National College of Ireland

Software Project

Business Information Systems

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Jack Carroll

x18300603

x18300603@student.ncirl.ie

"The PID (Project Initiation Document")
Technical Report

Contents

LINK TO PRESENTATION VIDEO =

LINK TO GitHub Repo =

https://github.com/JackmcBlack123/Software-Project-Final

Executive Summary

The purpose of this report is to highlight the technology that I have used to develop my application and provide insight on how my actual application runs and what was involved to develop it over the last semester. Within this report I want to outline the appeal of my application as well as giving an in-depth breakdown of all the components of the application and what technology was used to create it. This will be demonstrated via the use of USE CASES that will come with diagrams to provide the visual element to understanding how each feature works. I have also provided information on how I carried out testing on my application and the types of testing that I will be using for this application.

I will also show screenshots of my application in use and describe what should be seen in each screenshot. I have stated that I believe that this project idea could merit further development beyond my final year and that eventually I believe that a more advanced version of my app may be created on the marketplace.

The PID is capable of producing two types of documentation. The first is in the form of a text document and this will have the general output that is entered into the word editor that was created in the project. The second document is an Excel document that outlines all of the important figures that are associated with the project. There are templates depending on which type of agreement is being used and from there it is replicated into a text document. My project works as intended except for the PDF functionality which is documented in the testing section of this project.

I would conclude that the project was an overall success in terms of aligning scope with the feasibility in terms of what I could develop and the time that was allocated for this project.

1.0   Introduction
1.1. Background

I undertook this project due to my experience within the project management world. There had been many attempts by team members to both facilitate a cooperative approach to documentation signing and sharing as well as find ways to transform the PID (Project Initiation Document) into the project plan instead of having to create it from scratch. This process of the agreement phase can take years to reach an

agreement. After that we would be relying on receiving the correct version of the document and to correctly insert information into the project plan into a project management software. During my internship I was asked to use an existing project documentation software to find a way to integrate the documentation that we would have used with our clients. I did this to the best of my ability, but the idea was later scrapped due to difficulties in its functionality. I intended to develop this project keeping in mind the limitations of other external software that I had encountered. My team members never were able to find a piece of software that fitted that requirement. Having my experience and knowing what other like minded Project Managers were looking for I believe that my Project should fulfil this need as there isn't anything out there that fits the mould. My application is unique as two forms of documentation can be retrieved which are relevant for the project managers who would use it. The scope of the project had shifted a few times during the development of the application. The scope became creating an application that can facilitate cooperation and the ability to create agreements/ plans from templates that can be generated from predefined templates. This aspect was to usher in an efficiency and cut down on time on the drafting of this documentation. The project allows for the user to contact the customer also to gather their attention and to keep up the pace with looking over documentation. There are also options for personalisation such as changing passwords and adding contact info

1.2. Aims

My project's Primary aims are to improve cooperation from multiple users regarding working towards a singular goal which is encompassed within a document / agreement. The next aim is to minimise potential user error such as typos or misstructuring an agreement, such as there being a particular structure that a user if creating the document from scratch could jumble. This aim is both minimisation of human error and bring conformity to structure allowing it to have a uniform look. Human error is minimised as when docs are completed, they can then be generated into PDF's / TXT files and Excel files which will later be recorded and followed. This application will provide security for all its users and will allow for the sending of notifications to other users that are involved in the project that is being overseen within the application.

The approach that was used to manage the development of this project was Agile. This was purely down to the having to reassess the strengths and weaknesses at the midpoint and what the slight of change in direction would look like. During this process, multiple features were worked on simultaneously and due to this nature, the Waterfall approach was not suitable for the project.

1.3. Technology

To create this web app, I will be making use of Microsoft SQL Server Management Studio for the database aspect of the project. I used JavaScript to create the layout of the website including the front-end functionality. To create the Text Editor I used an API: execCommand(). I used the .NET and SQL to create the registration and login features of the project as well as to create the account management functions. I used the Elasticmail API to create the functionality to send notifications to other users.

1.4. Structure

The structure of this brief will be to outline the technology used within my project and to outline each feature, how it works and how I intend to test it. I will also provide insight into the flow of each feature and provide diagrams and use cases for each feature. I will also give insight into the testing that I performed and mention the testing I intend to complete by the submission date of the overall project.

2.0 System

2.1. Requirements

The requirement of my project is to fulfil multiple things:

- Facilitate a cooperative environment where multiple individuals from the relevant parties can examine and modify the existing PID.
- Implement multiple features such as provide a Login and Register feature, word editor, Template Generation, Document Approval, PDF/DOC Download, User sharing feature the ability to convert the saved document into Excel format for Project Managers to keep an eye on details.
- To have a secure registration and login feature.
- Allow the user the ability to personalise their account.
- To have a working text editor that will take input from users and be able to generate either a PDF or TXT document.
- Templates need to be able to be generated into an excel document.
- Users to be able to send notifications to others that are using the application.
- I want to be able to generate two documents, one with comments made by users and another with the base facts of the agreement in excel form so that they could both be followed.
- The Application will need to be easily accessible for authorised users.

Use Case Diagram

High level view of the system that I have proposed for my software project:
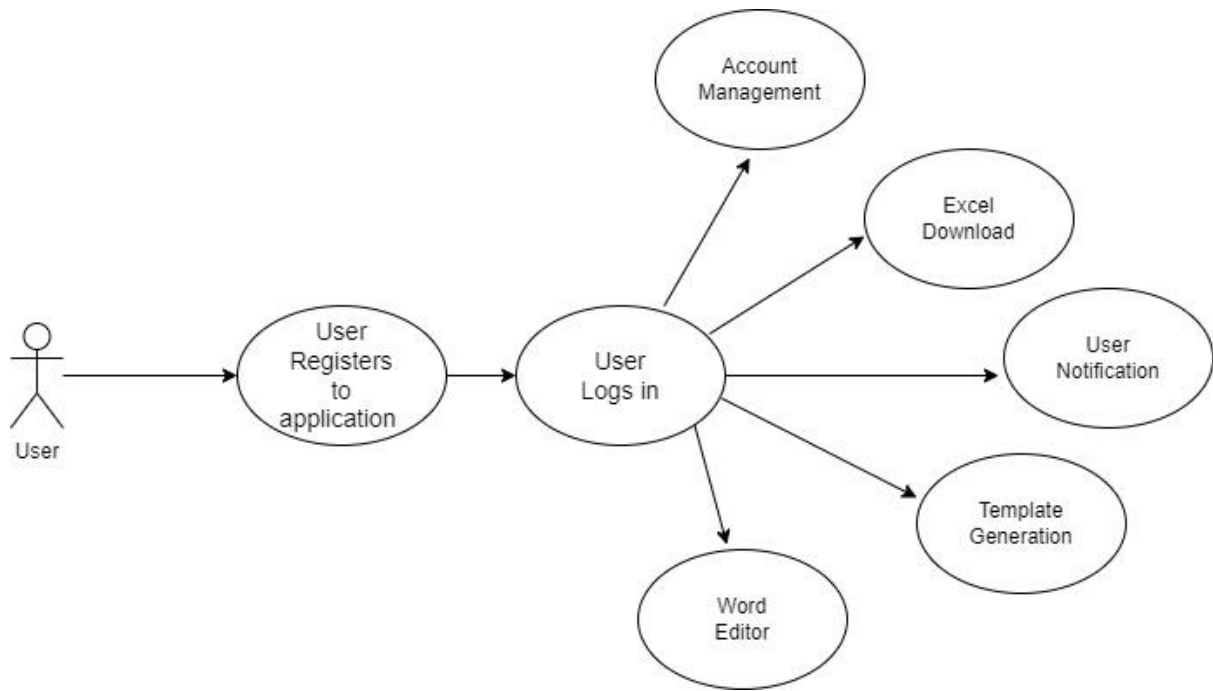
2.1.1. Functional Requirements

#1 Functional Requirement: Registration

It is highly important that my software is accessible and that users can register on the application. This will be a standard registration page.

USE CASE
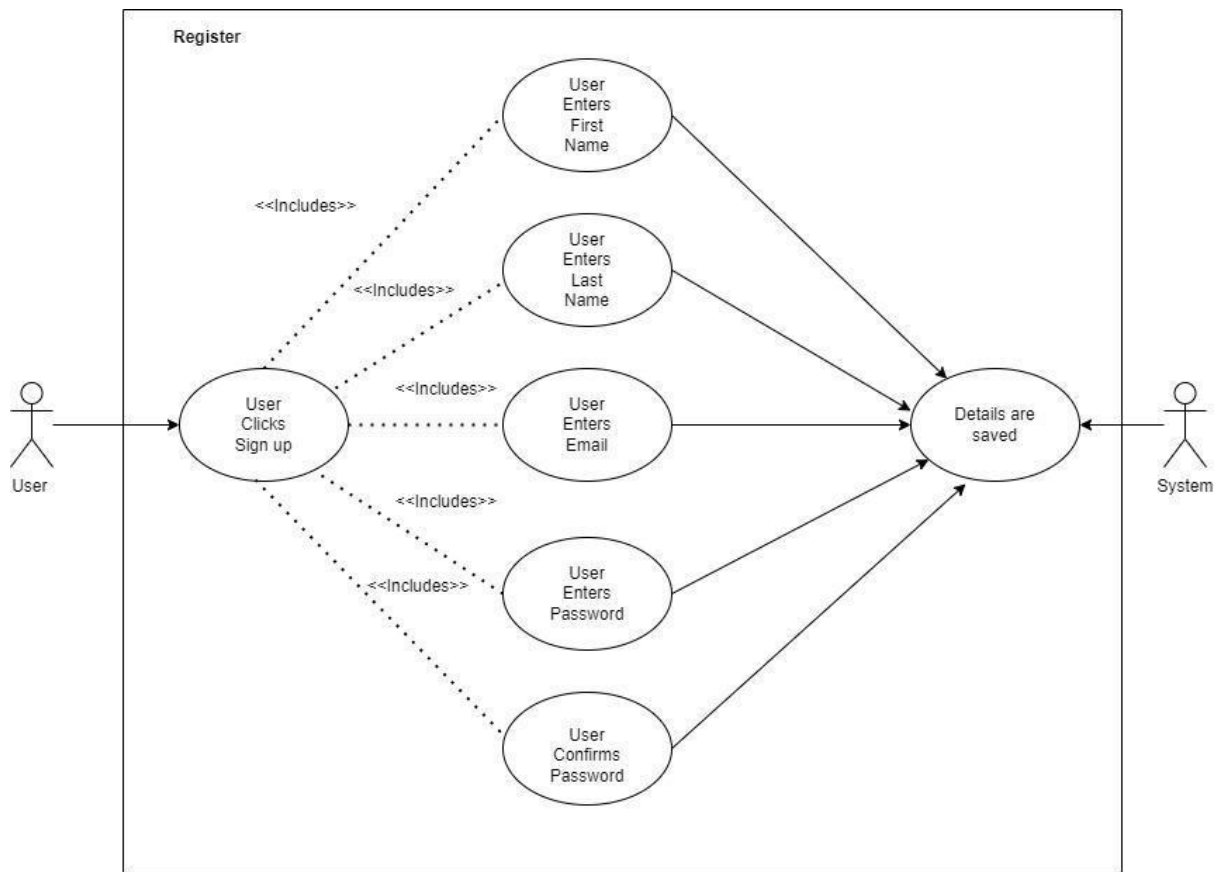
Use case ID	UC01
Author	Jack Carroll
Use Case Name	Registration
Scope:	The scope of this use case is to register the user.

Description:	This use case describes the process of registration onto the application
Actors:	User "The PID" Application Database
Preconditions	Users must have a valid email address. Users must have internet access.
Activation:	The use case starts when an user accesses the application page and clicks the registration button.
Main Flow	1. User clicks the "Sign up" button. 2. Application displays the form that has to be completed. 3. The user provides his/her email address or phone number. 4. The user creates a password and confirms it in the next text field. 5. User clicks "Remember me" 6. The user presses the submit button. 7. System validates the form. 8. The information is saved into the database. 9. The user is redirected to the login page.

Alternate Flow	A1: Invalid/incorrect email address
	
	    1. The user types in an invalid email address
	
	    2. The application displays an error message
	
	A2: Passwords don't match
	
	    1. The user types in 2 different passwords
	
	    2. The Application displays an error message

Exceptional Flow	E1: Internet connection lost
	        1. Internet connection cuts out while a user is filling in the form.
	        2. The Application displays an error message
	        3. All the information provided until then is lost.
	        4. When the internet connection comes back, the user will be redirected to the login and signup page

Termination:	Application loads the next page (login page) after the user has successfully created an account.
Post condition	The account details are saved in the database.
Special Requirements	The User must understand how to use and verify their email. They will need to make use of Gmail.
Implementation Requirements	Visual Studio Microsoft SQL Server Manager
Technical Specification	MS SQL Server Manager C# Excellent database knowledge.

