# *THE WIZARD*

## Design Document

### The Group

Awse, Reece, Shawwal, Zenna

## Concept:

Set in a fantasy world, The Wizard has lost his potions and is required to traverse across different realms to find them.

# Genre:

The Wizard is a 2D pixel art platformer for mobile devices. Gameplay will be in landscape mode on the device, this is to allow the player to see a substantial amount of the level.

The house of The Wizard is going to act as a hub similar to Crash Bandicoot or Lego Star Wars. The reason for having a hub world is to create a safe space for the player, an area where the player can relax.

# Scenario:

The Wizard is a young character filled with ambition. At the beginning of his wizardry studies he had a teacher that taught him nearly all of what he knows today, including the creation of the potions that grant The Wizard his abilities. However, due to The Wizard's curious and overconfident nature he quickly began to experiment with any magical object he could obtain. This resulted in  spells that became progressively more powerful and less controllable.

The game is set in the distant future where The Teacher mysteriously went missing some many years ago. The Wizard often makes attempts to find her again, to no avail.

One day The Wizard was creating a spell in his cauldron with some of the most prestigious and rare items in the known world, in yet another bid to find his beloved teacher.. The spell, he hoped, would create a portal to the foreign world in which The Wizard believed his Teacher was trapped in. However, the items did not bond well and sent The Wizard flying unexpectedly across his abode in a huge blast.

When he awoke from the blast, it was apparent that the spell did not create the portal he had hoped for, but instead created several portals to different worlds. There is no way of knowing which portal leads to The Teacher. The Wizard also noticed that his potions of abilities had vanished, scattered across those worlds. Without the potions in The Wizard's possession he can no longer use his abilities, significantly weakening him. Therefore, The Wizard needs to travel throughout the portals he has mistakenly created to regain his abilities and return to his former glory.

At the end of each world The Wizard will find a potion of ability that he lost. Once the potion has been recovered he heads back home. He will then be able to use that ability in the next world he travels to. This ability will prove vital to complete the levels as each level would necessitate the usage of them in their layouts and the challenges they offer.

Gameplay will be similar to games such as Mario, Rayman (PS1) or Celeste. The player will need to travel across premade levels that offer challenging terrain to run, jump, slide and swing across. Each set of levels will have their own colour palette and also heavily rely on the ability The Wizard had just recovered.

# Game Structure And Content:

The Wizard will feature the following content:

- 1 Hub Area and at least two levels, with each level making use of their respective gained abilities.
- Six abilities that totally change how the player plays the game and directly influences the creation of the following level after they are obtained.
- Six soundtracks in total: One for the Menu, one for the hub, one for the first level, one for the second level, one for the defeat screen and one for the victory screen.
- Collectibles in each area, with the currency obtained allowing the player to purchase alternate skins at the hub area offering a cosmetic pursuit that encourages a repeat playthrough.
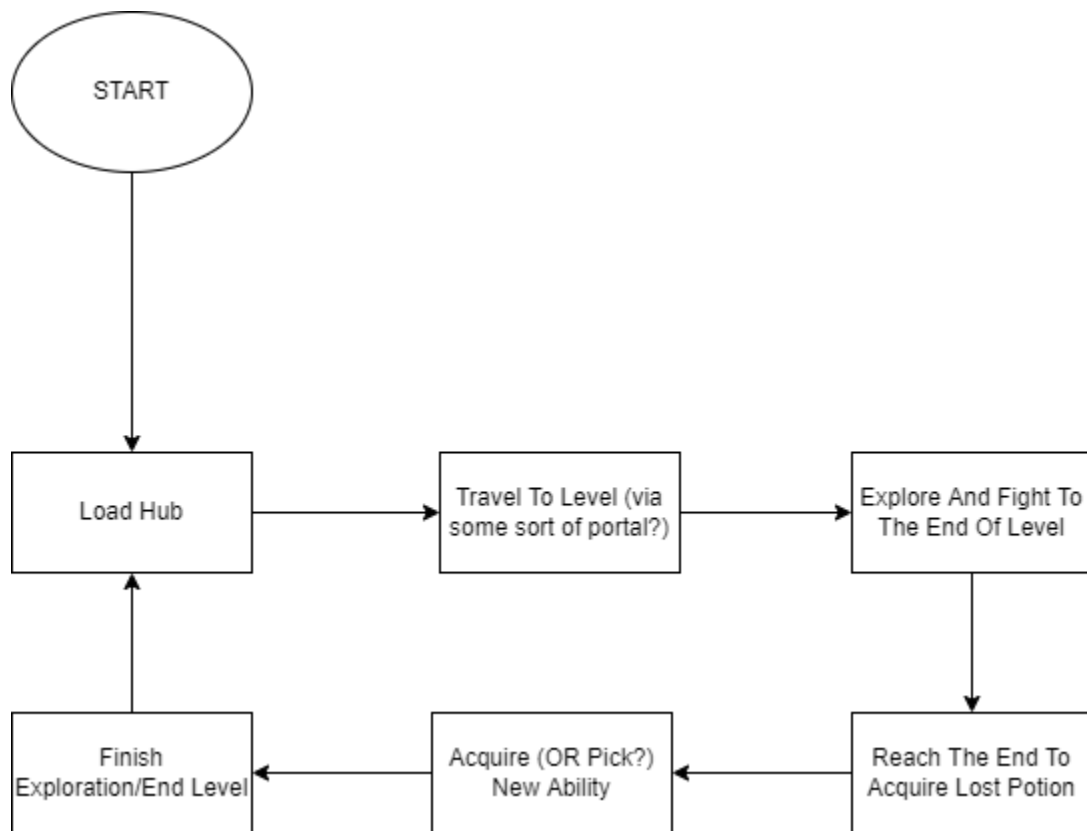
# Planned Levels:

