholders. If the requirements are not met we will need to find out why and get any problems fixed. We will be using brainstorming technique to find out the best way to approach this project and to decide which steps we will need to take. We will use prototyping to find any missing or unspecified requirements. We will have frequent demos given to ensure that everything is correct.

We will be holding focus groups instead of interviews to get any information that is needed. Workshops will be held for businesses to demonstrate how it is used.

e) Technical Details

This website will be developed using word press. In the future this website could progress, and it may need extra add ins or need to be coded. It will be connected to either a php data base or a my sql data base depending on the volume of data is collecting.

I will be creating a word press website to display the information that is needed. This will be the main development of the project. It is the core of the project as it will be what the customers will be accessing.

I will be using an api for the date and time. The date and time are used throughout this whole project and without this api the project would not be able to function.

f) project plan

I play to have the list of requirements for the project collected and verified by the bend of November. This gives time to put together a perfect list of requirements that are needed and to go through the techniques which will be used.

Next we will begin preparing what we need for the project. A gant chart will be made and a detailed date plan for which the requirements must meet. It will be over seen by all stake holders and all stake holders must agree on the dates which we choose.

Roles will be given out to all of the team members. These roles will stick with the team until the end to avoid any confusion. Risks will be assessed to ensure that we can handle them as they come.

All team members will be required to communicate with each other and also to the stakeholders. All employees must attend a daily scrum meeting with each other. Each manager of the teams must also attend a weekly scrum meeting with the stakeholders.

Once each milestone of the project is met we will reassess the gantt chart and the schedule to ensure tasks are prioritised and all needs are met. This will help us to advise any areas of the project where the needs are not being met.

A design and Colour scheme for the project is chosen.

The development of the project will begin in word press.

The website will need to be deployed and tested whether it can handle the volume it is needed to take. The validation of the website will begin, and changes may need to be made at this point.

During the close out phase we will use any spare time we have to ensure there are no bugs in the project. We also use this time to complete and add in any extra features that we feel will add to our project.

g) Validation/Verification

I will begin validating the project by having a good scope of effort. The scope will be broken down into a more detailed requirements that will be elicited. I will ensure we know how all the functioning requirements will work and what exactly each functioning requirements will do.

We need to know what, where, why, when, and how of every step we make. If a step is not necessary we will not take it. This will stop us from spending time on features that are not needed. If there is time at the end of the project then these features can be looked into seeing if they can be done.

Test cases will be made throughout the process of the project to ensure that at the end it will be up and running without any problems. It will ensure that all the user stories are verified correctly. This will help make decisions on the user outcomes and story. We will run through the test data as if we were in the scenario to ensure that we have not missed anything. This will also allow us to add any extra improvements if we see any space for them.

W3C mark up will be used to validate the website accordingly.

Appendix 2. Monthly Reports

a) October

Supervision & Reflection Template

Student Name	Rachel carter
Student Number	X19402832
Course	Technology management
Supervisor	Noel Cosgrave

Month: October

What?

Reflect on what has happened in your project this month?

This month I submitted my project pitch which then got accepted.

I was assigned my supervisor who will be there for me throughout the course of the project.

The project proposal and ethics for declaration were both completed and submitted.

So What?

Consider what that meant for your project progress. What were your successes? What challenges still remain?

So far this has kickstarted my project. The project could not have been started without these.

These helped me gather the requirements and identify the stakeholders.

I also put together a timeline plan of when I plan to have certain steps done.

Currently my time plan is on schedule.

Now What?

What can you do to address outstanding challenges?

So far we have had no outstanding challenges as we are so early on in the project life cycle.

We will assess challenges as we meet them through out the project.

b) November

Supervision & Reflection Template

Student Name	Rachel carter
Student Number	X19402832
Course	Technology management
Supervisor	Noel Cosgrave

Month:

What?

This month I began to brainstorm what I would like the project end product to look like.
I made rough surveys which I am going to submit to ethics.
These will be sent to companies to get their input on the project.

So What?

Consider what that meant for your project progress. What were your successes? What challenges still remain?
For no I do not have any challenges as I am only creating the ideas for the prototypes.
My main challenge will be ensuring the questions on the surveys are going to gather all the information that I need.
I am hopeful that my surveys will be accepted the first time by the ethics team.

Now What?

What can you do to address outstanding challenges?
I am doing research about what are the best questions are to put onto the survey.
I am now starting to create the first prototype.

Student Signature

Rachel carter

c) December

Supervision & Reflection Template

Student Name	Rachel carter
Student Number	X19402832
Course	Technology management
Supervisor	Noel Cosgrave

Month:

What?

Continued to brainstorm what I would like the project end product to look like.
I made rough surveys which I am going to submit to ethics.
These will be sent to companies to get their input on the project.

So What?

Consider what that meant for your project progress. What were your successes? What challenges still remain?
For no I do not have any challenges as I am only creating the ideas for the prototypes.
My main challenge will be ensuring the questions on the surveys are going to gather all the information that I need.
I am hopeful that my surveys will be accepted the first time by the ethics team.

Now What?

What can you do to address outstanding challenges?
I am doing research about what are the best questions are to put onto the survey.
Working on a prototype.

Student Signature

Rachel carter

d) January

Supervision & Reflection Template

Student Name	Rachel carter
Student Number	X19402832
Course	Technology management
Supervisor	Noel Cosgrave

Month: January

What?

Reflect on what has happened in your project this month?

This month the progress made in my project was a lot lower than usual, this was due to the assignments and assessments that we had in January.

So What?

Consider what that meant for your project progress. What were your successes? What challenges still remain?

This meant that I did not progress as much as I had hoped and planned to.

This also means that next month will be jam packed with work that needs to be done.

