

Functional Specification
Central Games Platform



Kyle Hennessy
C00227463

Table of Contents

1. Abstract	4
2. Project Description	5
2.1 Games storefront	5
2.2 Casino hub	5
3. Users	6
3.1 Games Players	6
3.2 Casino Players	6
4. Use Cases	7
4.1 System Use Case	7
4.2 Detailed Use Cases	9
5. FURPS+	20
5.1 Functionality	20
5.1.1 Primary Functionality	20
5.1.2 Secondary Functionality	20
5.2 Usability	21
5.3 Reliability	21
5.4 Performance	21
5.5 Supportability	21
5.5 +	22
6. Goals	22

Table of Figures

Figure 1 – Games Player Use Case	8
Figure 2 – Casino Player use case	9
Figure 3 – Register use case	11
Figure 4 – Login use case	12
Figure 5 – Logout use case	13
Figure 6 – View Catalogue use case	13
Figure 7 – CRUD Game use case	14
Figure 8 – Purchase Game use case	15
Figure 9 – Purchase Game use case	16
Figure 9 – Purchase Game use case	17
Figure 10 – View Transactions use case	17
Figure 11 – Manage Games Library use case	18
Figure 12 – Launch Game use case	18
Figure 13 – Switch To Casino use case	19
Figure 14 – Start New Game use case	20
Figure 15 – Start New Game use case	20
Figure 16 – Switch To Games use case	21

1. Abstract

The purpose of the Central Games Platform project is to develop a web based application intended for Windows 10 and Android that acts as a hybrid of both an e-commerce store to purchase and play video games, and an online casino, which is intended to be a one stop shop for gamers and casino players alike. Users will be able to purchase and play the latest and greatest blockbuster video game titles, or purchase casino passes to participate in casino games for a chance of winning real world currency. Video games can either be playable from the browser, or be installed to the supported device, depending on the game. Video games that are available on both platforms will be accessible to the user at no additional cost. The application will allow users to transfer winnings from casino games to a registered PayPal account. Impulsive gambling is a huge ethical issue, so a limit of 10 casino passes purchasable per day will be imposed on the user.

Central Games Platform is designed with a business to consumer/business to business approach. Users purchase games from the platform. Publishers of these games will receive the revenue the game has generated every month with a 15% cut. Casino games will be developed in-house. 100% of revenue from casino games goes straight to Central Games Platform.

2. Project Description

Central Games Platform is an application aimed at Games Players and online casino players alike, where players can manage and play owned games or frequently played casino games. For traditional games, an ecommerce storefront will host a catalogue of games. Casino games will have its own section that is entirely separate from the traditional games catalogue and will only be available to users who have verified that they are age 18+. This project has a desktop client and a mobile client which aims to seamlessly tie purchases of cross platform games as well as displaying details on owned/played games that are not supported on the current device platform. The dashboard will seamlessly tie both traditional and casino games together. Info and statistics on both types of games will be displayed to the player. The option will also be there to omit any mention of casino games to Games Players and vice versa. The unique selling point of this application is to provide an all in one games platform that combines traditional games with casino games which have a huge overlap in users which has never been done before possibly due to the stigma involved around gambling.

The project's two main aspects of development are the traditional games storefront and the online casino hub.

2.1 Games storefront

Traditional games are games that are not intended to be played for money but instead are to be played recreationally. These can range from very simple and lightweight games to high fidelity performance intensive games. Given the drastic differences between these games, some of them may not be suitable to be played directly in the application and will need to be installed on to the players device, although more simpler games can be played directly from the dashboard.

The games storefront will contain a comprehensive catalogue of all the games offered. Each game featured on the catalogue will have their own store page where details about the game will be available such as in-game screenshots, a gameplay description, supported platforms and pricing information. A game purchased by a customer will be added to their account and can then be played directly in the app or downloaded at any point from their library of games.

2.2 Casino hub

Casino games are games that reward monetary winnings to players. Due to the nature of offering monetary rewards, these must be played directly in the app to prevent any potential cheating from occurring. The logic in these games must be processed on the server to ensure that all results are fair and were not tampered with.

The casino section will contain a catalogue of games where each game will also have their own store page providing details about it. These games are only playable by game pass holders. A casino game passes can be used for any casino game. Game passes are one time use and are removed from a player's account once used. Casino games offer the chance of winning real-world currency. Winnings from these games are added to the player account which can then be used to purchase more game passes, traditional games or can be transferred to the players bank account for a transfer fee which will be a small percentage of the amount they are transferring. To prevent the occurrence of compulsive gambling, there will be a limit to the number of passes that can be purchased every day.

