Rapid Games Group 3 The Buccaneer Brawl

Design Document

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Game Overview

Game Concept

A 3D Low Poly Turn Based Battle Game based across different taverns where the player can select different agents and compete in 3v3 fights. Players can earn coins through defeating other agents, and even receive bonus coins depending on their abilities. Players can unlock new agents after encountering them in battle, each with unique special abilities to use in their team.

Genre

Face to Face Turn Based Battle System

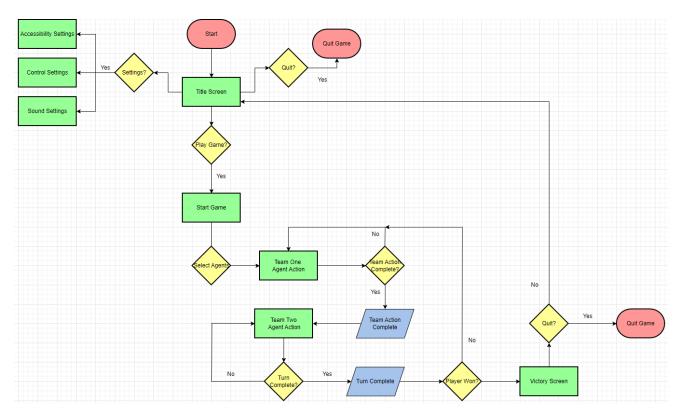
Look and Feel

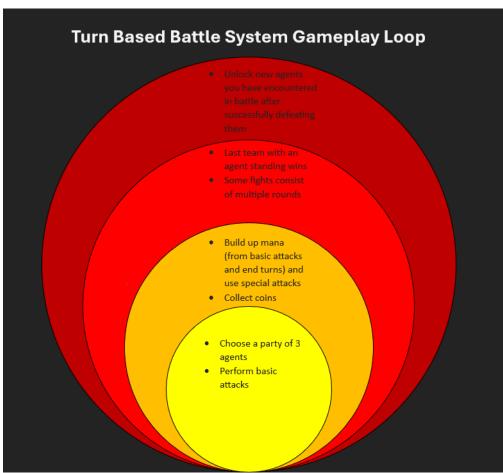
The look of the game will be a pirate and bar theme. As the game will feature low poly models and asset packs we will edge towards a stylised art style. We will look into colour palettes to see which fit the style of the pirate theme. We will have a slight serious tone to the game. We want our game to feel responsive and fun to play. This means we focus on having a robust combat system and a strong feedback loop for the player to enjoy. We will also focus on having some dynamic levels to give the player a feeling that they are playing in a simulated space. The Animations also will be focused on to give a further sense of feel.



- This palette is centred around brown colours which we will use a lot for the bar areas
- It dips into more purple and red hues which caters towards the playful feel of the game
- The teal colour contrasts the more red and purple tones in the palette
- · The overall warm palette emphasises the game's more light-hearted tone

Game Flow/Loop Summary





Core Pillars of Design

Agents

Players can select 3 agents from their roster before beginning a battle. Each agent has unique attack and health stats as well as a special ability corresponding to their class. After defeating a previously non-encountered agent, players will have the option to buy them and use them. This way, the player is introduced to the basics of an agent before they can buy them.

Turn-Based

Players take each of their agents' actions before ending their turn, allowing them to potentially create combos or set up plays for future turns. This increases the skill-ceiling of strategy for players.

Abilities

Each agent has unique abilities that make them stand out from one another and allows the player to strategize and create combos within their party. There are different classes of agents which have abilities corresponding to that class; Attacker, Defender, Debuff and Utility.

Mana-pool

Both teams have their own pool of mana. This is shared between each agent on that team and is used to cast their abilities. Each team starts with 5 Ability Points (AP) and a basic attack restores 1 AP.

Gameplay Systems & Mechanics

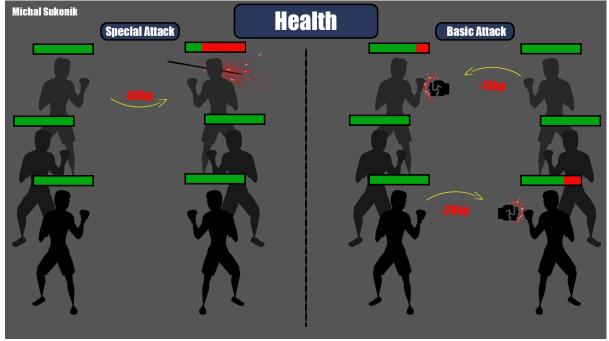
Basic Attack

Each Agent has a base attacking stat which is used to deal damage to an enemy when using a basic attack.



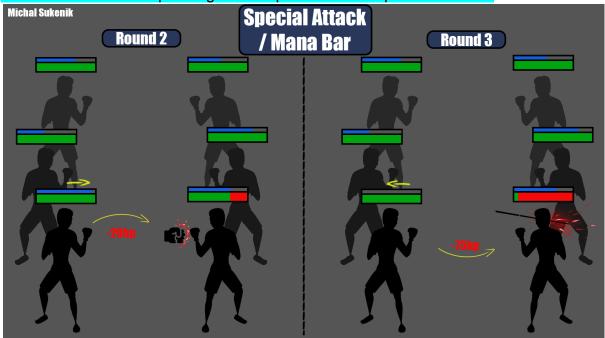
Health

Each Agent has a base health stat which is used to absorb damage from both basic and special attacks.