- Hub level - House of Knowledge, could feature a more mediaeval castle aesthetic with a darker look or could feature a more overgrown nature themed aesthetic. Small area size, only used as a transition between zones or to potentially view unlockables and player progress etc.

- Level 1 - Forgotten Wilds, a forest or plain area with a vibrant colour palette and a lot of greenery. Small-medium sized level with a simple layout to help teach the player the basic mechanics and systems without overwhelming them.

- Level 2 - Unearthed Mystery, a more jungle like area that looks overgrown, slightly darker palette. Medium sized level designed to teach and force the player to use their newly acquired power that they gained from completing level 1, slowly increasing complexity while keeping the player in their comfort zone.

- Level 3 - Barren Stoneland, a plain/rocky area with a higher level of complexity that puts all the player's current game knowledge to the test while also testing them on the use of the ability they acquired in Level 2 and potentially Level 1. A

large level with more secrets and greater challenges in terms of traversal forcing good use of the player's powers.

- Level 4 - Molten Rage, a medium sized lava theme level set in a magic made volcano. The difficulty ramps up slightly here and various environmental factors are introduced such as lava, weak terrain, etc. that will pose even greater threats to the player, requiring him to use their previously acquired power to overcome them.

- Level 5 - Dark Challenger, a boss level designed against a dark entity that has disliked your trespassing into these various unknown realms. A small sized level featuring a large boss sprite, with well telegraphed attacks that gives the player some leeway but will force them to use their powers if they are to avoid the boss' devastating attacks and deal damage to him. As he hits certain thresholds his attacks change and their ferocity increases. This is a culmination of all the players' accumulated skill and knowledge wrapped into one final moment.

# Core Loop Flow Diagram:

```
        ┌─────────┐
        │  START  │
        └────┬────┘
             │
             ▼
   ┌──────────┐      ┌──────────────────┐      ┌──────────────────┐
   │ Load Hub ├─────▶│ Travel To Level  ├─────▶│ Explore And Fight│
   │          │      │ (via some sort   │      │ To The End Of    │
   │          │      │ of portal?)      │      │ Level            │
   └────▲─────┘      └──────────────────┘      └────────┬─────────┘
        │                                                │
        │                                                ▼
   ┌──────────────┐   ┌──────────────────┐      ┌──────────────────┐
   │ Finish       │◀──┤ Acquire (OR Pick?)◀──────┤ Reach The End To │
   │ Exploration/ │   │ New Ability      │      │ Acquire Lost     │
   │ End Level    │   │                  │      │ Potion           │
   └──────────────┘   └──────────────────┘      └──────────────────┘
```

The above flowchart shows the general core loop of the game as decided so far. When starting the game from the launch menu, the player will load into the hub away (upon first ever launch maybe a small cutscene will play for flavour showing an explosion and the Wizard losing their potion). They then walk to some kind of portal or door sprite to select or automatically enter a level. They need to platform and potentially fight (if enemies are implemented) to the end, while exploring if there are any collectibles for potentially secret rewards. Once they reach the end, they can either pick between say three abilities or get a determined one for each level (makes the game more linear but level creation and balancing around these abilities significantly easier as we always know the exact capabilities of the player). Once the level is finished the player is returned to the Hub with their new power and acquired items/currency, and is ready to continue to the next level.