USE CASE #1 Diagram:

Register
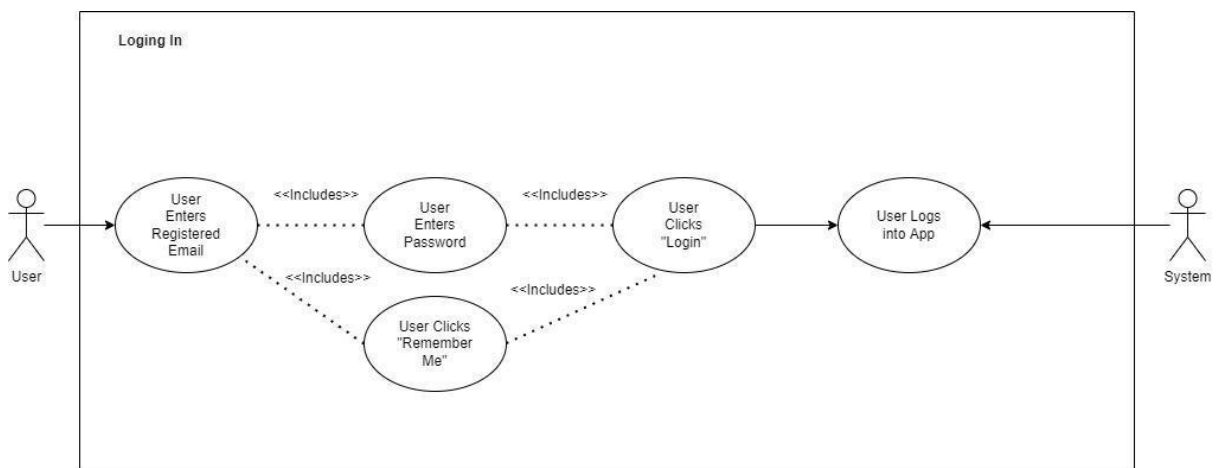
#2 Functional Requirement: Login

It is highly important that my application is accessible to existing users. This will be a standard login page.

Use case ID	UC02
Author	Jack Carroll
Use Case Name	Login
Scope:	The scope of this use case is to allow the user to login.
Description:	This use case describes the process of logging into the application

Actors:	User "The PID" Application Database
Preconditions	Users must have a valid email address. User must have a registered email address. Users must have internet access.
Activation:	The use case starts when a user accesses the application page and clicks the login button.
Main Flow	1. User clicks the "login" button. 2. The user provides his/her email address. 3. The user enters their password. 4. The user presses the submit button. 5. System validates the email. 6. The information is saved into the database. 7. The user is redirected to the word editor page.

Alternate Flow	A1: Invalid/incorrect email address
	
	    1. The user types in an invalid email address
	
	    2. The application displays an error message
	
	A2: Passwords don't match
	
	    1. The user types in 2 different passwords
	
	    2. The Application displays an error message

Exceptional Flow	E1: Internet connection lost
	    1. Internet connection cuts out while a user is filling in the form.
	    2. The Application displays an error message
	    3. All the information provided until then is lost.
	    4. When the internet connection comes back, the user will be redirected to the login and signup page

|	
Termination:	Application loads the next page (word editor page) after the user has successfully created an account.
Post condition	The account details are saved in the database.
Special Requirements	The User must understand how to use and verify their email. They will need to make use of Gmail.
Implementation Requirements	Visual Studio Microsoft SQL Server Manager
Technical Specification	MS SQL Server Manager C# Excellent database knowledge.

USE CASE #2 Diagram:

#3 Functional Requirement: Account Management

USE CASE

Use case ID	UC03
Author	Jack Carroll
Use Case Name	Account management
Scope:	The scope of this use case is to Outline the process user management within the application.
Description:	This use case describes the process of managing user details within the application such as passwords, email, phone number and personal data.
Actors:	User "The PID" Application Database
Preconditions	Users must have access to the application via registration or login. Users must have internet access. User must be able to login into their account details via the account button.
Activation:	The use case starts when the user click's "Hello[UserName]!".
Main Flow	Users access the account feature of the application via the "Hello[UserName]!". User can then switch between Tabs such as Profile, Email, Password, Two Factor Authentication and Personal data.

Alternate Flow	A1: User is unable to login to account. User loses wifi connection while attempting to login.
Exceptional Flow	E1: Loss of Wi-Fi when attempting to access the account details button.
Termination:	Application saves the account details entered in by the user.
Post condition	Account Details are saved to the database.
Special Requirements	The User must be able to log into their account via account button on application.
Implementation Requirements	.Net Framework
Technical Specification	MS SQL Server Manager C# Excellent database knowledge.

Use Case #3 Diagram:
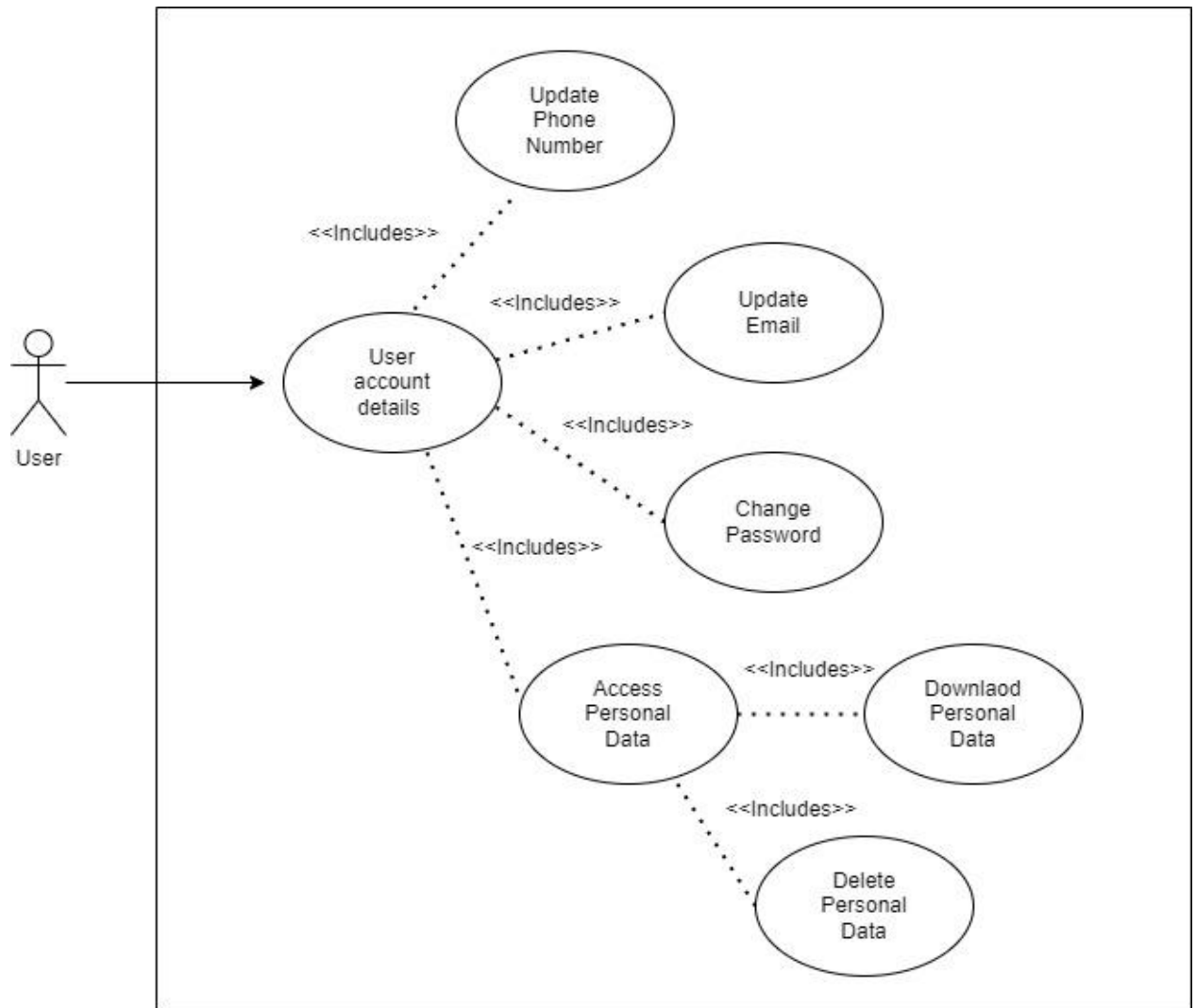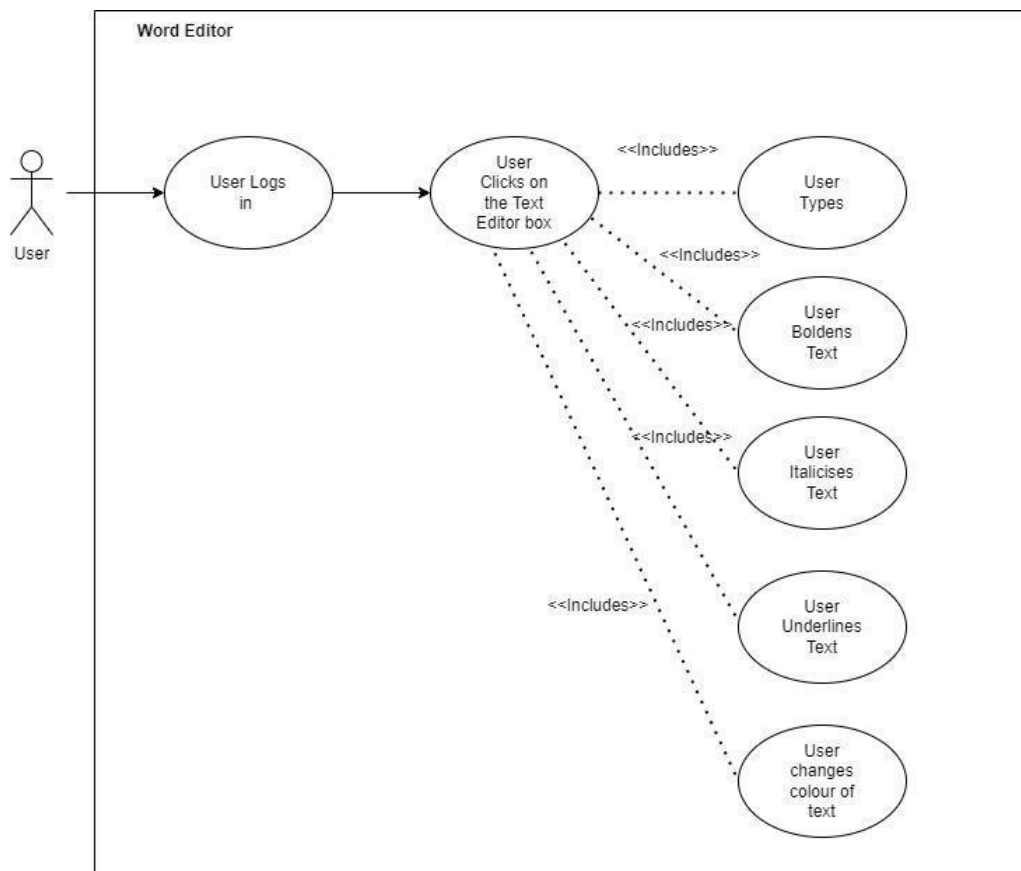
#4 Functional Requirement: Text Editor

USE CASE

Use case ID	UC04
Author	Jack Carroll
Use Case Name	Text Editor
Scope:	The scope of this use case is to Outline the process of using the text editor

Description:	This use case describes the process of using the text editor. The user must be able to begin typing into the word editor, The font and colour should be changeable. Once the text editor is used, the user must be able to download the text from the text editor via either PDF or TXT file.
Actors:	User Text Editor "The PID" Application Database
Preconditions	Users must have access to the application via registration or login. Users must have internet access.
Activation:	The use case starts when the user logs into the application.
Main Flow	User clicks into the text area of the text editor on the application.
Alternate Flow	A1: User Cannot login A2: User cannot type into the text editor.
Exceptional Flow	E1: Loss of Wifi when saving the input in the text editor.
Termination:	Application saves the input to the database for later download.

Post condition	The Input is saved in the database.
Special Requirements	The User must be able to type into the text editor.
Implementation Requirements	execCommand() JavaScript
Technical Specification	execCommand(). JavaScript

Use Case #4 Diagram:
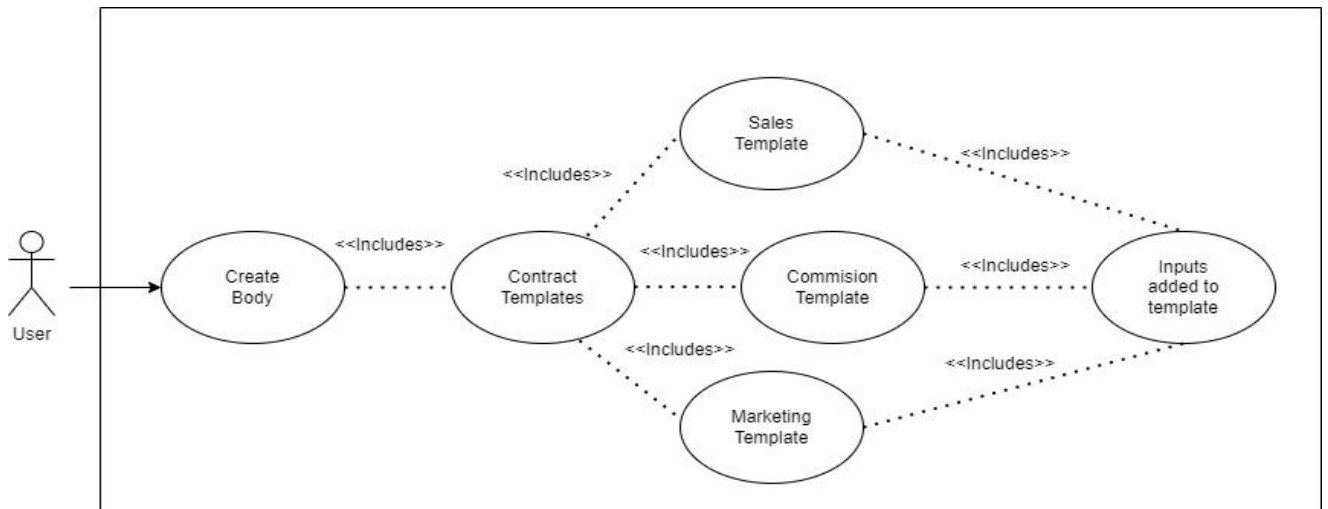
#5 Functional Requirement: Template Generation.