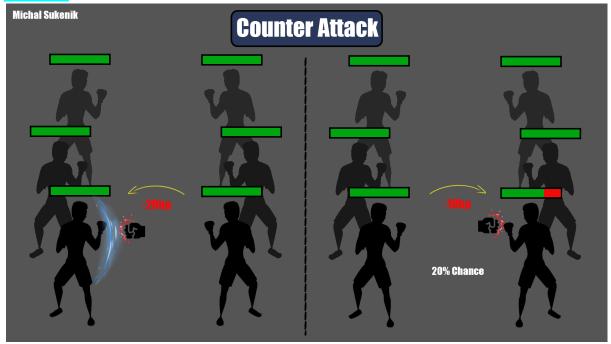
Special Attack / Mana Bar

Each Agent (excluding regular 'minion' type enemies) has a special attack that can be used periodically once their mana bar has been filled. Each Agent has a mana bar that slowly fills up after each basic action they complete. Agents' mana bars can fill at different rates depending on how powerful their special attack is.



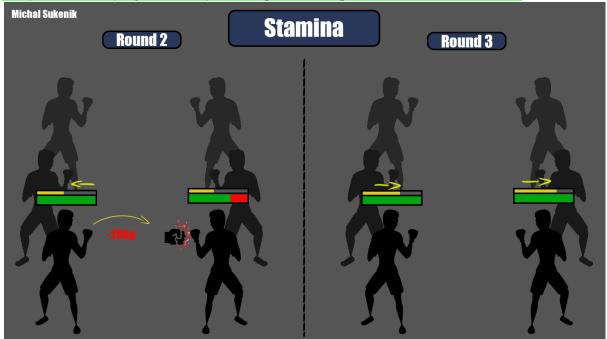
Counterattack

When being basic attacked, Each Agent has a small chance to perform a counterattack that deals low damage but blocks incoming damage they would have received.



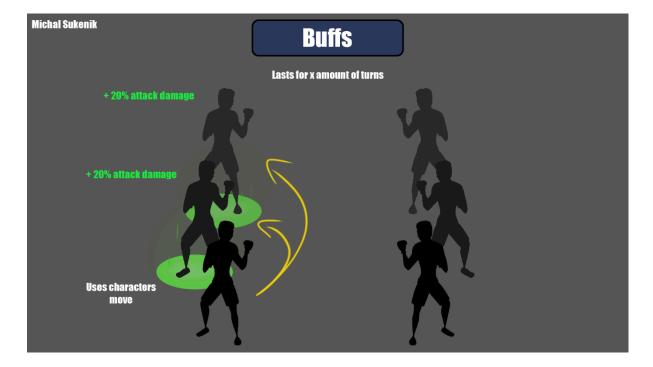
Stamina

Each Agent has a stamina bar which depletes after any action (more so with stronger attacks/moves); it will regenerate a little bit after each round. This system will prevent the player from spamming the strongest attack over and over.



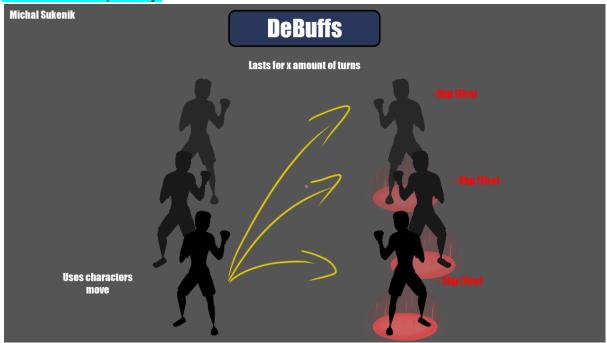
Buffs

Some Agents may have a special ability that provides a positive status effect to one or more allies. These could include increased attack/health stats, healing, mana bar surges or increased counterattack chances.



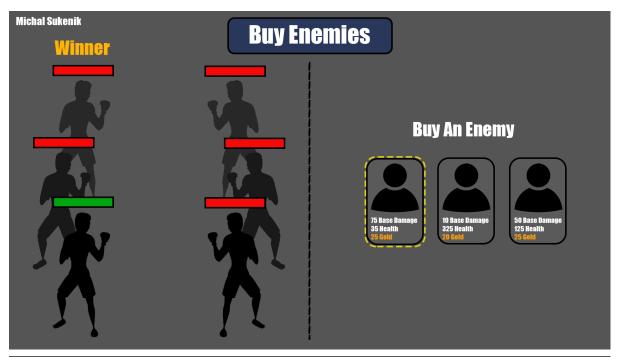
Debuffs

Some Agents may have a special ability that provokes a negative status effect on one or more enemies. Some examples include Fire or Poison damage where the affected Agent takes a small amount of damage at the beginning of each round that they have the status effect. Debuffs may also cause an Agent to lose some of their attack stat temporarily.



Agents

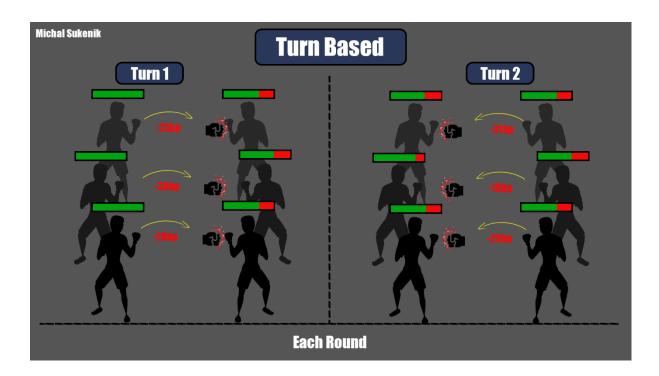
The game will feature multiple characters with different stat lines and abilities. The player can select the members of their 3-person party in the beginning of each new encounter. Once the player has encountered and defeated a new character, they may unlock them in the store. This method of progression helps to ensure that the player is familiar with a new Agent before they use them.