# UI, UX, Menus and Game cameras:



## The Wizard Menu Ideas
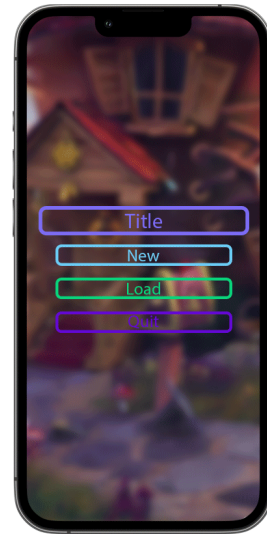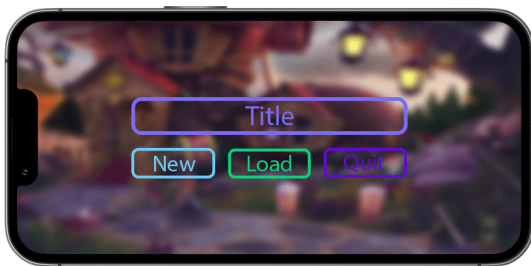


## Menu Template

We have decided that our game "The Wizard" would be best played in landscape. Otherwise the player would find the levels difficult as they will not be able to see what is coming. Becuase of this, we feel it is best for our menu screen to also be in landscape.
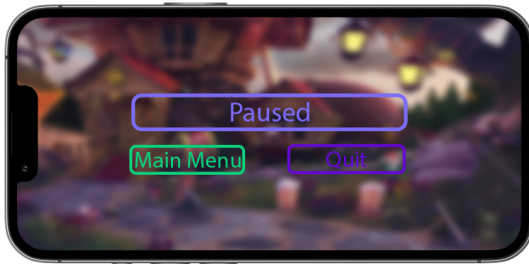
Blured Background of gameplay**

Rounded buttons to indicate where to press

*The title and buttons could glide in from the bottom of the screen as an animation
**The background could be of gameplay of future levels. (video, photo or slideshow)

# Pause Menu Ideas

Current gameplay blured as background

Paused
Main Menu
Quit

Paused
Main Menu    Quit

No need for a 'New' button in the pause menu

# Game Over Screen Idea

Game Over
Main Menu

Darkend game play screen

Only option is to return to mian menu
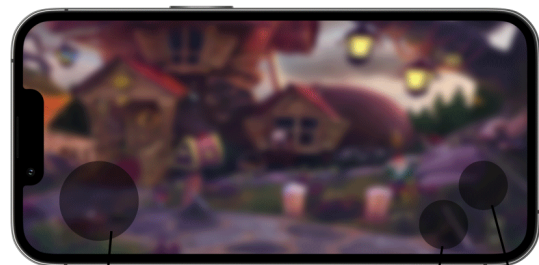Maybe an option to restart at check point/start of level

# Other Notes

- Potion icons to indicate what button has been selected?
(either side of selected button)

- Smooth transitions between screens. For example, fade in and out

# UI

Joy stick to control direction
of character (left/Right)

Power Up    Jump

*Faded buttons for player to still see gameplay
*Simplistic so player is not confused

<u>UX:</u>

The game controls are integral to game feel and can make or break a game depending on how they are implemented. As we are developing our game for mobile our controls will all be limited to touch screen, however there is still a lot of variety with which we can implement our touch screen controls.

There are two main routes that can be taken with touch screen controls:

· The first of these routes is where there is a visual representation of part of a gamepad or other controls scheme on the screen. This visual representation could be a D – pad or something else like a joystick. This has the advantage of providing a clear idea to the player of the relevant controls, as to most people these are easily identifiable.

· The other route is where there is minimal representation of controls which provides a more immersive experience. However, this can make it less clear to the player what the controls are, but it can make the game feel more authentic and real to the player.