USE CASE

Use case ID	UC05
Author	Jack Carroll
Use Case Name	Template Generation FOR Excel download.
Scope:	The scope of this use case is to Outline the process of Template Generation.
Description:	This use case describes the process of generating a template within the application.
Actors:	User "The PID" Application Database
Preconditions	Users must have access to the application via registration or login. Users must have internet access. User must be able to click on templates displayed. User must pick which layout to go with and fill in the details.
Activation:	The use case starts when the user clicks on the create body button.

Main Flow	User picks a template to work with from Sales, Marketing to Commission templates to use

Alternate Flow	A1: Template is not saved
	
	    1. The user does not select save template
	
	    2. User closes application
	
	    3. Application does not save the document as a template
	
	    4. Template is not saved

Exceptional Flow	E1: Loss of Wi-Fi during, saving the document as a template
Termination:	Application saves the template to the database. User clicks off the application
Post condition	The template with the added details is saved in the database.
Special Requirements	The User must be to fill the template with details and generate it to save.
Implementation Requirements	JavaScript
Technical Specification	JavaScript

Use Case #5 Diagram:

**#6 Functional Requirement: Exportation of Template to EXCEL**

    USE CASE

Use case ID	UC06
Author	Jack Carroll
Use Case Name	Exportation of Template to Excel
Scope:	The scope of this use case is to Outline the process of exporting the saved template to excel for download.
Description:	This use case describes the process of creating a project plan / agreement in Excel from the previously generated template mentioned in Use Case #5.
Actors:	User "The PID" Application Database

	MS Excel
Preconditions	Users must have access to the application via registration or login. Users must have internet access. User must have saved a template with details entered in by the user.
Activation:	This use case begins when the user clicks to create the body which displays the Templates that can be used for the contract to be displayed in Excel.
Main Flow	User clicks "Create Body" button. User picks a template to work with. The user then inputs the relevant details into template. The user can then display details which displays the base details and can then press the "Export" button which will download the spreadsheet of agreement.
Alternate Flow	User clicks see details, and nothing appears as they didn't enter anything into the inputs for the creation of the agreement.
Exceptional Flow	Application loses connection to wifi.
Termination:	Document / Agreement is generated and downloaded in MS Excel format.
Post condition	Excel document is generated with the terms of the document / agreement.
Special Requirements	N/A

Implementation Requirements	JavaScript
	Excel – Table2Excel JavaScript Library – (API)
Technical Specification	JavaScript
	Excel – Table2Excel JavaScript Library – (API)

USE CASE #6 Diagram:
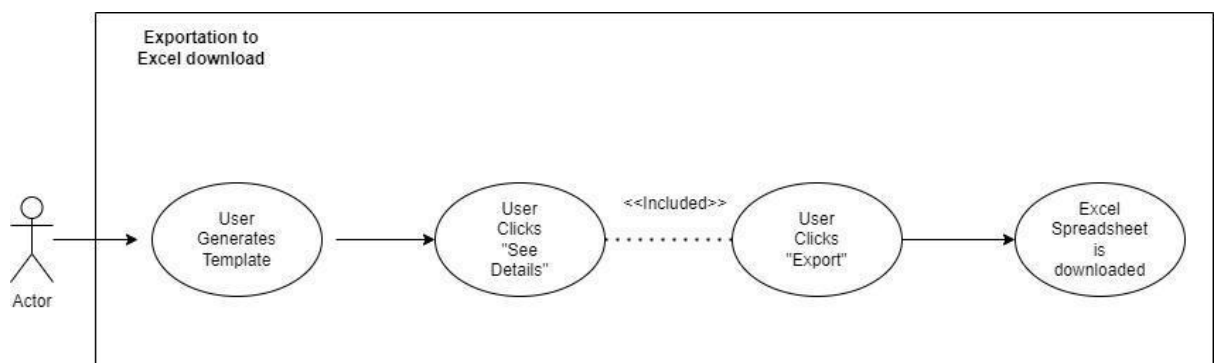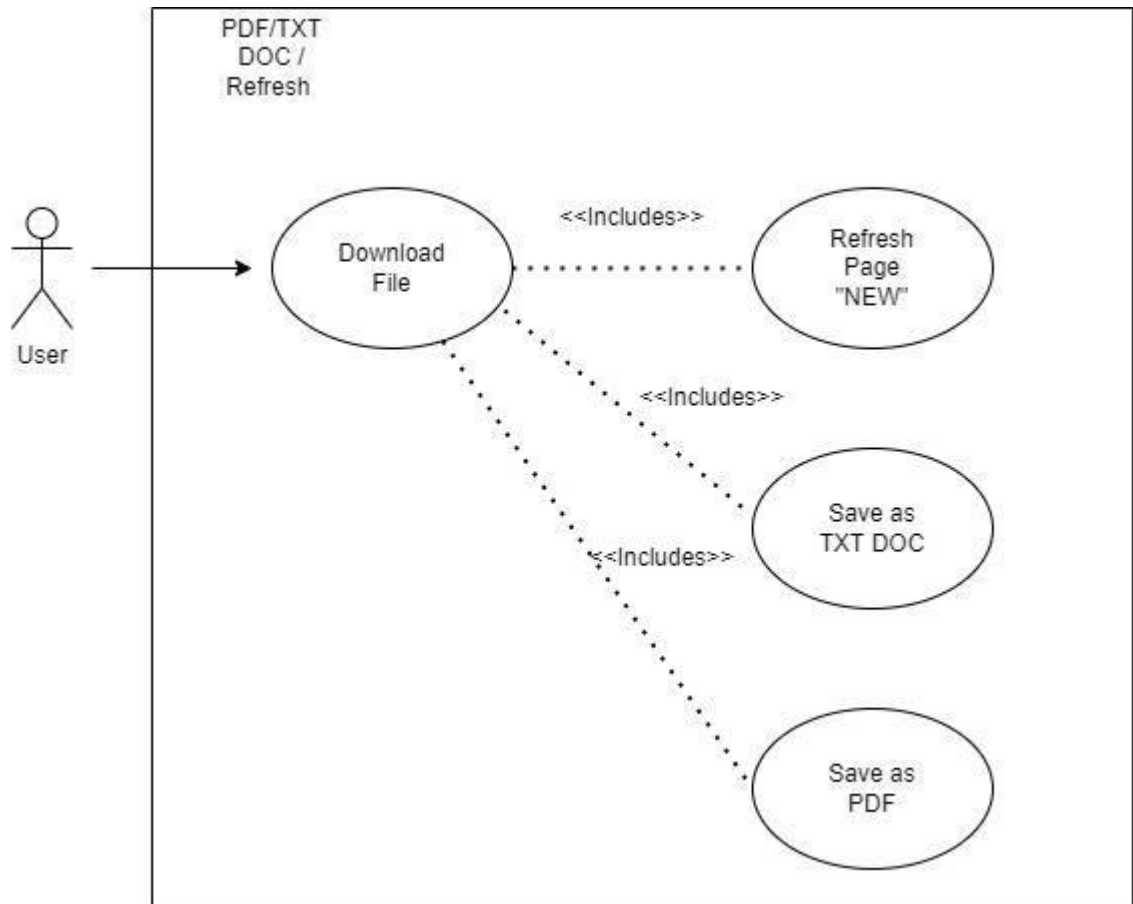

#7 Functional Requirement: PDF / DOC Download.

   USE CASE

Use case ID	UC07
Author	Jack Carroll
Use Case Name	PDF /DOC Download
Scope:	The scope of this use case is to Outline the process of Downloading the text that is saved in Use Case #4 into either PDF or TXT file.

Description:	This use case describes the process of saving input into the text editor into either PDF or TXT documents for later use.
Actors:	User "The PID" Application Database Text Editor
Preconditions	Users must have access to the application via registration or login. Users must have internet access. User must have entered inputs into the text editor and have saved them.
Activation:	The use case starts when the user selects the File button, from there, they have a choice to either download a PDF or an Text Document.
Main Flow	User selects download either PDF or Text button. The document is saved under either version picked.

Alternate Flow	A1: Document is not downloaded under PDF version.
	
	    1. User's do not click save PDF.
	
	    2. PDF is not saved.
	
	A2: Document is not downloaded under Text version.
	
	    1. User's do not click save Text.
	
	    2. Text is not saved.

	A3: User clicks "New"
	1. User's clicks "New: This will refresh the text editor box
Exceptional Flow	E1: Loss of connection during the process of saving the document. 1. User clicks download either format 2. Application loses connection to internet. 3. Application does not download either format of the agreements / documents generated.
Termination:	PDF / Text documents are generated and downloaded.
Post condition	PDF / Text documents are generated and downloaded.
Special Requirements	N/A
Implementation Requirements	JavaScript Exec command API
Technical Specification	JavaScript Exec command API

USE CASE #7 Diagram:

#8 Functional Requirement: User Notifications.
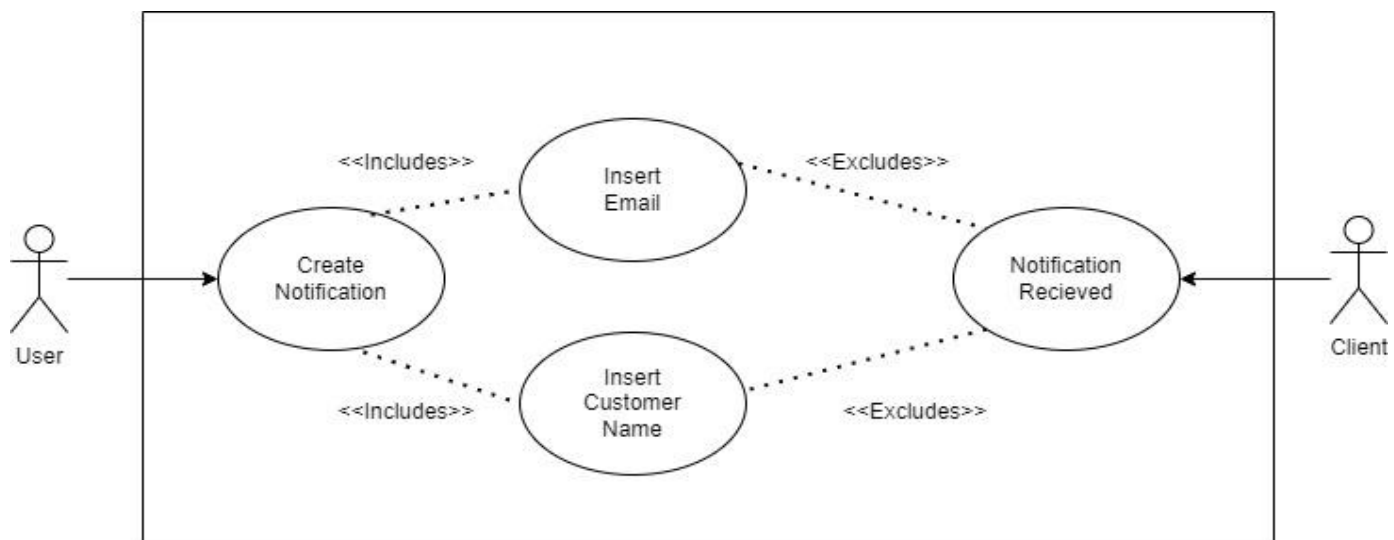
USE CASE

Use case ID	UC08
Author	Jack Carroll
Use Case Name	User Notifications
Scope:	The scope of this use case is to Outline the process of User Notifications.

Description:	This use case is do detail the process of how a customer is sent a notification. This feature encapsulates the notifications aspect of the project.
Actors:	User "The PID" Application Database Elastic API
Preconditions	Users must have access to the application via registration or login. Users must have internet access. User must have access to the documents before sharing.
Activation:	This feature is activated when the user clicks the "Contact Customer" button.
Main Flow	User clicks the contact customer button, once that is done the user then must fill in the customer email and the customer's name. Once this is complete the user will click submit and a notification will be sent to the customer.
Alternate Flow	The user enters in the incorrect customer email. Notification is sent to the wrong person.
Exceptional Flow	Application loses connection to the internet.
Termination:	User submits the notification to the customer with an automated message.