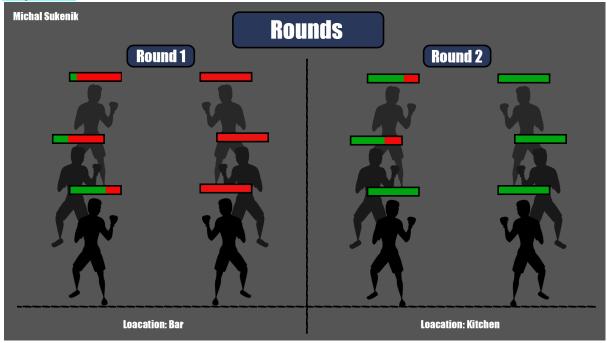
Turn Based

Each game is turn-based where players use an action from each of their 3 party members before their turn ends and the next player has a chance to go.



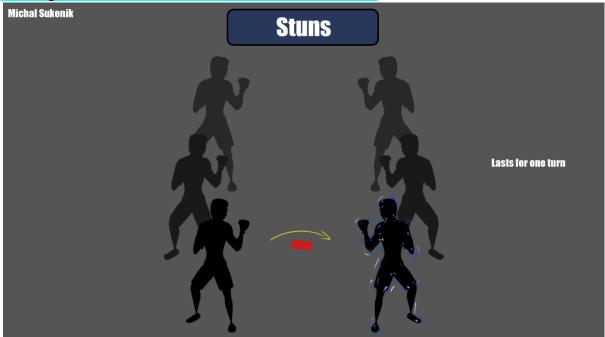
Rounds

Some encounters may feature multiples rounds before the player wins; in this case, they change the location of the current brawl (within the same area. For example, moving from the bar area of a pub to the kitchen) and will have to fight new enemies while still not being fully recovered (health and mana wise) from the previous round. This adds an additional layer of difficulty for the player and encourages them to consider their party members in conjunction with how many rounds the encounter may have.



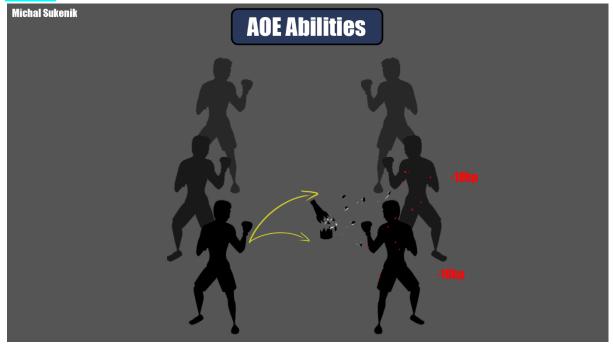
Stuns

Some agents may have a special ability that temporarily incapacitates an enemy, causing them to be unable to attack or counterattack.



Area of Effect abilities

Some agents may have a special ability that deals damage in an area, meaning it can hit more than one enemy at a time. These will typically have lower damage values.



Interactable Items

Agents may find objects in the battle area that they can pick up and wield to perform a unique critical attack. However, the process of picking this object up would take up an Agent's action for that turn.

Character Stats

Numerical values affecting characters

- Health: ≤0 triggers death
- Mana: Currency to spend to trigger Special Ability.
- Shield%: part of the damage nullified
 - o Example:
 - Case 1: Agent has 0 Shield%. Enemy attack of 10 damage deals 10.
 - Case 2: Agent has 20 Shield%. Enemy attack of 10 damage deals 8 instead.
- Dodge%: chance to avoid damage
 - o Example:
 - Case 1: Agent has 0 Dodge%. They have 0% chance to take 0 damage.
 - Case 2: Agent has 20 Dodge%. They have 20% chance to take 0 damage
- Accuracy%: chance to miss attack.
 - o Example:
 - Case 1: Agent has 100 Accuracy%. They always <u>hit</u> their targets.
 - Case 2: Agent has 0 Accuracy%. They always miss their targets.
- Counter%: chance to attack back attacker (no considered as a turn) (attack value=base attack value)
 - o Example:
 - Case 1: Agent 0 counter%. They never attack back when being attacked.
 - Case 2: Agent has 80 counter%. They have 60% chance to attack back when being attacked.
- Crit Chance%: Chance to deal Crit Damage to enemy.
 - Crit Damage = Base Damage X Crit Multiplier = Damage Dealt
 - o Example:
 - Case 1: Agent has 100 Crit Chance%. They always do Crit Damage.
 - Case 2: Agent has 10 Crit Chance%. They have 10% chance to deal Crit Damage to target.
- Crit Multiplier: Value used in calculating Crit Damage

ABILITY POINTS



- Special Abilities cost from 0-3 Ability Points (AP)
 Every Agent share the same pool of AP
- Using a Basic Attack adds +1AP
- The player can hold up to 5AP



Narrative

Story

Background

The game is set in the seaside town of a small kingdom during the 1600s. The people here live simple lives, their eyes never set further than on how they will spend the coming evening. They live for feasts, hearty food, and joyful tunes – because of this, the town has a wide variety of inns, restaurants, and bars that welcome the weary travellers who come by on their journeys.



https://www.artstation.com/artwork/N5Q5Bd

Due to the town's location, many ships come to dock while sailing. It's not unusual to see unfamiliar sailors singing drunkenly through the streets, or to see the odd traveller scout local stores for trinkets to bring back home. Citizens of the town happily welcome these strangers – as long as they don't cause any *problems*.

Introduction (will fill in)

Game World

Setting and Tone

The Buccaneer Brawl is set somewhere in-between the Middle Ages (500s -1500s) and the piracy era (1650s -1730s). This world has the architecture and feel of the

medieval ages, while having the recent appearance of pirates and more naval activity.