3.Users

There are two main users of the Central Games Platform. These are Games Players and casino players. It is important to distinguish between these two types of users as each will have a similar user experience when it comes to playing games but there are a lot of differences between the two and therefore use cases that apply to one user group may not apply to the other. There are some areas that may be common to both groups, and there may be some players who belong to both groups as they are not mutually exclusive from one another.

3.1 Games Players

Games Players are the types of players who prefer a traditional type of computer game, one where there is no implication of earning monetary rewards for their efforts. There is a wide range of traditional games out there that range from single player platform games to massive multiplayer first-person shooter with hundreds of different players playing simultaneously. Gamers that fall into this category are more involved with the culture surrounding video games and in turn are more likely to spend a large upfront fee to gain ownership of a game.

Central Games Platform aims to provide a dashboard for gamers that will have an ever-increasing library of games. The dashboard will provide them with a customizable list of owned games and integration with the storefront. Players statistics related to games such as time played or last time the game was launched can all be easily seen directly on the dashboard. Of course the main differentiation Central Games Platform has over other game platforms is the distribution of both traditional games and casino games so players will also be able to see their casino game statistics if they have ever played them before, while being hidden for those who have never played them before or who do not wish to see them.

3.2 Casino Players

Casino players are the types of players that will play chance-based computer games with the hope of receiving some type of monetary reward for winning a game. These games tend not to be complex and are rather very simple, some not requiring any strategy or input whatsoever. The enjoyment comes less so from the gameplay aspects of the game and more so from the thrill of winning cash prizes. Casino players typically are not informed when it comes to traditional video game culture but there is potential to expose them to it by offering game passes for purchasing and playing traditional games on the store.

While there are many online casino applications out there, many of them are predatory by nature and will incentivise compulsive gambling, making players place more money on bets. Instead Central Games Platform will not allow bets for the casino games, instead requiring that every game has a mandatory fee per play. This will prevent a player spending obscene amounts of money on a game with the very slim chance of seeing a high monetary return. Of course, a compulsive player may want to keep playing, so there will need to be a limit enforced on the amount of times played per day. While this will protect the player, it also has the added benefit of incentivising them to look at the traditional games offered on the platform.