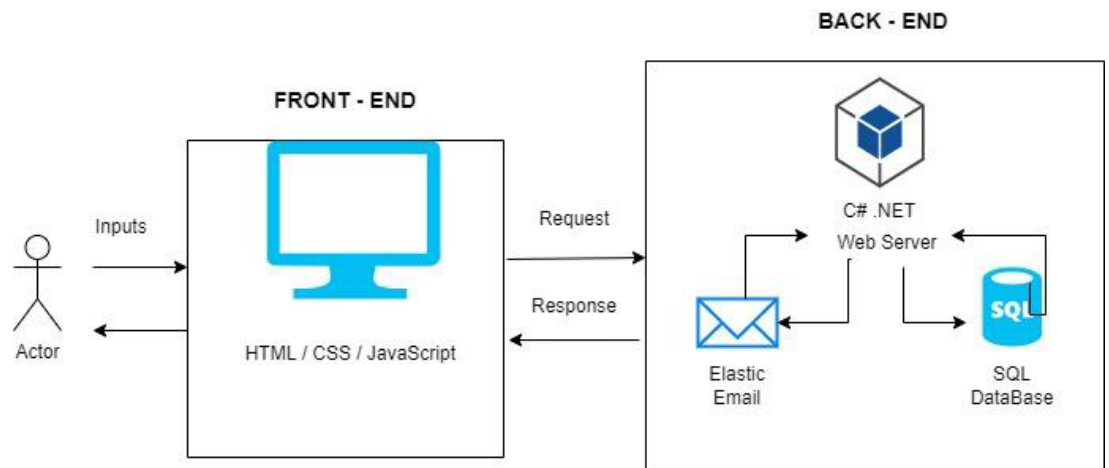|	
Post condition	Notification is sent to the customer.
Special Requirements	N/A
Implementation Requirements	Elastic API JavaScript
Technical Specification	Elastic API JavaScript

USE CASE #8 Diagram:

Development Timeline:

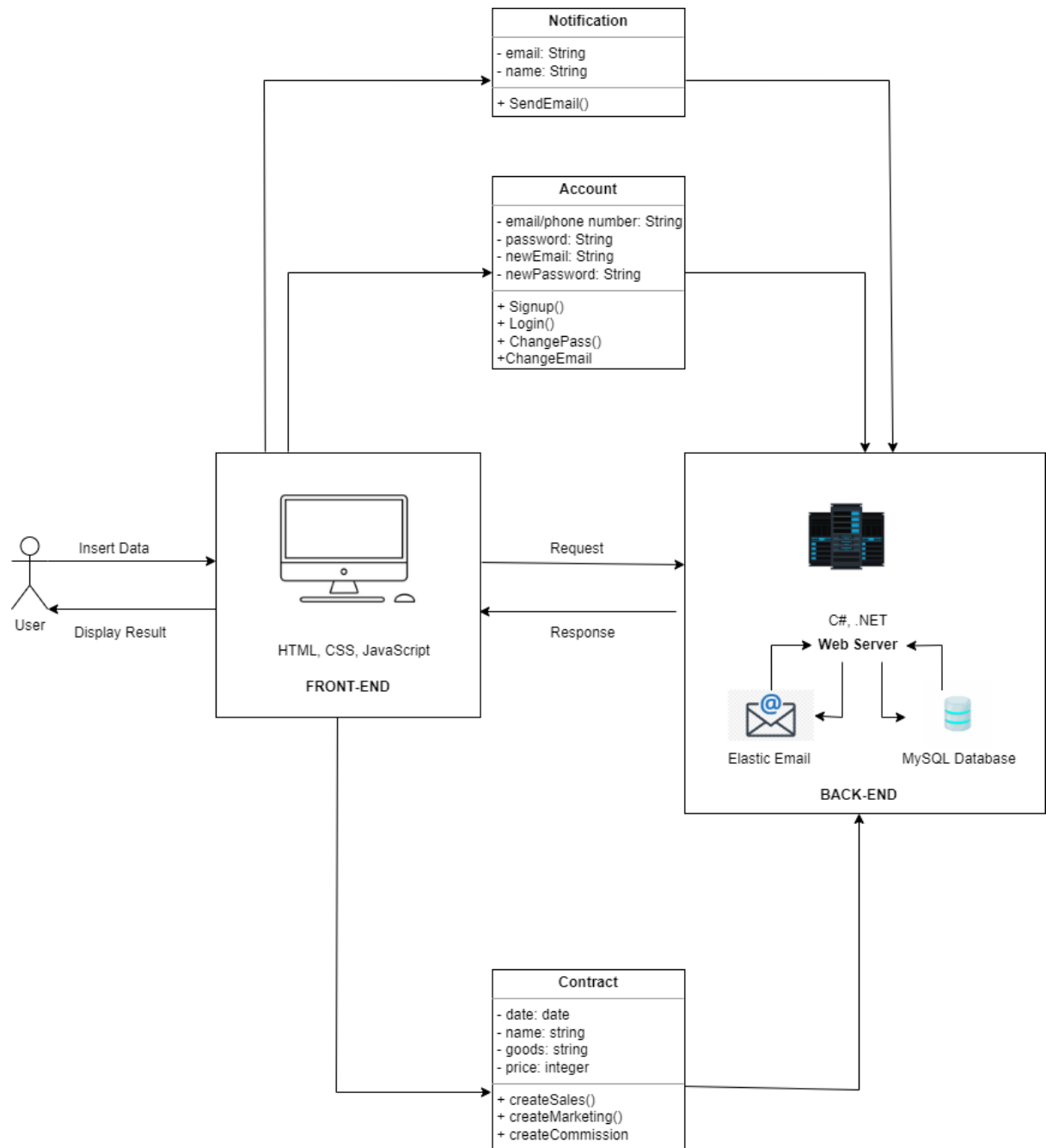| W1 –W7	W7 –W10	Jan - March	March - May
Idea formulation	I created the Database that would be used for the application	Template Generation	User Notifications Account Details
Use Case Creation	Login and registration built	Improvements made to Aesthetics of the application	Project Plan / Agreement creation Feature in EXCEL
Project Proposal	Word Editor Created – Adjustable Colors Downloadable function	PDF / Text Document Download	Posters and other documentation

1.1. Design & Architecture
Component Diagram:

1.2.

Class Diagram:

Notification

- email: String
- name: String

+ SendEmail()

Account

- email/phone number: String
- password: String
- newEmail: String
- newPassword: String

+ Signup()
+ Login()
+ ChangePass()
+ChangeEmail

User — Insert Data → **FRONT-END** (HTML, CSS, JavaScript)
Display Result

Request → / ← Response

BACK-END — C#, .NET, Web Server, Elastic Email, MySQL Database

Contract

- date: date
- name: string
- goods: string
- price: integer

+ createSales()
+ createMarketing()
+ createCommission

1.3.
Implementation

2.0 The Technology stack of my project involved:

3.0 ASP.NET,

4.0 Visual studio,

5.0 Microsoft SQL Manager,

6.0 JavaScript,

7.0 C#
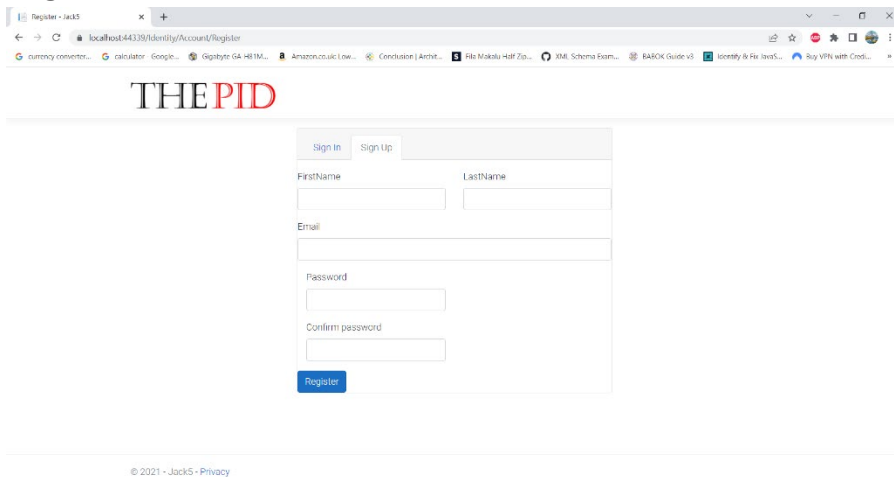
8.0 (API) Elastic API (Contact Customer email)

9.0 (API) ExecCommand() API (Word Editor)

10.0   HTML

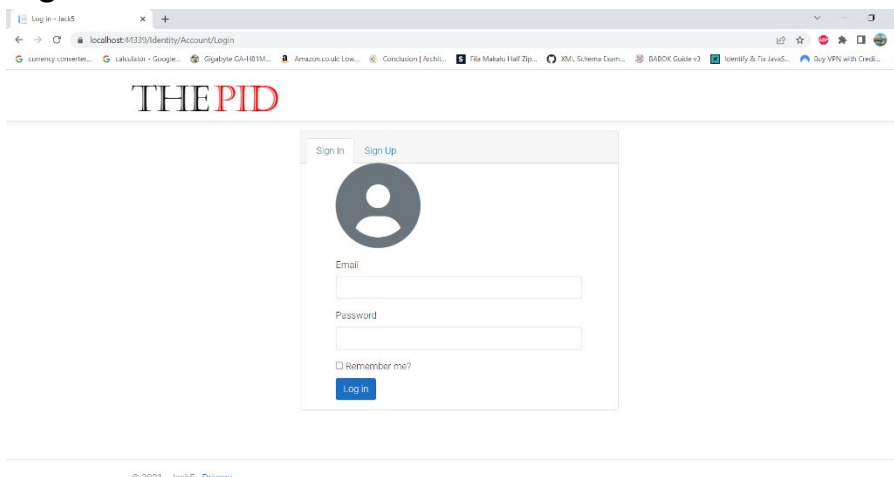## 10.1.   Graphical User Interface (GUI)

(1) Register:

This a typical standard layout for a registration requiring individual fields which can be retained in the personal data section within the Account management feature of the application.

(2) Login:

Standard Login System that will remember the user, should they click the "Remember me" button.

(3) Manage Account:
Profile:
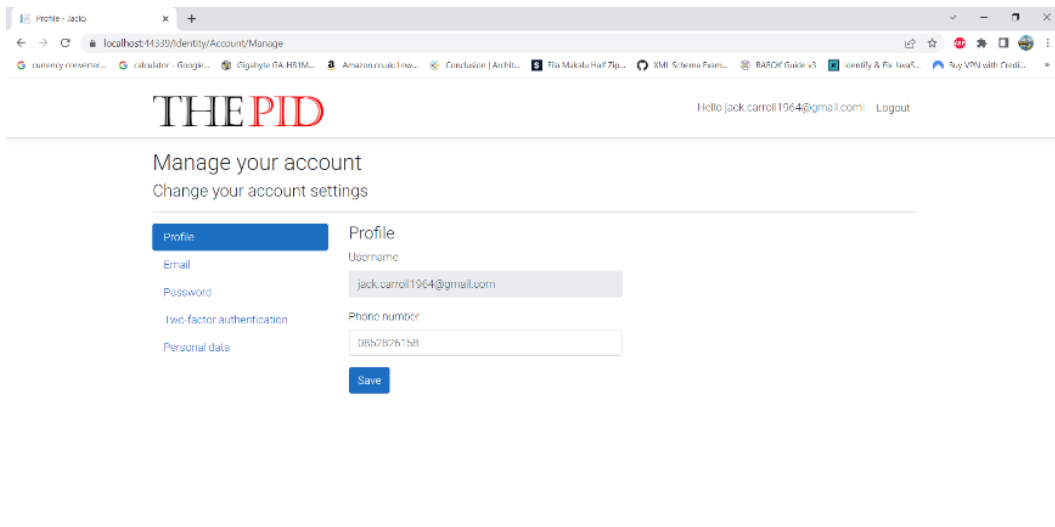
User can add their phone number to their account.

Change Email:
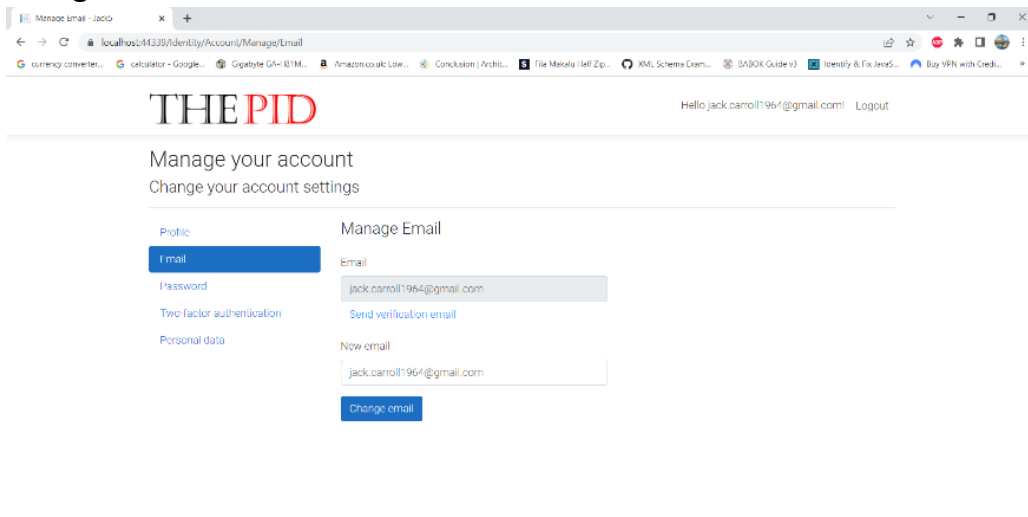
User can change their email.