There are no fantasy elements in the world, like magic and spellcasters, but the more grounded classic archetypes can still be found – thieves, bounty hunters, and so on. For the most part, however, the featured characters are inhabitants of the town and come in the form of sailors, drunks, labourers and common folks.

The tone of the game is a mix of snarky and comedic with a pinch of seriousness – close to Ballad of Buster Scruggs (Saloon Scene), but a bit less brutal.

Areas

The game starts at the bar and ends at the shipyard. Since our project is a vertical slice, we will be aiming to create the bar and wine cellar.



https://blenderartists.org/t/medieval-pub/1374572

List of locations:

- Bar
- Wine Cellar
- Bar Street
- Festival Market Stalls
- Rooftop
- Cemetary
- Sewers
- Shipyard

Characters

Protagonist

The main character for the game is the gluttonous pirate. Having been stranded on the seas after an intense battle, they found themselves washed ashore by the town. Smelling the scent of something absolutely delicious, they made their way through the winding streets until they came to its source – *The Crooked Tooth*, a quaint bar and restaurant in a busy street.



https://thewickwheat.tumblr.com/post/81301299047/i-finished-up-my-alchoholic-pirat e-design-btw

Stumbling in through the bar's doors, the pirate ordered a hefty amount of food and drink, downing it all until his hunger had finally been sated. But when the bartender asked them to pay the bill, the pirate attempted to sneak away as they had no money at all. As the pirate headed towards the door, the bartender caught a glimpse of them and realised what was going on – and this bartender was known for not being of the forgiving kind.

In the intense chase, the pirate is attempting to navigate the city while the bartender's allies come after them. The pirate wants to get to the Shipyard, in order to get on a ship and get out of there – how exactly this will unfold they've decided they will figure out when they get there. For now, escaping is the top priority!

Antagonist

The bartender is the (rightfully so) main antagonist of the game. They are the proud owner of *The Crooked Tooth* – an establishment that has been passed down in the family for generations. Few nowadays would even dare to cross the bartender, since they have a reputation for being merciless to anyone who tries any funny business.



https://www.artstation.com/artwork/g0XIGE

Being stubborn, the bartender has decided that they will chase the pirate as far as they can in order to get their money back – and have the connections to make this happen.

The bartender is aided by their regulars that come by their bar. These individuals have all been offered a deal – if they bring back the pirate, they will get some coin for their troubles. It's a tempting offer, as money can buy many a drink or a meal.

Other Characters

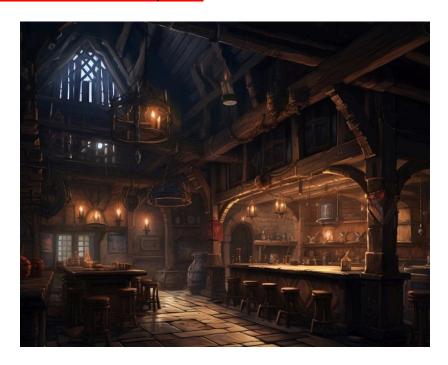
To be settled as the game design is developed. Will add some suggestions here though in the meantime which can serve as inspiration.

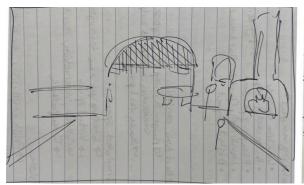
Levels

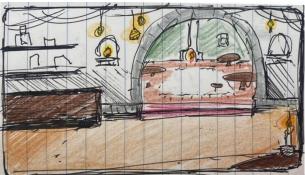
The game starts at the bar and ends at the shipyard. Since our project is a vertical slice, we will be aiming to create the initial levels.

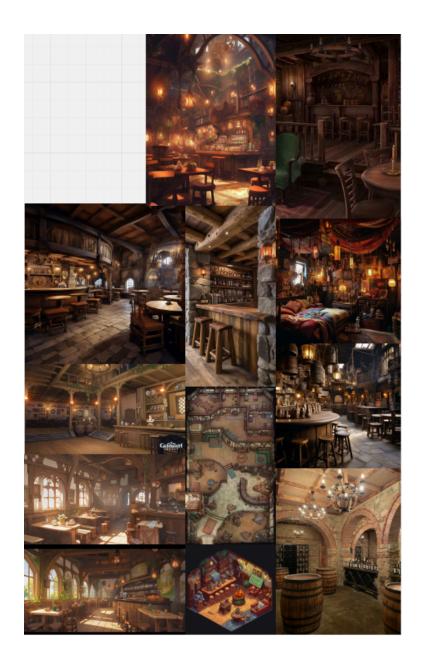
Level 01 – The bar, *The Crooked Tooth*

The fighting area within *The Crooked Tooth* would be next to the bar counter. A room can be seen behind the fighting area, indicating that there are more rooms in the bar. The bar is a mess of bottles and plates.









We could possibly hint to a space beneath the fighting area by having glimpses of light creep out through cracks in the floorboards.

If the player characters can pick up things in this level, it would be:

Bottles of wine

Bottles of beer

Tankards

Plates

Cutlery

Food

As the player finishes, the floor falls apart and their characters fall down into the Wine Cellar beneath.

Level 02 - The Wine Cellar

The fighting area within the wine cellar would be in front of rows of barrels, bottles of wine, and jugs of drink. The area may also store food such as bread, cheese, fruits, meat, and vegetables. A staircase can be seen leading back up – this one leads to a hatch in the floor behind the bar counter. If the cast ends up in the wine cellar, it could be caused by the floorboards collapsing – but how this happens will need further detail.

To hint to the roaring fire, fire sound effects might play in the background and ash may occasionally drizzle down.