There are several considerations that we must make before we decide on which route, we will take with our touch screen controls:

· The first is if the game is played in landscape or portrait. Our game will be played in landscape and most people will play landscape games by holding their phone with both hands, this means that their thumbs will be the main sources of inputs for our game. This allows us to potentially have multiple inputs checked at the same time for our game.

· The second consideration is where and how it will be played. If it is played while walking or while the player is tired and relaxing, then quicker, simple inputs would be preferable. Our game is intended to be played with the full attention of the player and therefore our inputs can be as complicated as they are required to be.

· The third consideration is how fast the player will have to react. If the player must react very fast to various obstacles, then quicker inputs such as a single tap are preferable to something such as a double tap.

Our game would require controls for the following:

· Moving around and the direction – A faded joystick on screen

· Jumping – Faded button on screen

· Potion Abilities - Faded button on screen

· Selecting Potions – An icon will appear on screen, which can be tapped to change icons

· Any other on screen button - Tap on the button

· Zoom in and out – Pinch the screen

· Pause Menu – Scroll Down from the top

For our game it would best be played in landscape as it would allow for the 3 key Inputs to always be present on the screen. These being the movement, jumping and the potion ability. The player would be able to both move and either jump or use their potion ability.

As the 3 buttons would be faded it would allow for the background to still be seen thus allowing the player to still be immersed within the game, while the visual representation would allow the player to easily grasp the controls.

The player may need to react to the attacks of potential enemies so the response from an input should be fast and fluid and therefore a single tap should suffice for our game.

Game Cameras:

Our game camera will simply follow the player sprite (the wizard) throughout the game. The camera will update its values whenever the player sprite moves so that the player sprite will always be the focus of the camera.

However, the game camera could at times focus on other objects instead of just the player sprite. If a unique enemy type is introduced, then the camera may briefly focus on them to display them as a greater threat. The same could also occur for any potential bosses.

Our game camera may also move if we are displaying a cutscene or cinematic that displays the story of The Wizard.

In conclusion the use of our game camera will be quite simple throughout our game however there may be some potential situations where we may utilise the camera to either go into detail regarding our story or showcase an enemy's abilities.

# Audio Requirements:

# Game Music

(Currently planned tracks (current Minimum Viable Product for showcase))

Track 1: Wizardly Beginnings (Menu Music) - Upbeat with a classic fantasy feel, lean more on absurdity/cartoony tone rather than a serious tone.

Track 2: Slip And Slop (Hub Music) - Calmer and slower music, give the player a feeling of rest and recuperation after beating a level while also making the player feel more inspired to go into another level and reclaim another potion.

Track 3: Humble Beginnings (Level 1) - A more sweeping score, get the player excited while learning the ropes and make him feel like he's undertaking a grand journey despite this level being primarily a tutorial player. Use sounds associated with fantasy adventures i.e pianos, violins etc.

Track 4: One Down, Too Many To Go (Victory Screen) - Very upbeat theme that should fill the player with a sense of victory, and a sense of greater power as he acquires a new ability.

Track 5: Wizardly Flop (Lose Screen) - A more solemn theme but one that should make the player feel that he wants to go again. Start slow and more sombre and increase tempo and scale as the theme progresses towards the end - a gradual progression.

Track 6: Uncharted Ground (Level 2) - A theme that should invoke a sense of mystique and exploring the unknown. "Uncharted Grounds" is also the theme of the level, an undiscovered place full of secrets. Encourage the player to release their inner spelunker and explore the unknown.

# Sound Effects - Interface + Action:

For our game we need a variety of sound effects to help make the game more immersive, add emotion to each level and give another layer of feedback to the player. Every game has sound effects to show the player jumping, crafting, taking damage, inflicting damage etc. These are used to give the player added feedback about the game without overloading the game's visuals with special effects, text and images.

Sound effects we need:
- Jumping
- Taking damage
- Inflicting damage
- Using power ups/potions
- Enemy noises
- Travelling through levels in the hub world
- Picking up the potions

Sound effects we might have:
- Interacting with the menu
- Running
- Footsteps on different materials

Sound effects we won't have:
- Speech/Dialogue

Our game will feature no speech/dialogue as we feel it is not needed. The Wizard will be a simple game with audio similar to games like Mario, with any story delivered via basic summary text. We will have audio feedback throughout the game so that the player will know when the actions they have done result in good or bad things within the game. In the games like Mario there is a single one-shot sound played when you collect a coin. This singular note is high pitched and cheerful; we would want to possibly have a similar one-shot audio for when you collect the potions in our game.

