

Deliverable: Requirements

Group number and name: Group 10 - Uptown Func()

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a)

Our group chose to elicit and negotiate our requirements through meetings with our customer, in which we questioned them on what they wanted in the game and suggested some ideas of our own, these meetings were also recorded and written down allowing us to revisit them by listening to or reading our notes. This approach let us stay up to date with the customer and their needs which proved effective and appropriate as it allowed us to distinguish which requirements were essential and desirable. With that said, we decided to format the list of system and user requirements by categorising them into two different groups, one being essential requirements and the other being desirable requirements, essential meaning that it is definitely required in the game and desirable meaning it is up to us whether we want to include it in the game. These two groups are then split into sub groups, user and system requirements, further categorising them. We chose to present it this way as it is easy to read and understand, keeping the risk of confusion low and effectiveness high.

b)

#### Essential Requirements:

##### User Requirements:

UR1 - Instructions: To allow everyone to be at the same level of understanding we are going to provide some instructions at the start of the game in the form of an instruction menu. This will give new players the opportunity to read the rules and learn how to play before starting. By including this a tutorial will not be needed.

UR2 - Events: Throughout the game there will be 3 events that the player can interact with. These events are placed randomly around the maze and they will all differ, positive, negative and hidden. These events will have different effects on the player, for example, the negative might change the remaining time and the positive might give a speed boost. Hidden will be different, it will not be visible to the player and the effects will be unknown, even though it should be well not visible a hint could be provided to avoid it.

UR3 - Pausing: To make sure players aren't rushed into the game and have had adequate time to read the instructions the game will start paused, and will only start when a keyboard key is pressed or a button is clicked.

UR4 - View: As the player is only limited to a certain view of the maze we will include a map that the player can access at any moment. This map will be updated as the player explores, revealing all of the previous paths he has taken, this will allow the player to consult the map and use it to view other options. This will help the user but not provide them with a way out, thus making them still have to explore in order to escape.

##### System Requirements:

SR1 - Genre: We want the game to be a child-friendly, thrilling exploration game. This will allow us to target a wider ranged audience when we develop the game. We will achieve this by making it bright coloured, easy to understand, avoiding any strong horror elements and most importantly fun.

SR2 - Accessibility: We want to make this game as accessible as we can, allowing as many different people as possible to play. We want all ages playing so to help promote younger audiences, all sprites and designs we use will be appropriate and unscary. We also want people with colourblindness to be able to play and not be at a disadvantage, so all the sprites and designs we use will be brighter colours and not too similar to help colour-blind users.

SR3 - Perspective: When playing the game and navigating the maze we want the user to be able to see all the nearby routes/paths. To do this we will make the game 2D, with a top-down view of the maze, thus allowing the user to navigate with other routes in mind.

SR4 - Scalability: We want to allow users the preference of where the game will be placed on their screen and how big, to do this we will make the game scalable. By this I mean the user can drag and resize the window of the game and place it anywhere on the screen. This will allow users with monitors different from the standard resolution of 1920x1080 to play the game without worrying about it not fitting.

SR5 - Runability: To allow users with different operating systems than windows to play the game we will make sure it runs on different operating systems such as mac and linux.

SR6 - Maze Generation: We want there to be one complex maze for the player, a randomly generated maze is not needed, as long as the maze is complex and large enough so that it will take the average player roughly 5 minutes to complete then it is adequate.

SR7 - Timer: There will be a clock displayed somewhere on the screen displaying the remaining time. The timer will start at 5 minutes and count down until it reaches 0 at which point you have lost.

## Desirable Requirements:

### User Requirements:

UR5 - Items: If we want we could implement some items that the player can carry along with them and use in certain scenarios. These could be acquired from positive events or from reaching/finding certain areas in the maze.

UR6 - Difficulty levels: There could be a choice at the start of the game of different difficulties, allowing players who believe the original maze to be too easy or too hard to pick one more suitable for their skill.

UR7 - Sprinting: A feature that would allow you to navigate the maze with increased speed or could be used to run away/avoid the dean, this would give the player more choice of how to explore the maze but using it too much will leave you with none, possibly putting yourself in a bad situation.

UR8 - Stamina: A feature like stamina/energy would heavily rely on sprinting being implemented. This would be a finite but regenerative resource, meaning the player can use it whenever but it will have a limit to its use and need time to regenerate.

### System Requirements:

SR8 - Losing: There could be other ways that the player is able to lose, not just running out of time. If there are other conditions present such as energy and you run out you could lose or if you're exploring and fall into a trap you could also lose.

SR9 - Themes: The maze could be themed however we want but we are choosing to use a university theme, taking inspiration from the University of York campus. The sprites and events will also be University/academia themed.

SR10 - Immersiveness: We can include a storyline into our maze, allowing the player to find clues and dialogue, making it more interesting and hopefully broadening our target audience.

SR11 - Multiple Exits: The maze could have multiple ways of escaping making it so the game isn't completely repetitive. This would encourage players to explore other areas in the maze in hopes of finding another escape.

SR12 - Replayable: We will introduce a system that allows players to replay the game without it being the exact same as before. Players who have completed the game for the first time and are attempting it again will have the option to choose a setting that changes the maze to become more challenging so that the game doesn't become stale, this could be achieved by adding multiple deans or adding more traps or events.

SR13 - The Dean: We will add the dean to the maze who acts as an enemy. Either lurking around randomly or following a set path trying to find the player. If the dean finds the player they can run away or hide, but if the dean catches the player then there will be a punishment such as losing or a decrease in time.

SR14 - Scoring: We can include a scoring system so that players can compete against one another to see who can achieve the highest score. The score could be influenced by speed of completion or events, this creates another winning criteria, not only by completing the maze but by being the best.