If the player characters can pick up things in this level, it would be:

Bottles of wine

Bottles of beer

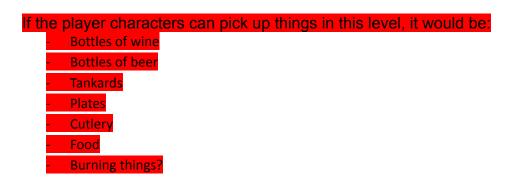
Food

Skeleton bones

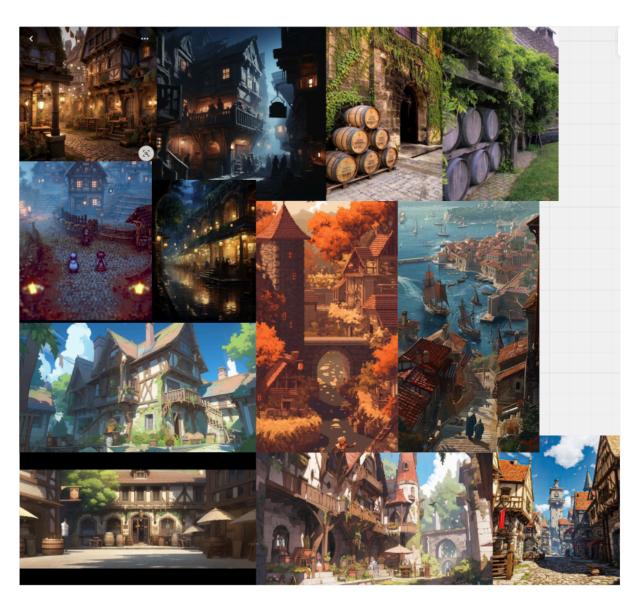
Rats?

Level 03 – The Crooked Tooth on fire?

The fighting area within the burning *The Crooked Tooth* would be next to the doors leading into the street – the player's route of escape. The building is on fire, so visual and sound effects making this clear is important.



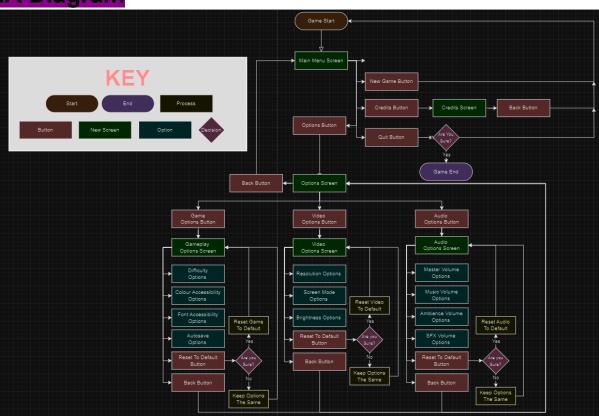
Level 04 – The Bar Street



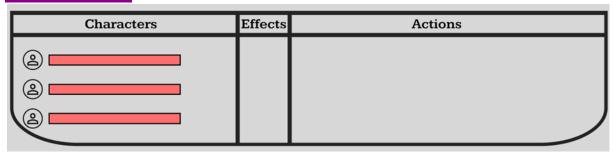
Training Level (Is this the tutorial level?)

Interfaces

IA Diagram

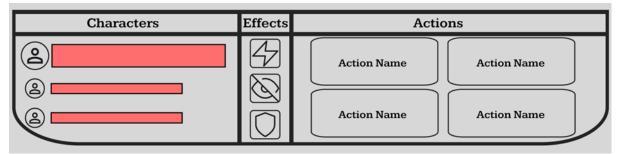


Combat Hud



The Combat Hud is divided into three parts. The Party Vitals, the Status Effect Bar and the Action Bar which are split into a 40:10:50 ratio.

Combat Hud (Character Selected)



When a character is selected it will get that character's specific attributes such as their available actions and what status effects they have. Their specific character vital will become bigger than the others to signify that the big vital bar related to the selected character.

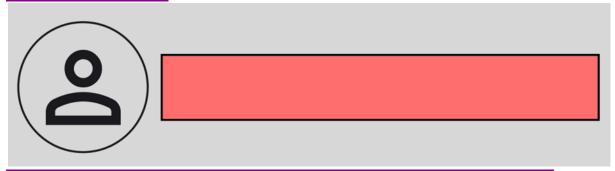
Party Vitals



Three Character Vital Bars make up the Party Vitals with the addition of Text labelling the panel as "Characters". They are spaced equidistant from each other to provide

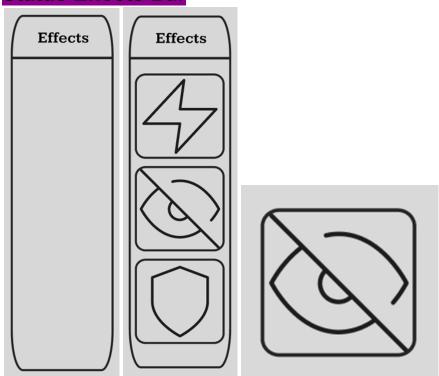
enough room for when a character is selected, at which point the specific character's Vital Bar will increase in size and arise to the top of the panel to inform the player that this Vital Bar is for the character that is currently selected.