Taking and inflicting damage are very important things we want to have sound effects for. This is mainly because it will make the game more immersive and clearly inform the player through sound that they have lost health or taken health from any enemy. If you look at any game with any type of sound effects, they all have audio feedback linked to health.

# Game Genre Research/Comparisons:

## **Game Comparisons:**

<u>Hub World:</u>

- Rayman Legends - Both have an interactive hub world, this is used to go between levels in the game. It is used instead of a boring simple level menu screen. Some games don't even let you choose between each of the levels as it is just one open world storyline, it will save where you last played. But for our game we really want to include a hub world to add something more unique to a mobile game. The majority of mobile games just feature basic icons referring to each level on a blank or block colour background. We definitely want something more interesting and interactable for a player. Rayman Legends' hub world was very popular and praised. It made the overall game feel seamless from one level to another. This was mainly due to the fact you were always playing as the main character and was not directed to a level menu screen after every level; which most felt would disrupt the flow of the game. We want to achieve this seamless transition between our levels, so are convinced we need a hub world for our level. Rayman also has a mobile version, this shows that the hub world would work fine for mobile games.

<u>Unlock characters:</u>

- Lego Star Wars - In Lego Star Wars you can unlock multiple different characters through the game. These characters normally don't have any bonuses or added powers, they are just used as a form of cosmetic aspirational content for the player. In Lego Star Wars the characters can be unlocked by completing levels, finding them in levels or even buying them from a store by using the ingame currency you collect during each level. Characters can vary in price to make some harder to get than others, this can create a competitive aspect between friends who all are trying to unlock the most expensive character. So for our game we were thinking, given enough time, we would like to add multiple characters you can unlock by collecting some form of currency (gems, crystals, coins etc).

<u>Powerups:</u>

- Mario - In all the Mario games there are different power ups you can collect to help you through the levels. Some examples of these are fire flower (you can shoot fireballs), mega mushroom (you triple in size), mini mushroom (you shrink to a tiny size) etc. How our game would differ to how the power ups are used to Mario would be that we want our power ups to all be in the form of potions, to fit the theme. We also want there to be only one power up per level that you need to reach as your end goal. Then the potion (power up) you collect will help you during the next level to reach the next potion. Some examples of the power ups we were thinking of having were double jump, fireball, shrink potion, double speed etc.

## **Abilities:**

The Wizard has lost his potions and is trying to gather them, with each potion gathered, the wizard can then use these potions to temporarily gain certain effects that will aid him in gathering the other potions. The idea for these abilities is that each level will have a specific theme where a relevant ability will be key to solve the level.

Double Jump – "The ability to jump and then jump again without any form of support, fundamentally breaking the rules of science. He was hoping for the effect to be infinite allowing him to touch the stars…this was not the case. By the end of the night of its creation, his teacher had to use every healing spell in her disposal to shape him back into something resembling a human".

The double jump ability will be used to access terrain that the wizard would not have previously been able to reach. This would most often be used to collect collectibles or to bypass enemies. It could also be used to make certain areas more difficult by adding in a dangerous obstacle that must be avoided using a double jump.

Shrink – "This allows The Wizard to reshape his body at a molecular level, making him extremely small and thus allowing him to access otherwise inaccessible passages for

the average person. Upon creation he hadn't realised that this potion lasted a limited time and had a painful time getting back to size".

The shrink ability will be used to go through small doorways and avoid obstacles. It could also be used to avoid potential enemies depending on how the player utilises the ability.

Speed – "This allows The Wizard to gain a large speed boost for a short time. However, he didn't quite expect that this potion would be so potent, and managed to smash through an entire forest in an instant".

The speed ability will allow the wizard to increase their momentum allowing them to make jumps that would otherwise have not been possible. This can also make it easier for the player to bypass enemies and avoid dangerous projectiles and other obstacles.

Fireball – "The Wizard can conjure a large flame projectile… he had to build a second house after the creation of this potion".