Change Password:
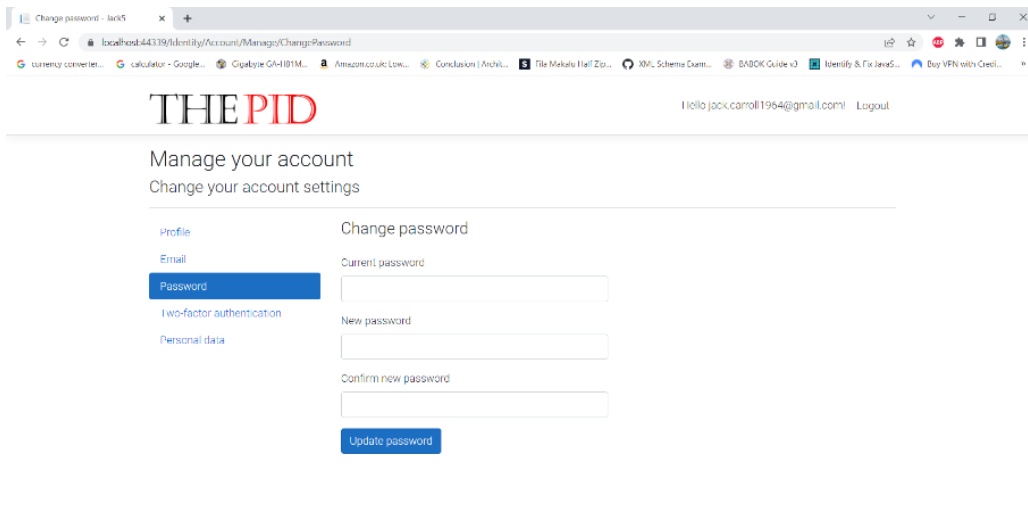
User can change their password.

Personal Data:
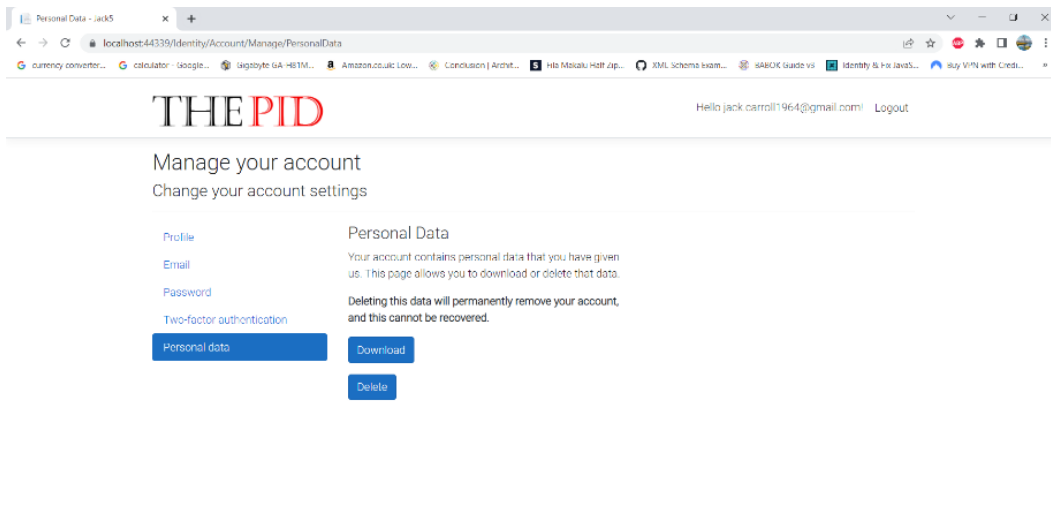
User can access their personal data; User can download or destroy their personal data at their discretion.

(4) Text Editor:
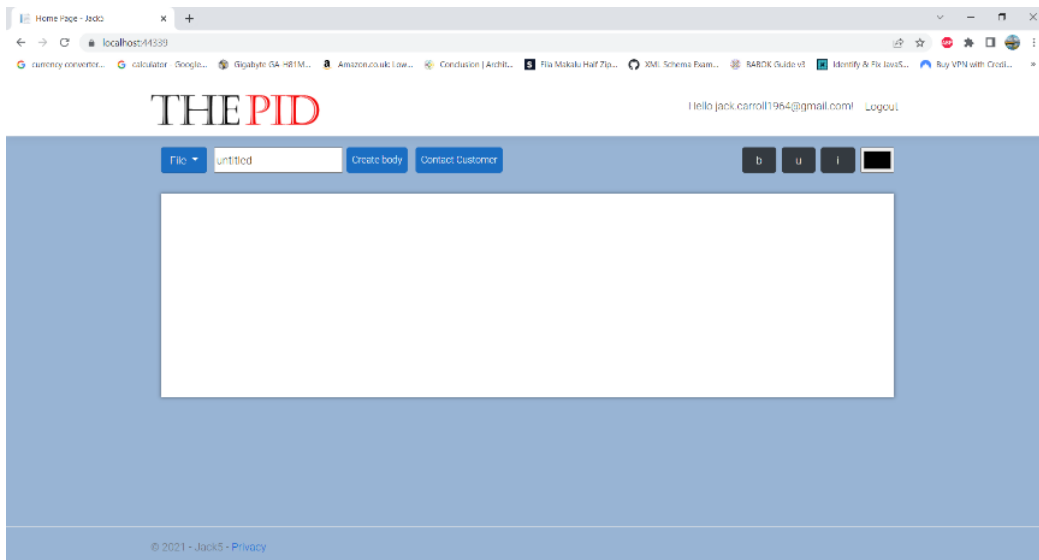
User can access the Text Editor once they log into the application. The user can type into the text editor, highlight text, underline, italicise and bolden their text.

(5) Template Generation:
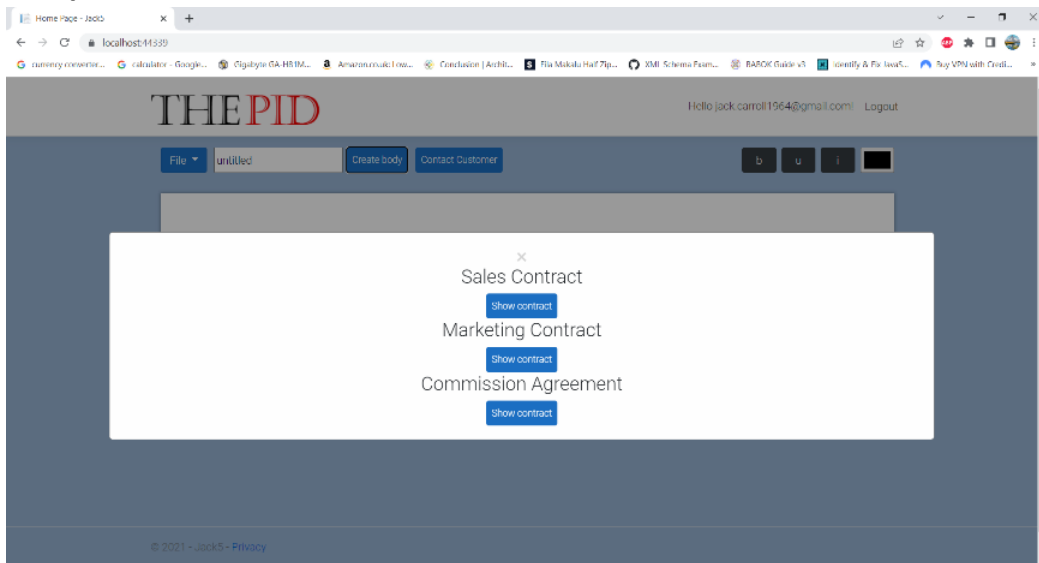
User can pick between three types of templates for contracts to generate.
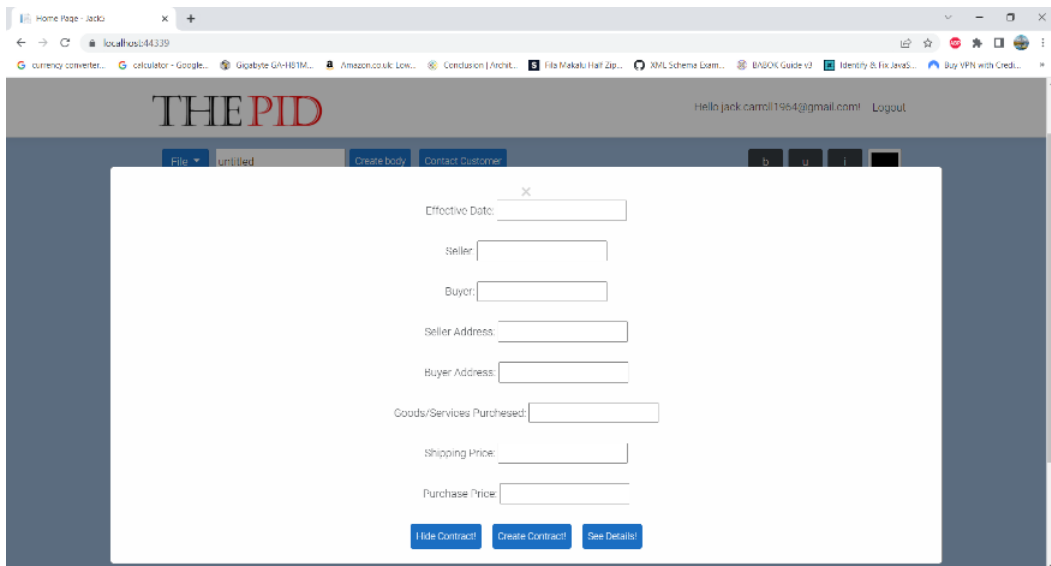
User can input into the fields present within each template before generating the contract.

(6) Exportation of Template to Excel
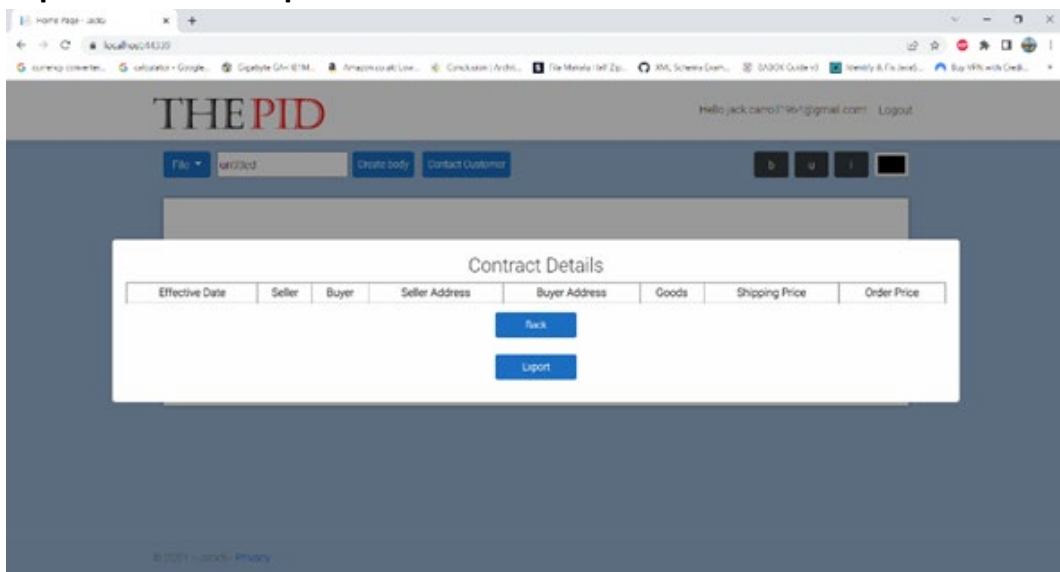
User can observe base details of the contracts and download them in excel format to ensure business continuity.

(7) PDF/ DOC Download:
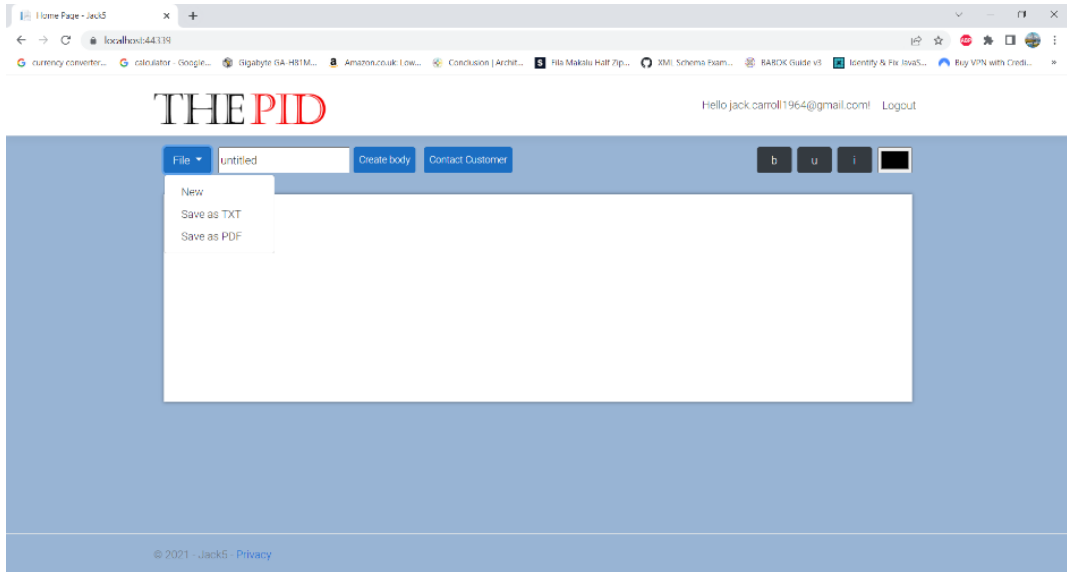
User can refresh the word editor by clicking the NEW button. User can also download the contract in either PDF or as a TXT file.