Character Vitals



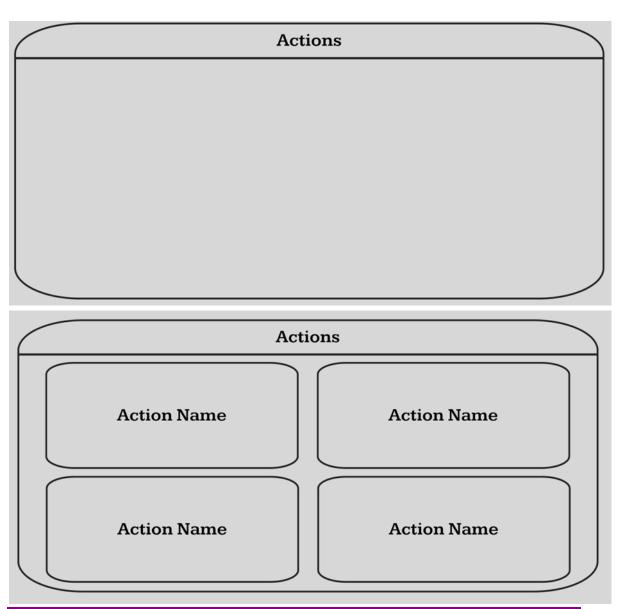
The Character Vital contains two elements, the Character Health Bar, and the Character Icon. The Character Icon is an image of the specific character, which is surrounded by a circular border, the Icon helps the player identify what health bar relates to which character.

Status Effects Bar



The Status Effect Bar is a rectangular container that holds all the status effects that a character could have during combat. Status Effects are small Icons that represent a status effect, for example the Poisoned Status Effect's Icon is a green skull. When a Character is selected the Status Bar will fill with all the Status Effect Icons that they currently have.

Action Bar



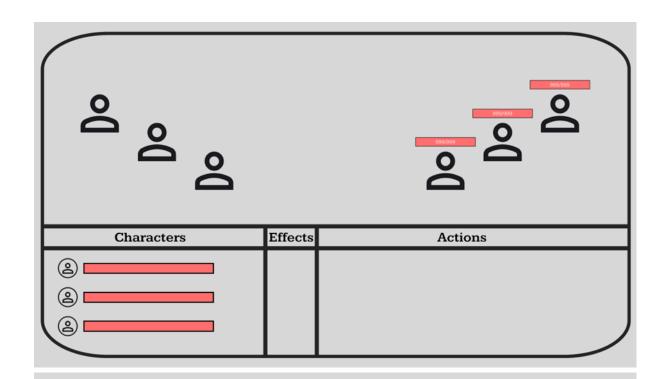
Similar to the Status Bar, the Action bar is an empty container until a Character is selected. When a Character is selected then all the available actions will be present within the Action Bar.

Action Button

Action Name Action Name

The Action Button a button that is created inside of the action bar. It will have one of the selected character's Actions with the Actions name in the centre of the button and when pressed it will turn red to inform the player it is selected then activate the Action it relates to.

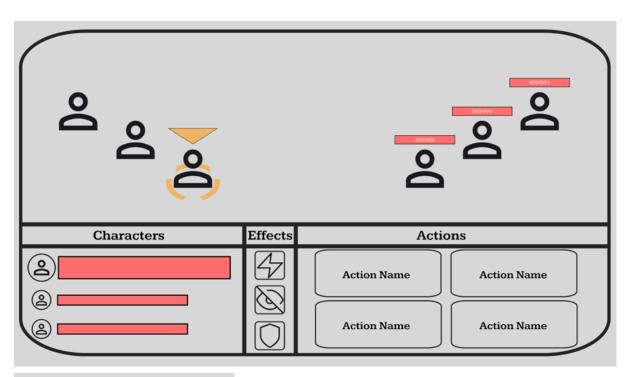
Enemy Vitals

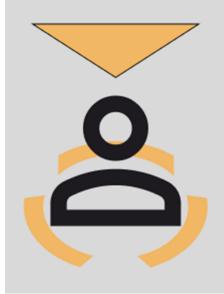


999/999

The Enemy Vitals is a Spatial Widget that appears above an enemy character's head. Due to the Vital Bar being much smaller than the Character Vitals a Text element was added onto the Vital Bar to read out what the current Health Points the enemy is on.

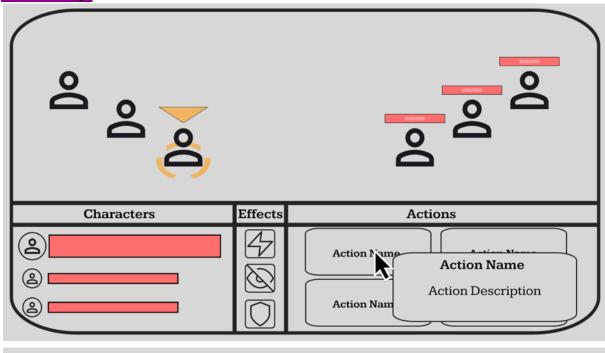
Character Selected





When a character is Selected the Selected Character Widget is activated. At which point an orange arrow will appear above the character's head then slowly bob up and down to bring more attention to it. A circular border will also appear bellow the character so that there is no mistake that it is the selected character.

Tool Tip

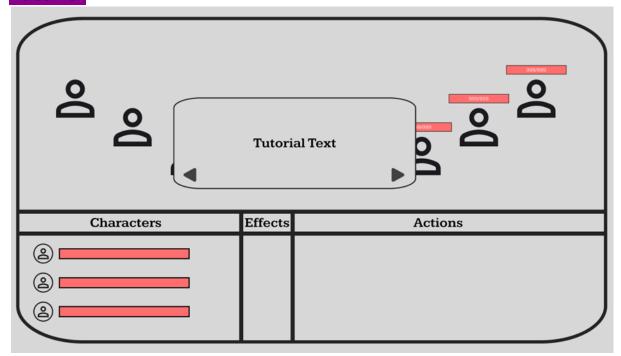


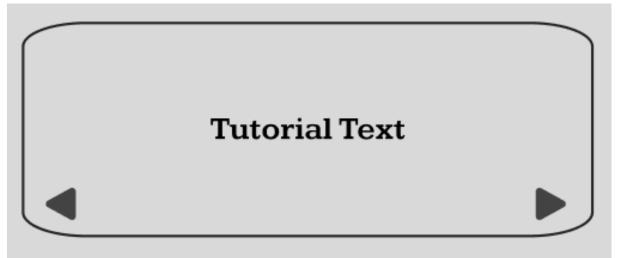
Tool Tip Heading

Tool Tip Description

The Tool Tip is a small box that appears when the player's cursor hovers over either an Action or a Status Effect. The Tool Tip is broken down into the Heading and the Description, the Heading will take on the name of the hovered over element to confirm that it is the correct element they want to look at and the Description will contain information on what the element does.