Now What?

What can you do to address outstanding challenges?

I recreated my project timeline due to this set back to ensure that all my targets will still be reached on time.

I am freeing up more time to work on my project by cutting down my hours in my part time job in order to be able to complete this project on time.

Student Signature

Rachel carter

e) February

Supervision & Reflection Template

Student Name	Rachel carter
Student Number	X19402832
Course	Technology management
Supervisor	Noel Cosgrave

Month: February

What?

Reflect on what has happened in your project this month?

This month I worked in some of the requirement's elicitations specifically a survey that will gather the opinion of the stakeholders.

So What?

Consider what that meant for your project progress. What were your successes? What challenges still remain?

So, once I get the survey approve by the ethics committee I will be sending it out.

This will allow me to build a requirements list for which they would like to see in my application.

Now What?

What can you do to address outstanding challenges?

This month so far I have not encountered any challenges just waiting on approval from ethics

Student Signature

Rachel carter

f) March

Supervision & Reflection Template

Student Name	Rachel carter
Student Number	X19402832
Course	Technology management
Supervisor	Noel Cosgrave

Month: March

What?

Reflect on what has happened in your project this month?

This month I worked on figuring out how I would get my project running in WordPress and how I want it to look and run.

So What?

Consider what that meant for your project progress. What were your successes? What challenges still remain?

This was a huge stepping point in my project as it is a step closer to my final product

Now What?

What can you do to address outstanding challenges?

The outstanding challenge I have at the moment is getting it properly running in word press which I am going to spend the majority of my time on for the next month

Student Signature

Rachel carter

g) April

Supervision & Reflection Template

Student Name	Rachel carter
Student Number	X19402832
Course	Technology management
Supervisor	Noel Cosgrave

Month: April

What?

Reflect on what has happened in your project this month?

This month I worked on getting people to answer question for my survey.

I also carried out interviews with two of the leading grocery store companies in Ireland and also an IT company.

So What?

Consider what that meant for your project progress. What were your successes? What challenges still remain?

This was a huge step in my project as its my requirement elicitation

Now What?

What can you do to address outstanding challenges?

Right now, my main challenge is just putting everything together and breaking down the answers to my survey.

Student Signature

Rachel carter

Appendix 3. Gantt Chart

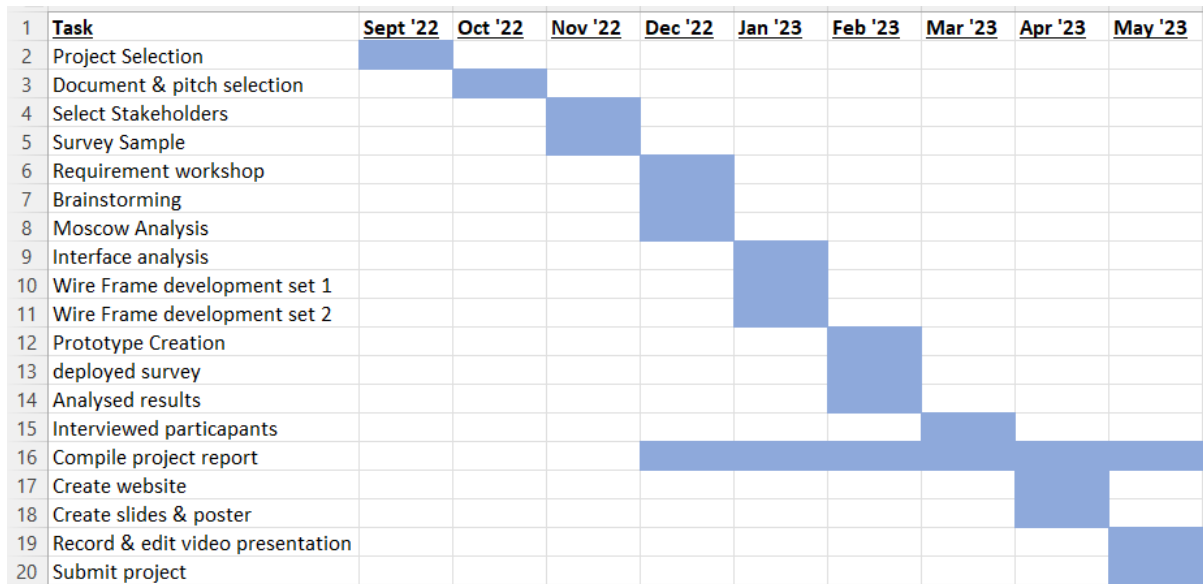


Figure 43: Gantt Chart

The above chart displays the timeline of the project throughout the year.

Appendix 4. Project Poster



MyHR

Rachel Carter X19402832, Technology Management
specialising in Business Analysis

What is MyHR?

MyHR is essentially an app to add technology advances to certain HR features. It adds these technology advances to the rostering systems and time off requests

Why?

I designed MyHR because of the personal experiences I've had with rostering and time off requests in my past jobs.

Benefits:

- It allows employees to access their rosters at any given time or place.
- It avoids the misplacing of time off requests.
- It allows employees to access these features from any device which they please.
- Employers can access their staff's rosters, details and time off requests all from one app.
- Makes rostering easier for employers

Requirement elicitation techniques used:

- Brainstorming
- Surveys
- Wire frames
- Requirements workshops
- MoSCoW analysis
- Interviews
- Interface Analysis
- Prototypes
- User stories

Conclusion:

After carrying out the business analysis and gathering information it was evident that an app like this is needed in the HR world today. Most people have said they would recommend this app to their employers. The HR employees stated that they would highly consider using this app in their organization.

Figure 44: Project Poster

This is the show case poster for this project.