4. Use Cases

4.1 System Use Case

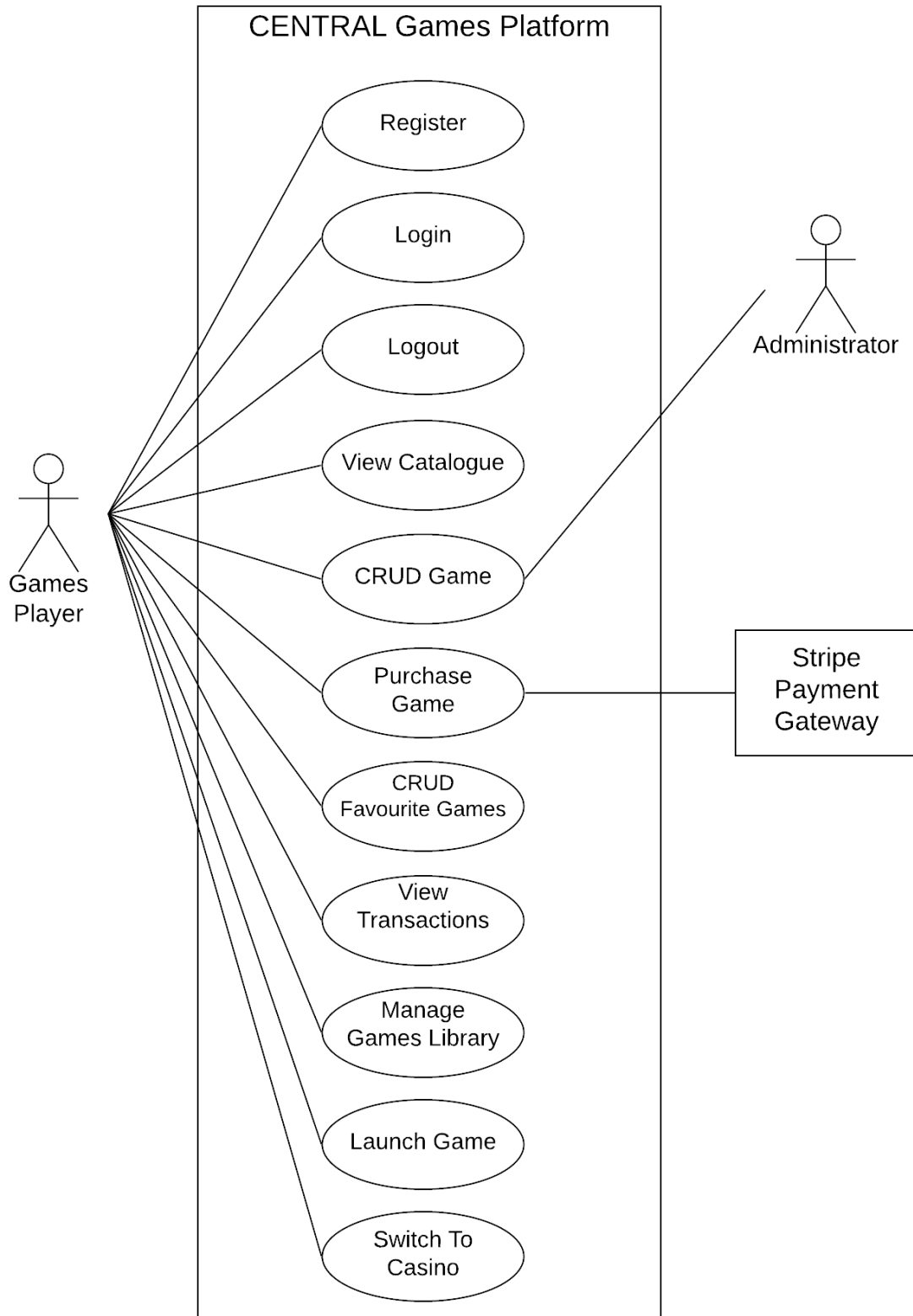


Figure 1 – Games Player Use Case

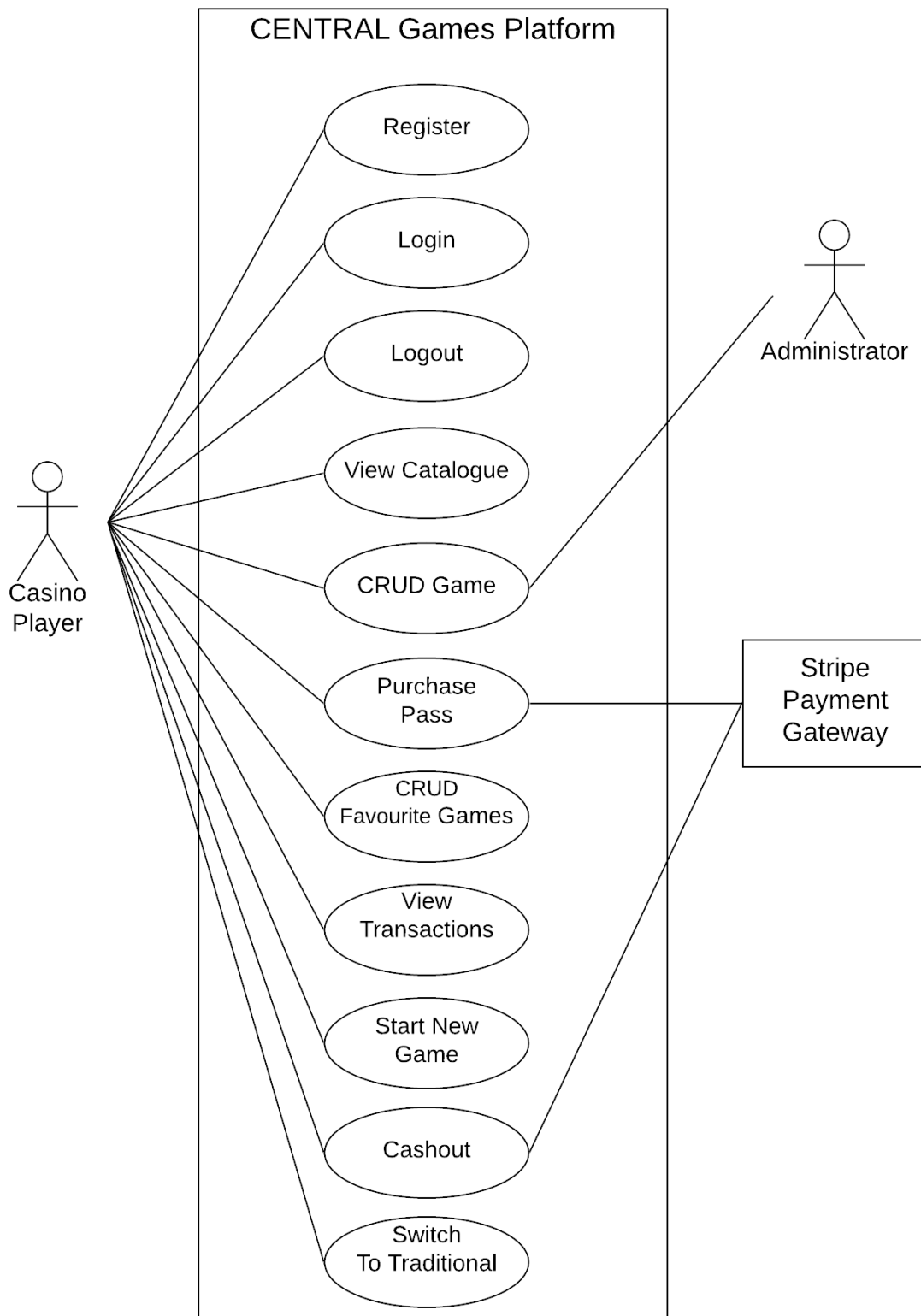


Figure 2 – Casino Player use case

4.2 Detailed Use Cases

Use Case Name	Register
Actors	Games Player, Casino Player
Pre Condition	The user has the login/register page open
Brief Description	This use case begins when the user chooses the option to register as a new user. The user in this case can be either a Games Player or a Casino Player
Main Success Scenario	<ol style="list-style-type: none"> 1. The user enters a username 2. The user enters an email address 3. The user enters a password 4. The user confirms their password 5. The user enters their date of birth 6. The user will select if they want to play traditional games, casino games, or both 7. The user submits their details
Post Condition	The user successfully registers for a new account
Alternatives	<ol style="list-style-type: none"> 1a. The user enters a username that is already taken <ol style="list-style-type: none"> 1. The user is prompted to enter a new username 2a. The user enters an email address that is not valid <ol style="list-style-type: none"> 1. The user is prompted to enter a valid email address 3a. The user enters a password that is not secure enough <ol style="list-style-type: none"> 1. The user is prompted to enter a password that is secure 4a. The passwords do not match <ol style="list-style-type: none"> 1. The user is asked to ensure passwords are matching 6a. The user has selected casino games or both and they are under 18 years of age <ol style="list-style-type: none"> 1. The user is restricted from selecting casino games or both

Figure 3 – Register use case

Use Case Name	Login
Actors	Games Player, Casino Player
Pre Condition	The user has the login page open and already is a registered user
Brief Description	This use case begins when the user chooses the option to login. The user in this case can be either a Games Player or a Casino Player
Main Success Scenario	<ol style="list-style-type: none">1. The user enters their email address2. The user enters their password3. The user submits their details
Post Condition	The user successfully logs in and is redirected to their account page
Alternatives	<ol style="list-style-type: none">1a. The user enters an email address that is not registered<ol style="list-style-type: none">1. The user is asked to check their email address is correct or if they are registered2a. The user enters a password that is incorrect<ol style="list-style-type: none">1. The user is asked to check if their password is correct2. The user is given the option of resetting their password

Figure 4 – Login use case

Use Case Name	Logout
Actors	Games Player, Casino Player
Pre Condition	The user is already logged in
Brief Description	This use case begins when the user chooses the option to logout. The user in this case can be either a Games Player or a Casino Player
Main Success Scenario	<ol style="list-style-type: none"> 1. The user selects the account settings option 2. The user selects the option to logout
Post Condition	The user will have successfully logged out and be redirected to the home page