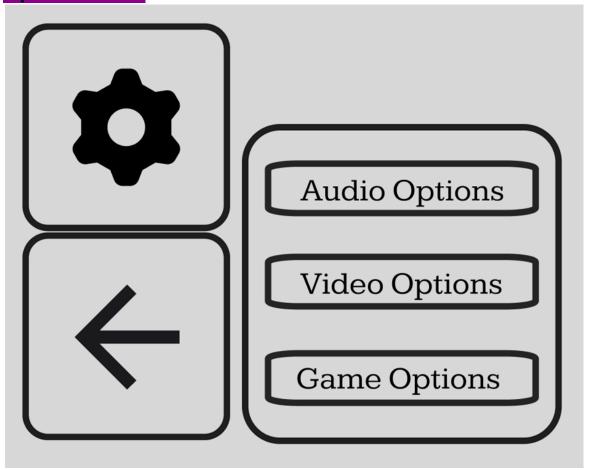
Tutorial





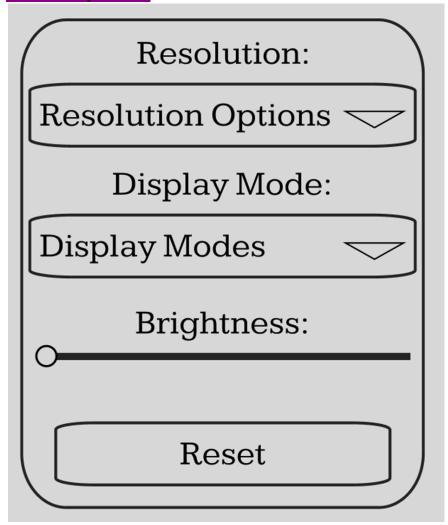
When the game is started a tutorial window will pop up on the screen. This widget contains two buttons on the left and right of the tutorial for the player to go forward and back. This is done so that the player doesn't accidentally skip past information and gives them the option to return to a previous text. The Tutorial has a text box in the centre which changes every time they press the forward arrow.

Options Menu



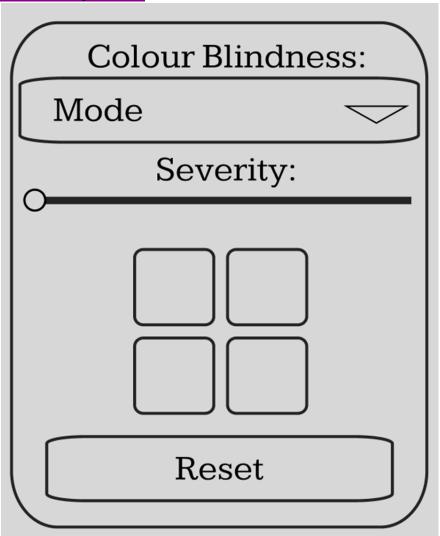
The Options Menu works as an overall container of all the option's menus so when a button is pressed such as "Video Options" then the box is cleared and then "Video Options Menu" is placed in that spot. To go back from a menu there is a back button on the bottom left box which will return them to the Option's Menu.

Video Options



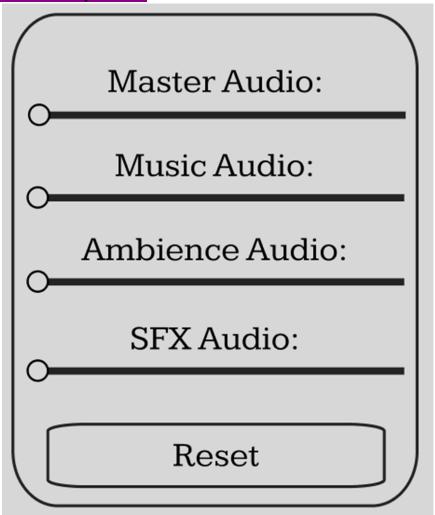
Video Options contains two combo boxes which drop down to create a list, Resolution options allow the Player to set the resolution either to 1920x1080 which is the default, 1600x900 or 1280x720. While the other combo box drops down to list the display options which are Fullscreen which is the default, Windowed Fullscreen and Windowed. The player can also alter the game's brightness in this panel using a slider. All these options can be reset to default by using the Reset button at the bottom.

Game Options



Game Options, these options allow the player to set the colour-blindness mode and the severity of the mode in the game. The modes are Standard, Deuteranope, Protanope and Tritanope. When a mode is selected the player can use the slider bar to change how much the mode impacts the colour. To help the player four boxes are placed in the centre of the options panel that contain the colours Red, Purple, Green and Yellow so that when a mode is selected it will affect the four colours as well giving the player a better look on how a specific mode and severity of that mode will change the colour spectrum of the game. All these options can be reset to default by using the Reset button at the bottom.

Audio Options



The Audio Options has four sliders. Master which allows the player to set the volume of the entire project. While Music, Ambience and SFX all allow the player to set the volume of their respective options. This allows the player to decrease or increase specific audio, instead of only being able to alter the volume of all the audio. All these options can be reset to default by using the Reset button at the bottom.

Main Menu



The main menu is broken down into three buttons. The New game button that allows the player to start the game, the credits button that allows the player to reach the Credits board and the Quit button that ends the game.