A purely offensive ability that can be used to defeat enemies. It can also be used to destroy doors or hidden walls and activate certain switches.

Anti-Gravity – "This potion affects The Wizard's relationship with gravity, granting passage to otherwise inaccessible areas.

This ability can be used to get to places that would otherwise be completely inaccessible to the wizard, but he would have to take care to avoid any obstacles while using this potion.

Invisibility – "This turns the wizard and his clothes (he thought about that) completely see through... though the effect for some reason was shorter on his body, a bit awkward when he showcased it to his friend".

This ability would allow The Wizard to become invisible and thus undetectable, allowing him to completely avoid enemy detection.

**Traps:**

Throughout the game there will be various traps and obstacles that will hinder the player's progress in the various levels. These traps will be static and also non-static.

Basic traps - These are traps that if the player collides with then they will die. They are simple and non moving - such as spikes.

Moving traps - These are traps that would have some form of animation and would move from one direction to another. An example of this could be a spear which increases in length.

Activated traps - These would be traps that would somehow be activated by the player. The traps that would be activated could be of any time static or non-static. An example trap could be a boulder that rolls down that activates when you step on a pressure plate. It could also be a bunch of spikes that appear.

Targeted Traps - These traps would specifically seek out the player and attempt to kill them. An example could be an arrow that is fired from a hole that follows the player in an attempt to kill them.

Throughout the levels there will be a different combination of various traps that will hinder the player in their quest to retrieve all of their potions.

**Enemies:**

Our game will include enemies although they will not be a major focus for the player as we aim to focus specifically on the platforming aspect of our game. The game will also include a variety of different enemies as the levels will take place in different worlds so we will have enemies to fit those different worlds.

To start off with we will only have simple enemies which will just run towards the player or run between two specific points.

Then we will include harder enemy variants which will fire some form of projectile at the player.

Later on we would have even harder variants of enemies such as an enemy that fires fast, larger and more difficult to dodge projectiles, or an enemy with higher movement speed, or an insta - kill high-threat enemy with heavily telegraphed attacks. These enemies would act as a kind of mini bosses for the player and would be rarer but more

significant challenges the player would need to overcome, requiring intelligent and effective use of their acquired arsenal of abilities.

In regards to the enemies the player would not be expected to kill the enemies, rather their objective would be to avoid or bypass these enemies. This would only change when certain offensive abilities are acquired such as the fireball ability, however even then the player would still have complete freedom in how they approach the enemies.

**Characters:**

The Wizard – "The main character, an old man with a yet young mind. A studious wizard who often has grand ideas, however he often forgets the minor details and ends up causing himself a whole heap of trouble due to his forgetfulness".

The default character, no special effect.

The Teacher – "A bombastic and larger than life character, this young woman mastered the arts and continued to push the limits of wizardry, much to the chagrin of her fellow wizards. She was The Wizard's teacher until she went missing one day and was never seen again. The Wizard frequently attempts to search for her but to no avail".

Potions are far more potent and may grant enhanced versions of acquired abilities, however they have reduced durations/charges.



*Royalty Free art used to show the intended vision of the final character, NOT REPRESENTATIVE OF THE FINAL PRODUCT.*
*Source: https://www.istockphoto.com/vector/vector-pixel-art-isolated-anime-witch-gm1224539999-360098052*

The Friend – "The Wizard's best friend who often helps him with various projects, attempting to minimise the amount of property damage caused by The Wizard's experiments whenever possible. A cautious and by-the- books character."

Gains more currency on currency acquisition but has less health.

The Rival – "A character in whom sportsmanship is a foreign concept, The Rival will often attempt to one up The Wizard by sabotaging his work whenever possible to stop any competition threatening him. He often fails due to the alertness of The WIzard's friend."

Gains a stacking movement speed buff from defeating enemies but has a lower base speed.

### Opening Scene:
'The Wizard is seen throwing ingredients into a large bubbling cauldron'
"A couple of Harpy Feathers, an inch of Merman Hair and a splash of Unicorn Blood. Why not add a Demonic Eye for good measure?"
'Cauldron bubbling intensifies'
"Well, this doesn't seem good…"
'A large explosion occurs and potions on a shelf are seen flying, The Wizard is flung backwards.

# Timeframe

Below is a timeframe for how long we expect The Wizard to be in development, with various milestones that we will aim to achieve. We aim to fully release our game within a year of development officially starting.