Figure 5 – Logout use case

Use Case Name	View Catalogue
Actors	Games Player, Casino Player
Pre Condition	The user is on the home page
Brief Description	This use case begins when the user chooses the catalogue option. The user in this case can be either a Games Player or a Casino Player.
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays a list of games available 2. The user can search for a game using the search bar 3. The user can go to the next or previous page of available games 4. The user can select a game from the catalogue
Post Condition	The user will see a list of games available on the catalogue
Alternatives	<ol style="list-style-type: none"> 2a. The user has searched for a game that does not exist <ol style="list-style-type: none"> 1. The application will display a message to say that the game searched for does not exist

Figure 6 – View Catalogue use case

Use Case Name	CRUD Game
Actors	Games Player, Casino Player, Administrator
Pre Condition	The user is on a game's store page
Brief Description	This use case begins when the user selects a game's store page from the catalogue
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays the game's information 2. The user can add or remove the game to/from their favourites 3. The user can choose to purchase the game or purchase a pass to play the game 4. The user can download or launch the game from the store page 5. The user can return to the catalogue
Post Condition	The user will be on the game's store page
Alternatives	<ol style="list-style-type: none"> 1a. The administrator wishes to modify the game's information <ol style="list-style-type: none"> 1. The application allows the game's page to be edited 2. The administrator can create, update or delete information 3. The administrator submits their changes 1b. The administrator wishes to create a new game store page <ol style="list-style-type: none"> 1. The administrator creates a new game store page 2. The game store page is created and can be edited 3. The administrator can create, update or delete information 4. The administrator submits their changes 3a. The user is not logged in <ol style="list-style-type: none"> 1. The user will be prompted to login 3b. The Games Player already owns the game <ol style="list-style-type: none"> 1. The user will not be given the option to purchase the game 4a. The Games Player does not own the game <ol style="list-style-type: none"> 1. The user will not be given the option to launch or download the game 4b. The Casino Player does not own a pass to play the game <ol style="list-style-type: none"> 1. The Casino Player will be prompted to purchase a pass to play the game

Figure 7 – CRUD Game use case

Use Case Name	Purchase Game
Actors	Games Player, Stripe Payment Gateway
Pre Condition	The Games Player is logged in
Brief Description	This use case begins when the Games Player wishes to purchase a game from the game's store page
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays the details of the current game order 2. The Games Player proceeds with the order 3. The application displays the payment details form 4. The Games Player selects their card type 5. The Games Player enters their card number 6. The Games Player enters their billing address 7. The Games Player submits the payment details form 8. The application sends the payment details to the Stripe Payment Gateway 9. The Stripe Payment Gateway approves the order and takes the money from the Games Player's bank account 10. The game is added to the Games Player's library 11. The Games Player will be redirected to the order confirmation page
Post Condition	The Games Player will now own the game they have purchased
Alternatives	<ol style="list-style-type: none"> 5a. The card number is not valid <ol style="list-style-type: none"> 1. The Games Player is prompted to enter a valid card number 7a. Required fields are left blank <ol style="list-style-type: none"> 1. The Games Player is prompted to fill in the required fields 9a. The payment details provided are not valid <ol style="list-style-type: none"> 1. Stripe Payment Gateway cancels the order 2. The Games Player is redirected to the order failed page

Figure 8 – Purchase Game use case

Use Case Name	Purchase Pass
Actors	Casino Player, Stripe Payment Gateway
Pre Condition	The Casino Player is logged in
Brief Description	This use case begins when the Casino Player wishes to purchase a game pass
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays the details of the current pass order 2. The Casino Player proceeds with the order 3. The application displays the payment details form 4. The Casino Player selects their card type 5. The Casino Player enters their card number 6. The Casino Player enters their billing address 7. The Casino Player submits the payment details form 8. The application sends the payment details to the Stripe Payment Gateway 9. The Stripe Payment Gateway approves the order and takes the money from the Casino Player's bank account 10. The game pass is added to the Casino Player's account 11. The Casino Player will be redirected to the order confirmation page
Post Condition	The Casino Player now has an additional game pass added to their account
Alternatives	<ol style="list-style-type: none"> 5a. The card number is not valid <ol style="list-style-type: none"> 1. The Casino Player is prompted to enter a valid card number 7a. Required fields are left blank <ol style="list-style-type: none"> 1. The Casino Player is prompted to fill in the required fields 9a. The payment details provided are not valid <ol style="list-style-type: none"> 1. Stripe Payment Gateway cancels the order 2. The Casino Player is redirected to the order failed page