(8) User Notifications - Emails:
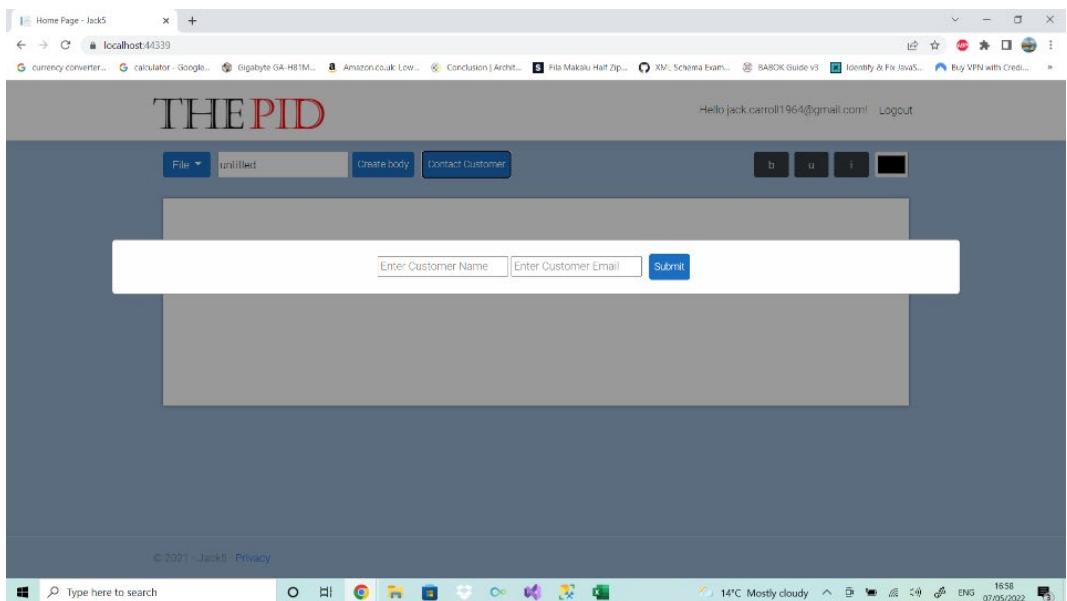
User can enter customer name and email to send a notification. This notification comes in email form.

10.2.   Testing

The testing methods that I used to test my application were test scripts. I have used these during my work experience and believe that they are invaluable in spotting errors or mistakes within the application. I will be using the test scripts to conduct the Acceptance Testing and Unit Testing. The test scripts are attached to this submission.

Unit Testing – [07/05/2022]:

Feature	Feature ID	Expected Result	Actual Result	Comments
Launch App	F-01	App should launch	The app launch fully	The launching of the app can be very slow, need to look into this.
Register	F-02	The user should be able to register their email account to the application	Registration works fully	N/A
Login with incorrect details	F-03	User inputs incorrect details when trying to login		N/A
Login with correct details	F-04	User inputs correct details when trying to login		N/A
Homepage button functionality	F-05	User should be able to refresh the page as well as come pack to home page whenever the Icon is hit	Homepage button works as intended	N/A
Click Hello user button	F-06	Clicking the hello user button should bring the user to the account management section of the app	I can access my account details via the "Hello" button on the home page	N/A
Enter and save Phone Number	F-07	User should be able to add a phone number	I am able to add my phone	N/A

			number to me details	
Click on Email tab and change email	F-08	User should be able to change their email associated with the application	I can change my email at will	N/A
Change Password	F-09	User should be able to change their password	I can change my password at will	N/A
Download Personal Data	F-10	User should be able to download their personal information that is used for the application	I can access and download my personal details used for the application	N/A
Delete Personal Data	F-11	The user should be able to terminate their account by deleting the personal data	I can delete my personal data and by extension my account	N/A
Type into word input box	F-12	User should be able to type into the text editor box	I can type into the text editor box	N/A
Change font	F-13	User should be able to Bold, Italicise and Underline the inputs into the text editor	I can Italicise, bold, and underline the input	N/A
Change colour	F-14	User should be able to change the colour of their password	I can change the colour of the input entered the input box	N/A

Save Input	F-15	User should be able to save the input into the text editor	I can save my input at will	N/A
Download input into PDF	F-16	User should be able to download the input into PDF form	I can't download the PDF	Unsure where the issue lies with this, could be a something to do with the Visual Studio that was used to create the application.
Download input into Text document	F-17	User should be able to download the input into Text Document Form	I can download the text file because of the input into the text editor	N/A
Launch template generator	F-18	User should be able to launch the template generator	I can launch the template selection	N/A
Launch Sales Agreement	F-19	User should be able to generate the Sales agreement Template	I can generate the Sales agreement template	N/A
Launch Commission Agreement	F-20	User should be able to generate the Commission agreement Template	I can generate the Commission agreement template	N/A
Launch Marketing Agreement	F-21	User should be able to generate the Marketing agreement Template	I can generate the Marketing agreement template	N/A

Download Sales agreement in Excel Format	F-22	User should be able to export the Sales agreement into excel form to download	I can download the sales agreement in excel	N/A
Download Commission agreement in Excel Format	F-23	User should be able to export the Commission agreement into excel form to download	I can download the Commission agreement in excel	N/A
Download Marketing agreement in Excel Format	F-24	User should be able to export the Marketing agreement into excel form to download	I can download the Marketing agreement in excel	N/A
Send Notifications to other users	F-25	User should be able to send notifications to other users	I can send notifications to others regarding documentation	N/A
Log out	F-26	User should be able to log out of the application	I can log out of the application	N/A

Acceptance Testing – [07/05/2022]:

Feature	Feature ID	Expected Result	Acceptable?	Comments
Loading of application	F-01	The PID Application should boot up in less than a minute	The PID application loads up around 20 - 30 seconds (Acceptable)	I would like the load time of the application to be faster, but this is down to the hardware of my

				laptop so not an issue of the app
Registration	F-02	The registration should only take a valid email address	(Acceptable)	This feature works as intended in keeping in mind parameters mentioned
Registration	F-03	The registration should check that the password and conformation of password are matching together	(Acceptable)	
Login	F-04	For the login feature of the application the remember me button should be fully functional	(Acceptable)	
Word Text Editor	F-05	The "untitled" area for naming of the application should automatically disappear once the user clicks on it	(Acceptable)	This is a small item but for the aesthetic of the application
Word Text Editor	F-06	The download option should enable the user to download the Text doc type	(Acceptable)	
Word Text Editor	F-07	The download option should enable the user to download the PDF doc type	(UnAcceptable)	PDF download does not work
Notification	F-08	The notification button "Contact Customer" should be able to send out to	(Acceptable)	

		notifications to the email entered in		
Manage Account	F-09	The User should be able to add / change phone number	(Acceptable)	
Manage Account	F-10	The User should be able to change current email	(Acceptable)	
Manage Account	F-11	The User should be able to change current password	(Acceptable)	
Manage Account	F-12	Two Factor Authentication feature should be able to add a device	(UnAcceptable)	Time constraints hindered the inclusion of this feature
Manage Account	F-13	User should be able to view and download personal data	(Acceptable)	
Manage Account	F-14	User should be able to delete personal data	(Acceptable)	Time constraints hindered the inclusion of this feature
Template Generation	F-15	User should be able to generate a contract template	(Acceptable)	
Template Generation	F-16	regenerate a template without disturbance	(Acceptable)	When a contract is generated, it must be fully deleted before generating a new one as there is overlap

Template Generation	F-17	User should be able to view the details of the template before it is generated	(Acceptable)	
Template Generation	F-18	User should be able to see the excel spreadsheet containing template docs inputs	(Acceptable)	

10.3. Evaluation

Based on my test scripts that are displayed above and are supplied with this document, I can conclude that the vast majority of features displayed are fully functional therefore my evaluation is positive, and I am satisfied with the product being the "PID" application.

11.0 Conclusions

During the course of development for this project, I have had to make many modifications to the scope and as a result, aspects of the idea for the project. These changes include the replacing of external software to facilitate the project initiation document to Excel. This decision was made as I am limited in terms of what I can develop with the skill set I possess. The inclusion of external software aside from Excel would have been favourable but it wasn't feasible given time and as mentioned earlier, skillset.

The next change came in the focus of changing the subject from having a fully fleshed out Project Initiation Document to having Agreement templates. This again was a limitation that was a by-product of skill level regarding programming and feasibility in relation to the time allocated for the development of the project. These changes have not affected the product in a negative or drastic way as the core idea and functionality is still present, the execution and methods used are different to how I would have preferred but I am still happy with the result.

The advantages of developing this project are that its unique is that the application encompasses many aspects of the project initiation phase. This application can generate many two documents at the same time. The first is the written piece and the next is the excel spreadsheet that contains important figures to a project such as cost and budgeting. This provides a level of business continuity and I believe is very important to have when starting a new project. There is also a great range of options

to download in different formats from Txt docs, Pdf's and Excel spreadsheets which can all be useful in a meeting setting when addressing a team on the topic. This app allows users to notify the customer as a reminder for important dates that may come up. This can help reduce time in waiting for an agreement to pass avoiding stagnation.

If I could start again, I would be looking at picking out core features and using them as tenants for my application. Instead of having a big bag of features that are not closely related at all, I would find ways to have features that can intwine with others instead of having random ones. I think this would have made the scope clearer and more precise for timing each feature.

Further Development or Research

With more time to develop this project I would expand on the original vision and try to focus on areas that I had missed in my latest submission. I do believe that this project is unique and if given more time to develop it I believe that the original vision could be achieved.

12.0 References

Reference all code snippets***

https://www.youtube.com/watch?v=CzRM-hOe35o&t=825s – (Registration and Login with ASP.NET core MVC. Also referenced inside the code under file index.cshtml.

https://www.w3schools.com/howto/howto_css_modals.asp?fbclid=IwAR2Xtd6eOCcV2avil1Henxq4UFSrMeFa3A6njMNa_tPC-d_S-ACabUpWvOM – (CSS and JS Modal).

Also referenced inside the code under file index.cshtml.

https://www.youtube.com/watch?v=i2eXkSKjl0A&t=383s – (Email and Contact Form)

Elastic Email used – smtp.elasticemail.com

https://www.youtube.com/watch?v=vWbMRlUvre8&t=298s – (HTML Table to Excel File)

13.0 Appendices

14.0

14.1. Project Proposal

Project Proposal

"The PID"

3rd November 2021

Software Project

Business Information Systems

Academic Year 2021/2022

Jack Carroll

X18300603

x18300603@studnet.ncirl.ie

Contents

1.0 Objectives

The objective behind my project is simple. I want to create an application that allows me as a project manager to see how the PID (Project Initiation Document) is progressing regarding

the project's progression. I also want to be able to recreate the terms and dates agreed on the PID be translated into a project plan with the use of existing project management software. For Instance, as a Project Manager, I don't always get to sit in and see what is agreed with a client company for months on end until the PID is finally shared which can progress in specific stages of the initial agreement. I would set the terms of the PID however the terms to the PID can change. These changes only add to more time before anything is signed by both companies. Typically, a document is stored on a local machine. This leaves the chance for multiple copies to get mixed up.

The problem that I want to solve is to eliminate the fogginess and to accelerate the rate at which a PID or similar project management artefact is signed. During my work placement the smallest of hiccups always caused months to recover from. Also, parts of the documentation were either ignored or forgotten about. I want to institute a collaborative piece of software that allows both parties to see what's going on instead of communicating completely over email which also adds time onto the already defined time constraints.

There is software that is designed to get legal documentation signed but nothing exists that is tailored for Project Managers to facilitate a PID agreement except for a static version of word. Unlike some of similar competitors, (that advertise legal documentation, which is separate to a PID), out there for this type of software which are typically a static UI where the user just stamps their signature, I want to be able to facilitate cooperation and communication between companies as well as be able to create a project plan that has been tailored via the PID so that I can capture the correct tasks into the PID without risk of making a simple mistake. This involves assigning departments to certain parts of the PID. Each member as per PID is outlined with their respective obligations but many never actually see the PID for themselves which allows for miscommunication and misinformation, also the ability to upload graphical projections for which display impacts to delays. As a personal touch I want to be able to create software that can save a particular format which can be deemed as standard practice for a company to mitigate the writing up of each document. I want to incorporate a fields section that, like the assignees feature, alerts users to sensitive dates but can also be used as a tool to highlight parts of the documents for closer examination. This application is going to be the one stop place for both legal counsel, Project Managers and any other entities that have special interests into the PID and want to ensure that there is ample cooperation between companies. This application will also contain the history of each document which allows users to see changes made over time.

There will be the feature for users to configure the layout of the doc to fit their specifications and this will also save time in drafting new documents.

2.0 Background

I chose this topic to pursue due to my recent work experience. I along with my team of experienced Project Managers always found it baffling on how PID's can be messed up by either legal counsel, other Project Managers, or other senior members of a company. Little

mistakes always held us up. Topics that were agreed upon prior that may have been neglected in the PID also tended to trip up the overall progression of a project.

I want to create a software that distinctly highlights when a piece of the PID needs to be acknowledged and by whom. The sad fact is that a lot of times, at least where I worked, our clients were incredibly slow to sign anything even after the large investments they had made into our company. A certain company had a weirdly difficult time managing its own legal team who later abandoned the company. My goal is to hold members of the company and specific teams accountable and to accelerate the rate at which projects are signed and to be able to display possible projections for any potential delay in the signing of the project's PID.

I intend to meet the objectives the same way I conducted my management over projects. I have identified what features I want to develop. I have created a timeline between now and the submission date to consider the lack of proficiency that I have when it comes to coding. I have also made use of Asana which I have documented the many steps that I will need to conduct to finish this project. I have had extensive conversations with my previous work colleagues regarding the specific features of which were conceived during my time in work placement. I now know that there is a want for this application.