·    Official Start Date- 16/04/22 – We would begin by first of all finishing all of our designs for all of the relevant areas for our game. This would include the various levels, the hub world, and finally the ability potions. We would settle on what our Art should be and also what our music should be like for the game.

- First Milestone 28/05/22 – At this point the design for our game will have been completely finalised. At this point we would begin production on our Music, Art and Programming our game. For our music we would outsource to a group of talented individuals who we would give our Game Design Document which contains all the information for our soundtracks and our sound effects. The same would occur with the art as we would have decided on all the relevant assets that we would require.

- Second Milestone 28/06/22 – At this milestone we would have fully finished our UI with various menus as well as an opening screen which would take the player to the first level.

- Third Milestone 28/08/22 – Here we would have fully mapped out all of our levels and the player movement so that the player can move around, although these maps would be devoid of anything.

- Fourth Milestone 28/9/22 – All of the various enemies and traps and objects would be placed within the levels. Various object colliders would also be applied, and it would be possible to enter the separate levels from within the hub world.

- Fifth Milestone 15/11/22 – The potions and all of their ability activates would be applied to the game.

- Sixth Milestone – 15/01/23 – The AI for our enemies would be fully realised. Any game bosses would also be fully completed.

- Alpha – 15/02/23 – Our game would now be in Alpha status and fully playable, the correct assets would be applied, and our game would also have our relevant sound effects and game tracks also added to the game

- Beta – 16/03/23 – We would spend the beta fixing any games that are present within our game.

- Release – 16/04/23 – Our game would now be released.

# Audience & Marketing

With 83% of the world having a mobile device (according to [www.bankmycell.com](www.bankmycell.com)) The mobile gaming market is a huge audience to appeal to with a lot of opportunity for success.

**Target Audience:**
English Speaking 8+ year olds. 7+ rating on the app store.

Our priority target audience will be the English-speaking population ages 8-16. As previously mentioned, our game is a 2D platformer and this is because we want to appeal to those who grew up playing retro games such as Mario or Donkey Kong but don't have time to sit down at a console. The portability of a mobile device will mean The Wizard can be played anytime, anywhere - On public transport to or from work or at a café while waiting for someone to arrive.

The reason we specifically mention the English speaking population is because it is the most spoken language across the globe. Initially, we will release the game in English, with the intention to release updates to translate the game into other languages like Chinese, due to China specifically having a massive mobile game market, arguably larger than that of the West.

We do suspect that our chosen pixel art style, user friendly UI and easy controls will attract younger players. With this in mind, we are going to ensure The Wizard does not include any graphic violence, nor any foul language. For this reason, The Wizard will have a rating of 7+ on the App Store, meaning that it may contain content unsuitable for children under the age of 7, but it is not restricted.

A PEGI rating 7 means a game that contains scenes or sounds that might be seen as frightening to very young children. It may also include very mild forms of violence, but cannot feature any blood or inappropriate weapons. The Wizard will feature no weapons, no blood, no gore and no inappropriate language. If we do decide to have enemies in our game, the violence between the player and enemies will be minimal and won't feature physical weapons to keep the PEGI rating low. The art style is also stylised and retro, adding to the more child friendly nature of the game.

**Marketing:**

When it comes to marketing The Wizard, we plan to create a social media following before the release of our game. This can be done across several social media platforms such as Twitter, Reddit, Instagram, TikTok etc… The reason for this choice is to get attention from our intended target audience. We will be able to interact and talk directly to people who are interested in playing The Wizard before release and have instant feedback/suggestions during development. We will show the regular progress of The Wizard without giving any valuable information away but still creating a buzz for the release of the game.

While creating a social media presence for The Wizard we plan to use advertisements to gain initial attraction to The Wizard. Adverts will continue to be used while The Wizard is released to help keep a flow of new players. This can be done on Facebook, Instagram, Google, TikTok etc... Again, the reason for this is because our younger target audience will predominantly already use these apps, especially Instagram and TikTok.

For the advertisements themselves they will be catchy, colourful and grab the audience's attention. The video media will include some gameplay so the viewer will know what the game looks like, what the goal is and how the goal is achieved. The icon for The Wizard will be uniform across all social media sites, our website and the icon on the mobile device.