Figure 9 – Purchase Game use case

Use Case Name	CRUD Favourite Games
Actors	Games Player, Casino Player
Pre Condition	The user is logged in.
Brief Description	This use case begins when the user is on the Favourite Games page of their account. The user in this case can be either a Games Player or a Casino Player.
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays a list of the user's favourite games 2. The user can select a game from their favourites which will bring up details and options for the game 3. The user can search for a favourite game using the search bar 4. The user can add a new favourite game to their favourites 5. The user can remove any games from their favourites 6. The user can go to the next or previous page of favourite games
Post Condition	The user will be on their Favourite Games page
Alternatives	<ol style="list-style-type: none"> 1a. The user has no favourite games <ol style="list-style-type: none"> 1. The application alerts the user that there is no favourite games associated with their account 3a. The favourite game searched for does not exist <ol style="list-style-type: none"> 1. The application alerts the user that the current search term does not match any games in their favourite games 2. The user is prompted to search on the store instead for this search term

Figure 9 – Purchase Game use case

Use Case Name	View Transactions
Actors	Games Player, Casino Player
Pre Condition	The user is logged in.
Brief Description	This use case begins when the user is on the Transactions page of their account. The user in this case can be either a Games Player or a Casino Player.
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays a list of the user's transactions 2. The user can select a transaction to see more details 3. The user can sort by date of purchase
Post Condition	The user will be on their Transactions page
Alternatives	<ol style="list-style-type: none"> 1a. The user has no transactions <ol style="list-style-type: none"> 1. The application alerts the user that there is no transactions made on this account

Figure 10 – View Transactions use case

Use Case Name	Manage Games Library
Actors	Games Player
Pre Condition	The Games Player is logged in.
Brief Description	This use case begins when the Games Player is on the Home page of their account.
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays a list of the Games Player's owned games 2. The Games Player can select a game from their library which will bring up details and options for the game 3. The Games Player can search for a game in their library using the search bar 4. The Games Player can go to the next or previous page of their library
Post Condition	The Games Player will be on their Games Library page
Alternatives	<ol style="list-style-type: none"> 1a. The Games Player does not own any games <ol style="list-style-type: none"> 1. The application alerts the Games Player that they do not own any games

Figure 11 – Manage Games Library use case

Use Case Name	Launch Game
Actors	Games Player
Pre Condition	The Games Player is logged in and owns the game that they want to launch.
Brief Description	This use case begins when the Games Player selects a game from their Games Library.
Main Success Scenario	<ol style="list-style-type: none"> 1. The application displays a list of options related to the game selected 2. The Games Player selects the option to launch the game 3. The application redirects the user to the game page
Post Condition	The Games Player will be on their Games Library page
Alternatives	<ol style="list-style-type: none"> 3a. The game is installed on the Games Players device <ol style="list-style-type: none"> 1. The application launches the game 2. The application minimizes

Figure 12 – Launch Game use case

Use Case Name	Switch To Casino
Actors	Games Player
Pre Condition	The Games Player is logged in and has casino games enabled on their account.
Brief Description	This use case begins when the Games Player is on their account page and wishes to switch to the casino section
Main Success Scenario	<ol style="list-style-type: none"> 1. The Games Player selects the option to switch to the Casino section 2. The application alerts the Games Player that they are about to go to the casino section where they can potentially lose money 3. The Games Player is prompted to confirm their action 4. The Games Player is redirected to the casino section
Post Condition	The Games Player is now in the casino section and is now a Casino Player
Alternatives	<ol style="list-style-type: none"> 1a. The Games Player does not have casino games enabled on their account. <ol style="list-style-type: none"> 1. The option will be hidden from the Games Player 3a. The Games Player cancels their action <ol style="list-style-type: none"> 1. The Games Player remains in the Traditional Section

Figure 13 – Switch To Casino use case

Use Case Name	Start New Game
Actors	Casino Player
Pre Condition	The Casino Player is logged in and has at least one game pass on their account
Brief Description	This use case begins when the Casino Player is on a games store page and wishes to start a new game
Main Success Scenario	<ol style="list-style-type: none"> 1. The Casino Player selects the option to start a new game 2. The application alerts the Casino Player that to play they must use one game pass 3. The Casino Player is prompted to confirm their action 4. The Casino Player is redirected to the games page 5. Winnings of this game is added to their wallet
Post Condition	The Casino Player will be playing the game
Alternatives	<ol style="list-style-type: none"> 2a. The Casino Player does not have any game passes <ol style="list-style-type: none"> 1. The application alerts the player that they do not have any game passes 2. The Casino Player is prompted to purchase a pass 3. The Casino Player is redirected to the Purchase Pass page 3a. The Casino Player cancels their action <ol style="list-style-type: none"> 1. The Casino Player remains on the games store page 5a. The Casino Player loses the game <ol style="list-style-type: none"> 1. The Casino Player does not get any money