I have designated targets to achieve throughout this year for which I intend to meet by going through the weekly check-ups with my supervisor and keeping in line with my project plan inside of Asana.

3.0 State of the Art

There are many applications that exist for the sole purpose of signing documentation or getting a signature. My proposal is different in that I am advocating for a collaborative piece of software with the intended use of keeping track of deadlines for the signing of documentation and to foster a constant monitor over the document. I want to make sure that the relevant members of the project are updated on the ongoing projects through the signing phase.

Here are a few examples of my competitors for which I intend to distinguish my own product:

-**Docusign**. Docusign is a platform in which the user is able to upload a PDF of a document. From there other individuals within the company are able to stamp their generated signatures onto the document. Each member is notified of the signature via email. This process is static. It doesn't give reminders about needing to sign documents and is largely a format to stamp a signature. There is no insight into how each section of the document is being progressed and nothing to notify the sender if the document has been read and which parts of interest have been examined. Also this piece of software isn't designed to deal with Project Initiation Documents and the complexities that come with them.

-**SignNow.** SignNow does appear to have similar features to my project proposal however there are a few areas that I believe have been neglected and can cause room for error which I have personally seen. The first is that users can be notified of the overall document, but it doesn't allow for users to be sent alerts for particular sections of the document. There can be 20 collaborators at the one time, but parts of the document can be neglected and therefore missed. This is an issue that I have seen many times. I also don't see where the user can upload any graphical projections of the timeline for the PID to be signed. I believe this is an opportunity to introduce a graphical element into the project. I also want to emphasise that changes in scope and requirements should be highlighted and should be reflected onto the application of the PID and there should be an area to convey this message graphically.

The last item that I wish to point out about the existing software is that they are not designed to be incorporated with project management software at all. Once the agreement is signed that's it. There is no further functionality after this point. I want my project to interact with existing management software that exists and is widely used. I want my project software to become an integral part of the agreement phase within both PID's and legal Documentation.

4.0 Technical Approach

My approach to this project will be first to transfer the activities and next steps on to a tool that I have been using for over a year for project management. I will be transferring my steps onto Notion. My plan will see the implementation use case diagrams and flow charts to charter how my project should flow. The subsequent phases will be there to see the plan through and materialise.

To identify requirements for my project I will need to research how to develop the many features I intend to use on my project. As I am not proficient with coding but do have experience, I will be looking at tutorials online on completing these tasks as well as viewing how others create these tasks and find out ways how to make my approach different. In this phase which is the second will be my requirements gathering phase. So far I am aware of what I will need for the project in terms of technology and libraries I will make use of. I just need to figure out how I will connect them all together and make them into a cohesive application that fits my specific needs.

So far, I have identified what features I will need to incorporate into my project however I am not closed to the idea of altering my initial idea in terms of making adjustments. I will consult with my former work colleagues and get their perspective on what is needed on this type of application in terms of what they would like to see if it was something that they would use in the future.

The next step would be to prioritise each feature and sort them from what's essential to what is nice to have. I have learnt in the past that without a clear direction for scope that "tack ons" can heavily interrupt the flow of the project. This step will be undertaken within my online tool "Notion" for the project management side. The items that I have prioritised

for my project will be initiated sooner than the other items on the list. I will have a rating system 1 to 3, 1 being the highest in demand item and 3 being a nice to have item.

After I have finally gathered my requirements the next stage is to finalise and commit to my requirements. These will be the parameters for my project and will act as a steady margin. Once a requirement is finalised it will be assigned a value in terms of how important it will be and how quickly I will need to create it.

The final step will be to manage the requirements of my project. This will essentially mean that I will need to keep track of all my deliverables and keep them rolling up to the finish line in May. This will incorporate the heavy use of Notion. At this stage my project will be broken down in detail and this aspect of the project reporting will be a box ticking exercise to report to my supervisor on a weekly basis. This phase of the project is important as I need to keep a close grip and not allow certain items to go astray and to keep a watchful eye on all areas of my project.

The activities each week will provide a steady flow into the overall progress of the project and will be used to show careful tracking of each item. This will allow me to never neglect a certain feature that has been stated on the overall project plan.

This phase will also see the use of project milestones which should be detailed in the project plan on Notion. These will be markers in the project's progression and will be clearly outlined for me to follow and my supervisor to see in full view.

5.0 Technical Details

The technology that I foresee being used within my project will be making the use of #C for the back end of this application. I will also be making use of Node.js to make use of the simplified model of event driven programming which will make use of the call back signal to show the completion of a task. I can see that I will also need to make use of .NET and maybe VSCode. I will also be making use of Angular and its many libraries for my project.

I will also be making use of JavaScript. I have been spending time over the summer to reacquaint myself with this programming language but as stated before I am not proficient with it. I may also consider making use of JSON or MySQL for a potential database.

As of now these items are still under speculation in regard to if I still chose to use them. I have been watching many tutorials on what they are used for and how to use them and they seem to be the best ways to achieve my desired results for this application. I am still deciding on which to use either JSON or MySQL. I have used MySQL in the past and understand how it works more than JSON but again this item is still under consideration.

If I decide to go down the route of using MySQL, I will be making use of the MySQL workbench application which I already have installed whereas if I decide to use JSON I will only need to make use of the VScode Studio.

I will need to make use of an API that will allow me to input text onto the PID. There are many API's that should suffice but I will be looking to implement an API that changes font type and colour.

This phase of work will require a great deal of testing and patience. My understanding of this is to start straight away on this topic and get a head start.

In short, this application will need to be able to accommodate many users at once, provide a text editor provided by an API and allow users to amend and change components of the PID at once and notify other users of changes and upcoming dates for specific parts of the PID to be agreed upon. This application will need to be able to authenticate and verify users before. As outlined in the PID members who are assigned roles and tasks need to be notified when their names and contact info are added. There are terms and information specific to each company that need to be added as per template and branding. This PID will have many steps and dates that alerts, and notifications will be sent out. Every part of the PID will always be interchangeable and require close inspection. At the end of the inspection there will be an acknowledge button that checks once a term is agreed by the client. At the end of the approval phase for both sides a congratulations notification will be sent out. There will need to be a database to keep track of each member and their contribution. There will also be a chat section so both company members can communicate instantly once there is a change instead of relying on email.

6.0 Special Resources Required

To my knowledge I have access to all the resources that I may need for this project. The major thing I will need is to appropriately allocate time with my supervisor for our weekly check-ins for this project.

7.0 Project Plan

The project in my mind will run on till May. As of now the research aspect of my project is still ongoing in regard to what I need to do and what I can and can't incorporate into my project. As of now I have some estimation of what some steps of my project will involve which are documented into Notion.

I first intend to create use cases for my project. These will outline how my project will work for my users and the expected outcome for making use of my project. These use cases will be made on the 8th of November and will be presented to the supervisor for inspection.

I will assign milestones for each feature that I implement into my project. There will be a total of 6 milestones. The last milestone will be the completion of testing and this will be

weeks apart from each other. Each milestone has a subtask. These subtasks will range from getting ethics forms to small advancements in my project's progression.

I intend to start with conceptualising how my application will look before writing any code for my project. The next step would be to start the coding side. The first step will be to create the signup and login authentication for users which will require front end and back-end development. As this is a relatively straightforward operation it shouldn't really take long and therefore isn't regarded as a milestone. These milestones as mentioned will be weeks apart.

For the front-end development, I will be making use of .NET, JavaScript and a couple of Angular libraries which come to mind. This will most likely be one of the first milestones that are completed in the duration of my project.

I will also be incorporating a database. Due to my familiarity this milestone won't take long to complete. Using MySQL or potentially JSON to facilitate this feature.

The next milestone will be the creation of the application's foundation. Making it run as an online application. The next milestone will be to implement the features that I have proposed such as addition of fields, addition of timelines and graphical projections, Security, template generation and finally notifications. The last step of the project will be to display the testing that will be ongoing. I will be making use of the Black box testing, end to end testing and finally acceptance testing. The testing phase should only extend for 2 weeks at the max which is including the creation of the test scripts.

I have created a very indicative timeline that will need to be examined and remapped, but it contains the structure for which I intend to follow:

Once this phase is closed out, I will mark it as finished in both directions and notify the supervisor and then I will finally submit my application for review.

8.0 Testing

The forms of testing that I will be making use of will be end to end testing likely with another person, Acceptance Testing and Black box testing.

To test my application end to end I will be, and another student will test the application from top to bottom in terms of functionality and aesthetic. To conduct this form of testing, a test script will need to be developed which will take into account if all the features of the application work as intended. This test script will contain fields such as ID's for each feature and their components as well as yes or no for working, expected result, actual result and a comments section for each feature. This will allow for a meticulous approach to testing and allow me to be able to home in on the areas that need further attention. I have experience in conducting these tests in the past therefore creating this type of test should be relatively straightforward.

I will conduct black box testing. This form of testing will only be considering the inputs and outputs of my application except for the user not having seen or using the application prior to testing. For this form of testing to apply to my project I will be testing each feature to see if they fulfil their purposes. I will also be looking to see how the overall application works at the end once all of the features have been tested. I want to see the PID at the end containing all the adjustments made to it at the end. This will be testing the application's output. I will in effect be testing the overall application on what it produces. This tester will need to be separate from the last as mentioned before, they need to be new to the application.

The last form of testing that I will be conducting will be Unit testing. This will be different from the end-to-end testing in that instead of following a script in a sequence of testing. I will be testing each component of the application on its own without intervention from the other features. This test will be conducted using test scripts also but on a more precise level. I will need to further consider what exactly other elements I will need to take into account for this specific test. Once I have tested the system on my own, I will then hand the test script to another individual and allow them to test from their perspective and I will match up both results of the test.

14.2. Reflective Journals
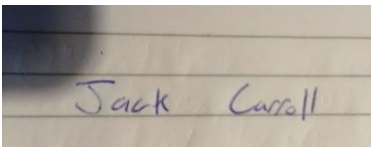
Month: September

What?

For the month of September, I was forming the project idea. I had an idea of what I want to create as I received inspiration from my work placement from January 2021. At this stage I'm researching other potential ideas for the software project, but this month remains to be idea formulation.

So What?

The Idea formulation was relatively easy as I already had inspiration for what I wanted to create. The progress of this month was that I had spoken to other project managers and gathered info on what they thought could be relevant for my project in terms of features. I have an outline of a project proposal but will need to wait until I see any document template to initiate this project.

Now What?

The first challenge that I face is that my idea is not entirely new, and I need to find an angle on how it can stand out from existing software. I will be speaking to my former colleagues on their opinions for the application to better help foster new innovative ideas.

Student Signature	Jack Carroll

Month: October

What?

I have solidified my idea for the project proposal. I have outlined what my application will be and what it will be able to do. I have created and submitted my project proposal and created a few early use case diagrams to better understand my application.
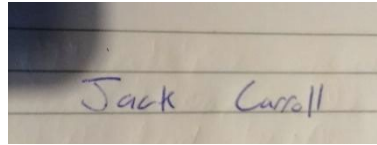
So What?

I succeeded in cementing my project idea. I have an idea on how to make it completely unique from other existing software that is currently on the market.

I have had the chance to speak to some of my friends from my work placement and they seem to agree that this project is worth pursuing and I have gotten new interesting insights from these other project managers.

Now What?

My next step is to look into the technical requirements for my project. I need to sit down and see what is feasible and how it can be developed. I am still very much in the research phase of this project, but I have confidence that my ideas for features are achievable.

Student Signature	*Jack Carroll*

Month: November

What?

This month has seen some tangible progress on the development side of my project. I have nailed down how my project can be unique from other existing software. I have amended my project proposal to incorporate the recent developments within my project.

So What?

I was able to create the SQL database using Microsoft SQL Server Manager. I was also able to create the Login and Registration features of my project using Visual Studio using HTML/ CSS/ JavaScript/ and ASP.NET.
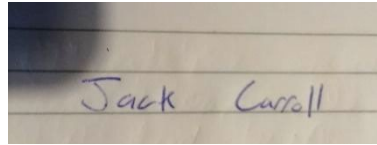
These are two developments that I intend to showcase for my Prototype.

I have started my Tech report, but I am not yet finished as I need to implement another yet to be developed feature into my project.

Now What?

I need to create the text editor functionality of my project, create the tech report, and create the slide deck to deliver my proposal for the midpoint presentation.

Student Signature	*Jack Carroll*

Month: December

What?

I was able to finish the text editor feature for my project. It is a very early and simple version of what I intend to develop later. I have also finished the tech report and all of the USE CASES and their diagrams. My Slide deck presentation is complete. This has been the busiest month so far due to the fast-approaching deadline and amount of work that was left to do.
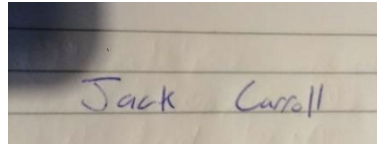
So What?

As of now I am reviewing my documentation to make sure that it is 100% complete and I'm not missing any sections before I submit. The challenges that remain are that I will now need to start developing the later features after the midpoint presentation. This prototype will need to evolve to encompass all the other aspects of my project.

Now What?

I will need to conduct further research on how to develop the remaining features of my app. I will need to submit my video and material which I intend to do in a timely manner.

Student Signature	*Jack Carroll*

Month: January

What?

This past month I have been editing the aesthetic of my applications user face. I have been updating the look in terms of colour scheme and adding UI enhancements such as scrollable bars as the submission to the midpoint, the application looked slightly bare. I will be focusing on closing other functionality intended for this project in February.
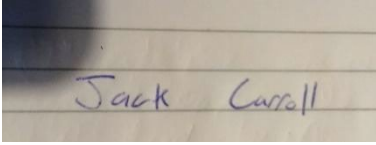
So What?