Figure 14 – Start New Game use case

Use Case Name	Cashout
Actors	Casino Player, Stripe Payment Gateway
Pre Condition	The Casino Player is logged in and has money in their wallet
Brief Description	This use case begins when the Casino Player is on their account page and wishes to transfer money from their wallet into their bank account
Main Success Scenario	<ol style="list-style-type: none"> 1. The Casino Player selects the option to cashout 2. The application redirects to the payment details form 3. The Casino Player selects their card type 4. The Casino Player enters their card number 5. The Casino Player enters their billing address 6. The Casino Player submits the payment details form 7. The application sends the payment details to the Stripe Payment Gateway 8. The Stripe Payment Gateway approves the order and sends the money to the Casino Player's bank account 9. The Casino Player will be redirected to the order confirmation page
Post Condition	The Games Player will be on their Games Library page
Alternatives	<ol style="list-style-type: none"> 1a. The Casino Player does not have enough money in their wallet <ol style="list-style-type: none"> 1. The application alerts the user that they cannot cashout because they do not have enough money in their wallet 4a. The card number is not valid <ol style="list-style-type: none"> 1. The Casino Player is prompted to enter a valid card number 7a. Required fields are left blank <ol style="list-style-type: none"> 1. The Casino Player is prompted to fill in the required fields 8a. The payment details provided are not valid <ol style="list-style-type: none"> 1. Stripe Payment Gateway cancels the order 2. The Casino Player is redirected to the order failed page

Figure 15 – Start New Game use case

Use Case Name	Switch To Traditional
Actors	Casino Player
Pre Condition	The Games Player is logged in and has casino games enabled on their account.
Brief Description	This use case begins when the Games Player is on their account page and wishes to switch to the casino section
Main Success Scenario	<ol style="list-style-type: none"> 1. The Casino Player selects the option to switch to the Traditional section 2. The application alerts the Casino Player that they are about to go to the games section where they must own games to play them 3. The Casino Player is prompted to confirm their action 4. The Casino Player is redirected to the games section
Post Condition	The Casino Player is now in the games section and is now a Games Player
Alternatives	<ol style="list-style-type: none"> 1a. The Casino Player does not have casino games enabled on their account. <ol style="list-style-type: none"> 1. The option will be hidden from the Casino Player 3a. The Casino Player cancels their action <ol style="list-style-type: none"> 1. The Casino Player remains in the Casino Section

Figure 16 – Switch To Games use case

5. FURPS+

FURPS+ is a model that is used to classify the functional and non-functional requirements and all aspects of the FURPS+ model must be considered to ensure the success of a project. The FURPS acronym stands for Functionality, Usability, Reliability, Performance and Supportability with the '+' representing any other additional non-functional requirements. It is important to utilise the FURPS+ model early to identify most of the requirements before development commences.

5.1 Functionality

The functionality of the project relates to the main features associated with this application and the functionality involved with them. Functionality should be identified by their level of priority as there may be some functionality that is not entirely essential for the success of the project.

5.1.1 Primary Functionality

The primary functionality is the main features and functionality that is necessary for this project and would not function as intended without them. The Central Games Platform has the following primary functionalities:

CRUD Game

Customers will be able to view store pages for any given game to learn more about them or to make a purchase. Administrators will also be able to create new game pages and update or delete existing ones.

View Catalogue

Customers will be able to browse a catalogue of games available for purchase or playing. A basic implementation of this is essential but extra features such as searching, or sorting can be considered as secondary functionality

Purchase Game/Purchase Pass

Customers will be able to purchase a game to own or a game pass to play casino games. This is the only source of revenue and the whole purpose of this project, so it is necessary.

Launch Game

Customers will be able to launch the games that they own or have a pass for.

Switch to Games/Switch to Casino

Customers will be able to switch between the traditional games storefront or the casino games hub. This is the unique selling point of the project so this functionality is essential.