I am still having issues with the PDF download feature of my application. I have been able to really change the look of the app that I believe is appropriate and has added depth to the applications design and functionality

Now What?

I intend to finish out the remaining features of my application. The timeline that I outlined for the overall project will need to be remade as I was unaware of the time frame difference from last year. Completion of additional features will need to take place at a faster pace, and I will be documenting the changes and their dates.

Student Signature	*Jack Carroll*

Month: February

What?

I created the layout of each contract type that will be used in my application. This was done via finding templates online and creating them in my project in snippets of JavaScript. There are a total of 3 contract templates that are implemented into the project. The idea is that the user chooses the layout of the contract that differs from others based on their needs. The contract template takes in input from the user and generates the contract which they specified such as name, dates and other relevant details such as products sold etc... The overall design has been improved for aesthetic purposes.

So What?

I need to invest time into looking at the tools I will need to use to make this feature possible as well as how it will look. Another aspect of my project which is proving difficult is being able to generate the contract template into existing software. I will look for alternatives to Asana to make sure this is possible.

Once I have identified the tools and methods for developing my project further, I will begin to segment features of my project into phases of development. Each phase will focus on an area of the project's different components.
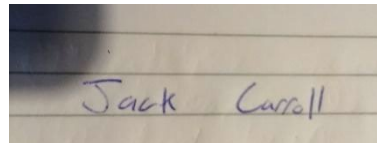
Now What?

I intend to develop a share button which is used for the collaborative aspect of the project. Once the contract has been completed from the Project Managers perspective, the share button is used to provide access to the client to review it.

I will be reviewing my project timeline and developing an updated version for each component of the project to develop. I will then approach each new feature on an incremental basis.

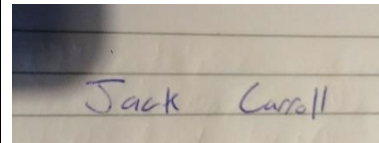| Student Signature	Jack Carroll

Month: March

What?

This month I have finished working on two templates of the contract feature. I had issues in getting them to work with not generating the correct layout. The three types of contracts that I have now are Sales agreements, Marketing contracts and the Commission agreements. I have spent a significant amount of time and research on tools that I will use for my project. With input from my supervisor, I have decided to go with Microsoft Excel which is where my contracts will be generated when exported from my app. The remaining features that I need to develop are the share button and the exporting of the project into MS Excel. This has been a very busy month with exams therefore my progress with the project has been stunted by it. I needed to replan how I was going to structure the development of my project.

So What?

I have been able to research the tools that I will be using to develop the share button and the Contract generation feature on excel. I have also gotten my contract templates to be fully functional. I am now more focused on completing my remaining features as the overall goal is clearer.

Now What?

I plan to start coding these features in early April, as mentioned due to the ongoing bandwidth with college assignments. Once the coding for the remaining features is complete, I can then focus on conducting the Acceptance Testing and Unit Testing for my project and wrap up the remaining documentation. I also plan to review different hosting options for my project in April. I will rely on counsel from my supervisor on how best to approach this area.

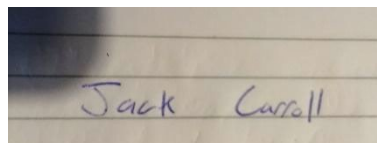| **Student Signature**	Jack Carroll

Month: April

What?

This month I focused mainly on the communication feature of my project. Using the Elastic email smtp I have been able to create a smart html form that receives inputs from the user (such as: customer email, the subject of the email, and the body of the email). I will be using them to create a way in which a user can contact a customer very quickly through the application. After I finished what was supposed to be the last technical feature of my application, I spent about 1 week finishing the overall design of the website and polishing different areas.

I have also added in the feature for account details this past month. This is to provide the user with insight to the emails that they used and password for security purposes. I used the .Net Framework to complete this feature.

I believe that all the features I planned on developing at the beginning of this project have been mostly successfully developed. The main challenge was to send an email with inputs from the user, that's why I chose to use the Elasticemail APIs because it is free and very easy to use. I will be spending the remaining two weeks working on my documentation aspects of my project such as refining the poster, collecting, and sorting the monthly journals, refining the PowerPoint presentation and reviewing the test scripts that I will be using for the testing aspect of the project. The test scripts are created; they just need to be adjusted to compensate for some changes made to the application.

I completed most of the technical parts, the only thing left is to complete my documentation as mentioned above.

Student Signature

Jack Carroll

14.3. Test Scripts

Unit Testing:

Feature	Feature ID	Expected Result	Actual Result	Comments
Launch App	F-01	App should launch	The app launch fully	The launching of the app can be very slow, need to look into this.
Register	F-02	The user should be able to register their email account to the application	Registration works fully	N/A
Login with incorrect details	F-03	User inputs incorrect details when trying to login	Correct Response for incorrect login details	N/A
Login with correct details	F-04	User inputs correct details when trying to login	User can login with correct details	N/A
HomePage button functionality	F-05	User should be able to refresh the page as well as come back to home page when ever the icon is hit	Homepage button works as intended	N/A
Click Hello user button	F-06	Clicking the hello user button should bring the user to the account management section of the app	I can access my account details via the "Hello" button on the home page	N/A
Enter and save Phone Number	F-07	User should be able to add a phone number	I am able to add my phone number to me details	N/A
Click on Email tab and change email	F-08	User should be able to change their email associated with the application	I can change my email at will	N/A
Change Password	F-09	User should be able to change their password	I can change my password at will	N/A
Download Personal Data	F-10	User should be able to download their personal information that is used for the application	I am able to access and download my personal details used for the application	N/A
Delete Personal Data	F-11	The user should be able to terminate their account by deleting the personal data	I can delete my personal data and by extension my account	N/A
Type into word input box	F-12	User should be able to type into the text editor box	I can type into the text editor box	N/A
Change font	F-13	User should be able to Bold, Italisise and Underline the inputs into the text editor	I can italisise, bold and underline the input	N/A
Change colour	F-14	User should be able to change the colour of their password	I can change the colour of the input entered into the input box	N/A
Save Input	F-15	User should be able to save the input into the text editor	I can save my input at will	N/A
Download Input into PDF	F-16	User should be able to download the input into PDF form	I cant download the PDF	Unsure where the issue lies with this, Could be a something to do with the Visual Studio that was used to create the application.
Download Input into Text document	F-17	User should be able to download the input into Text Document Form	I can download the text file as a result of the input into the text editor	N/A
Launch template generator	F-18	User should be able to launch the template generator	I can launch the template selection	N/A
Launch Sales Agreement	F-19	User should be able to generate the Sales agreement Template	I can generate the Sales agreement template	N/A
Launch Commision Agreement	F-20	User should be able to generate the Commision agreement Template	I can generate the Commision agreement template	N/A
Launch Marketing Agreement	F-21	User should be able to generate the Marketing agreement Template	I can generate the Marketing agreement template	N/A
Download Sales agreement in Excel Format	F-22	User should be able to export the Sales agreement into excel form to download	I can download the sales agreement in excel	N/A
Download Commision agreement in Excel Format	F-23	User should be able to export the Commision agreement into excel form to download	I can download the Commision agreement in excel	N/A
Download Marketing agreement in Excel Format	F-24	User should be able to export the Marketing agreement into excel form to download	I can download the Marketing agreement in excel	N/A
Send Notifications to other users	F-25	User should be able to send notifications to other users	I can send notifications to others in regards to documentation	N/A
Log out	F-26	User should be able to log out of the application	I can log out of the application	N/A

Acceptance Testing:

Feature	Feature ID	Expected Result	Acceptable?	Comments
Loading of application	F-01	The PID Application should boot up in less than a minute	The PID application loads up aroun 20 - 30 seconds (Acceptable)	I would like the load time of the application to be faster but this is down to the hardware of my laptop so not an issue of the app
Registration	F-02	The registration should only take a valid email address	(Acceptable)	This feature works as intended in keeping in mind parameters mentioned
Registration	F-03	The registration should check that the password and conformation of password are matching together	(Acceptable)	
Login	F-04	For the login feature of the application the remember me button should be fully functional	(Acceptable)	
Word Text Editor	F-05	The "untitled" area for naming of the application should automatically disapear once the user clicks on it	(Acceptable)	This is a small item but for the aesthetic of the application
Word Text Editor	F-06	The download option should enable the user to download the Text doc type	(Acceptable)	
Word Text Editor	F-07	The download option should enable the user to download the PDF doc type	(UnAcceptable)	PDF download does not work
Notification	F-08	The notification button "Contact Customer" should be able to send out to notifications to the email entered in	(Acceptable)	
Manage Account	F-09	The User should be able to add / change phone number	(Acceptable)	
Manage Account	F-10	The User should be able to change current email	(Acceptable)	
Manage Account	F-11	The User should be able to change current password	(Acceptable)	
Manage Account	F-12	Two Factor Authentication feature should be able to add a device	(UnAcceptable)	Time constraints hindered the inclusion of this feature
Manage Account	F-13	User should be able to view and download perosnal data	(Acceptable)	
Manage Account	F-14	User should be able to delete personal data	(Acceptable)	
Template Generation	F-15	User should be able to generate a contract template	(Acceptable)	
Template Generation	F-16	regenerate a template without disturbance	(Acceptable)	When a contract is generated,it must be fully deleted before generating a new one as there is overlap
Template Generation	F-17	User should be able to view the details of the template before it is generated	(Acceptable)	
Template Generation	F-18	User should be able to see the excel spreadsheet containing template docs inputs	(Acceptable)	

"The PID"

PRESENTATION

22/05/202

Introduction

Name: Jack Carroll

Course: Business information Systems

Project Title: "The PID"

Project Overview

- The PID is essentially an application where users can collaborate and share Project Initiation Documents to accelerate the speed of an agreement.

- This application is aimed towards Project Managers as I have worked with them during my placement and saw how slow a generic PID can take to get approved. These docs are usually stored locally, and individuals often forget to look at parts which often need to be examined by a specific date, pushing out the PID further.

- This app is different due to its functionality extending by being able to produce two different documents that are beneficial for Project Managers to use. The first is the Inputs entered in by the stakeholders and the other is the hard details that are converted into Excel format that provide Project managers details to keep in mind.

Project Overview

- The PID is essentially an application where users can collaborate and share Project Initiation Documents to accelerate the speed of an agreement.

- In addition to creating a sharing platform, The PID uses the info gathered from the Template Generator to create documents that can then be downloaded and used for later use.

Technology & Tools

Microsoft SQL Server Management Studio
I used Microsoft SQL Server Management Studio to create the database for my application.

C#
I used C# to facilitate the backend of the application.

JavaScript and .NET for the front end. .NET MVC for login and registration system. The My account was created with .NET.

API's
I Used an API for the word editor specifically –
execComand() API. This allowed me to create the functionality within the word editor.

elastice stmp API. Was used to enable the user to send notifications to other users on the application.

Requirements Engineering

- The requirements that I identified for my application were based on what I as a Project Manager would like to see in relevant software.

- Registration & Login

- Working text editor

- Template Generation and downloadability into Excel.

- Downloadable documents TXT / PDF

- Ability to send notifications to individuals Emails.
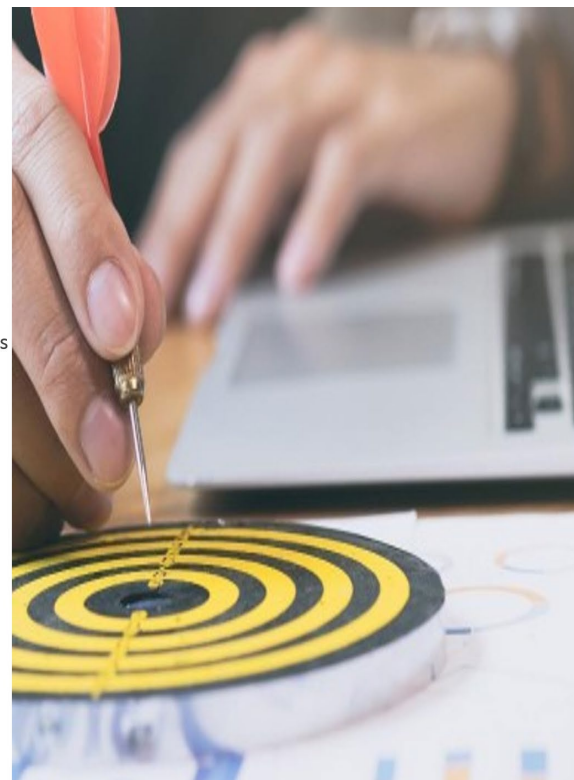
Project Plan and Progression to Date

W1 –W7	W7 –W10	Jan - March	March - May
Idea formulation	I created the Database that would be used for the application	Template Generation	User Notifications Account Details
Use Case Creation	Login and registration built	Improvements made to Aesthetics of the application	Project Plan / Agreement creation Feature in EXCEL
Project Proposal	Word Editor Created Adjustable Colors Downloadable function	PDF / Text Document Download	Posters and other documentation

Demonstration of Application

SHOWCASING:

- ENTIRE PROJECT

Q & A

- Most Difficult aspect of the project in relation to the chosen specialization.
- Why would I consider my project innovative?
- Change to requirements specification and the impact it has had on the final Project
- My Approach to testing?
- Changes to project?

Thank you

14.5.   Video

14.6.   Github Repo

Link: https://github.com/JackmcBlack123/Software-Project-Final