5.1.2 Secondary Functionality

The secondary functionality is the features of the project that are of low priority and are not needed for it to function but would heighten the level of quality of the project if implemented.

CRUD Favourite Game

Customers will be able to add games to their favourites for easy and immediate access to them. They will also be able to view them, update them or remove them entirely.

Manage Games Library

Customers will be able to see a list of all owned games and will be given searching and customizable options to categorize them or sort them by alphabetical, recently played etc.

Search/Sort Catalogue

Customers will be able to search through the catalogue using search terms or sort them by new releases, alphabetical etc.

5.2 Usability

The usability of the project is the user experience (UX) and the accessibility. The UX is important as it will be the deciding factor in whether a user will stay on the application or not. The UX will naturally change over the course of development as the best design choices are not always apparent until the application can be tested in real life scenarios. The application will be easily accessible and relatively trivial to navigate through on both Windows and Android platforms. Users will be able to login within 10 seconds 99% of the time. Users will be able to register within 1 minute 90% of the time. Users will be able to reset their passwords within 2 minutes 75% of the time. The time it takes to transition between pages should be less than 15 seconds 90% of the time. The time it takes to load up a game should be within 2 minutes 90% of the time. Users should be able to make a purchase within 1 minute 95% of the time. Users should be able to cashout their winnings within 2 minutes 80% of the time.

5.3 Reliability

The reliability of the project relates to its level of stability and availability to customers. Any errors in the application should be able to recover without rebooting 90% of the time. Due to the nature of a web application, a stable and reliable network connection is required. The application should load on to the user's browser 99% of the time. Payments must be accepted and result in an exchange of product 99.9% of the time.

5.4 Performance

The performance of the project relates to the speed in which games will load, and the ability for it to perform well on the user's hardware. A minimum of 4GB of RAM and a quad core processor will be required for the user to efficiently run and play the games offered on the application. A minimum of broadband internet with 3mbps download will be required to download and play games at the maximum intended wait times. Retrieval of data from the SQL database will take no longer than 20 seconds in 90% of all scenarios.

5.5 Supportability

The supportability of this project relates to the level of scalability, compatibility and maintainability. The application will avoid the use of comments as much as possible and instead provide documentation for code that is complex. Method and variable names will be descriptive to make it easier to understand to other developers. The web application should be able to update pages or games without error.

5.5 +

External Interfaces/APIs

The application will depend on the Stripe Payment Gateway API to handle and process all payments and pay-outs.

Security

Security is very important for this project as the integrity of games must be maintained to prevent any cheating from taking place in the casino games. All important game logic will occur on the server to prevent any outside influence. Data related to customer accounts such as passwords and emails will be encrypted to protect them from malicious attacks to their data.

6. Goals

The project will not be considered successful unless all milestones are achieved. The milestones at which the success of the project will be measured is listed below.

- The application will run on both Windows PC and Android.
- It will be possible to create a new account.
- User data will be secure and encrypted.
- The Stripe Payment Gateway will be implemented
- It will be possible to purchase games and view & play owned games when logged in.
- Game passes will be successfully added to or removed from accounts when purchasing or playing a game.
- It will be possible to win money from casino games and have it transferred to a bank account.
- It will not be possible to cheat at casino games whatsoever.
- A list of all transactions will be available to view for each account.
- A limit will be implemented to the amount of game passes that can be purchased per day.
- Games will be delivered successfully and will be able to deliver the right version depending on the platform.
- It will be possible to switch between traditional games and casino games.
- Casino games will be off limits to under-age players.

DECLARATION

*I declare that all material in this submission e.g. thesis/essay/project/assignment is entirely my/our own work except where duly acknowledged.

*I have cited the sources of all quotations, paraphrases, summaries of information, tables, diagrams or other material; including software and other electronic media in which intellectual property rights may reside.

*I have provided a complete bibliography of all works and sources used in the preparation of this submission.

*I understand that failure to comply with the Institute's regulations governing plagiarism constitutes a serious offence.

Student Name: (Printed)KYLE HENNESSY_____

Student Number(s): C00227463_____

Signature(s): Kyle Hennessy_____

Date: 30/04/2021_____

Please note:

The Institute regulations on plagiarism are set out in Section 10 of Examination and Assessment Regulations published each year in the Student Handbook.

are set out in Section 10 of Examination and Assessment Regulations published each year in the Student Handbook.