Credits

Credits

Name Name Name

Name Name Name

Role 1Role 1Role 1Role 1Role 2Role 2Role 2Role 2

The credits board is a how the members of the development team are credited in game. The board has a heading above naming the board "Credits" with each name having enough space to fit two roles below them without being too close to another team member's role.

Controls

As this is a turn-based game most of the controls will be done through the mouse as this is the easiest way to control the game. As a stretch goal we will attempt to create controller support.

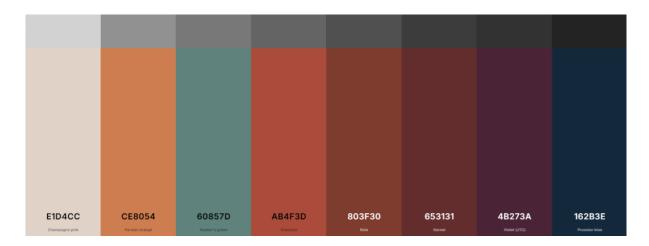
Mouse = Move Cursor Left Click = Select Option

Audio

We will use a range of pre-made assets as well as potentially creating our own audio assets for this game. The audio of the game will fit the theme of the game. So using sounds one may find in a bar.

Accessibility

An accessibility feature that we have considered is the colour palette and how it might effect people with different sight impairments. We will look to implement Unreal Engine's built in setting for this. Another consideration could be the option to change the colour and size of the text and other UI elements.



To increase readability across different kinds of colour blindness the palette has a strong attention to variation in its grey-scale values, making the colours rely on more than just their given hues.



The teal used within the colour palette is identifiable across different colour blindnesses due to its strong contrast in hue and grey-scale value.

Most of the palette consists of brown colours which are made up of varying degrees of red, yellow and blue. This makes the brown colours more consistent across different kinds of colour blindnesses. Additionally, the palette mainly consists of warm

colours (colours with a lot of red and yellow in them) which further contrasts the teal colour (which has a lot of blue in it and a bit of yellow).

Due to the teal being so different in hue and grey-scale value, it is fit to be a signifier for interactable things within the game world and can be used for things that we want to draw attention to within the game.

Screens

The whole UI system will remain within a single level, creating a comprehensive experience throughout navigation. The main menu will consist of all the regular settings that form a main menu, such as New Game, Settings, Exit, etc, but will be without the credits menu as this will be set up at the bar. Both levels will also exist within the same world and will focus around two separate areas of the bar.

Main Menu



Having a darker colour palette than the bar itself, the main menu creates a well-executed contrast in colour composition. This will help the main menu stand out while also still fitting in with the overall theme of the setting. The use of diegetic elements like the boxes as clickable buttons adds into the narrative while also keeping the main menu simple and compact while also giving enough space to showcase the environment, which is the main aspect of the UI.

<u>Settings</u>

Consisting of the usual settings that remain within this menu section, the UI will stay rather simple so not to be too distracting for the user due to the amount of information needed to be processed for the player.

Theme

Following on from the colour palettes of the game in general, the theme of the UI is to incorporate metallic colours, along with a multitude of bar-themed elements. This allows for a cohesive medium between the player and the game, portraying information to the player without standing out too much or fitting in too much also.

HUD

Being the main area of use for UI, the HUD is the area of the game with the most UI inclusion. This will consist of a large box on the bottom half of the screen holding all information to the player's characters like health, status conditions and attacks. This is the most important area of the game so the UI must stick out enough for players to easily comprehend the information on screen, so will consist of a contrasting colour palette, particularly black and gold, with other colours being present also.

Status conditions will have a separate icon for each different effect, so will be vastly different in design. To counteract this, each design will be on a barrel's lid to not only fit in with the theme, but to also work with the colour palette, blending with the golds frequented throughout the HUD.

Blindness



Strengthened



Stunned



<u>Focused</u>



<u>Sharpen</u>



A Little Something



<u>Alcoholic</u>



War Cry



<u>Poisoned</u>



Shut The Front Door



Tooltips are designed to give the player useful information that should be considered throughout the entire playthrough, so displaying this information is extremely important. This will be carried out through a jewel-like design in the corners of the box, highlighting significance through a skeuomorphic approach to attention-grabbing elements. This will most likely consist of a ruby to fit with the colour theme with a presence of reds throughout the HUD.



Technical

Release Platforms

Depending on the outcome of this project we might release our game on Itch.io for free to show off our work. This will also help us all when putting this project onto our portfolios; it's easier to have someone play the game.

Hardware Requirements

As this is only a vertical slice of a game, the user won't require anything powerful to run it. Any okay laptop or PC will be able to run the prototype without any problems.

Development Hardware & Software

To create this vertical slice, we will be using a variety of different software like: UE5, Blender, Photoshop, Miro, Trello, PowerPoint, Word.

- UE5
 - o This will be the engine we use to create/bring together the entire game. The levels will be built in UE5, and all the blueprint scripting will also be done in this software.
- Blender
 - o Blender will be used to create any low poly assets we can't find asset packs of. As only a small number of us can low poly model we will primarily be using free assets, however, may have to use Blender for some harder to find assets.
- Photoshop
 - o Photoshop will mainly be used to help with documentation, or to create any simple concepts of the world/levels.
- Miro
 - Miro is primarily used as a means of getting down rough ideas, that are later further discussed and fleshed out.
- Trello
 - o Trello is our way of giving everyone tasks, which makes is much easier to keep track of things that aren't assigned, are being worked on and that are finished. This can also be used to write down any known bugs that need fixing.
- PowerPoint
 - PowerPoint is used to format/display work that we have done, show examples of other games and show any research done. It can also be used to display designs we have created.
- Word
 - Word is used for the same reason PowerPoint is and can be interchanged very easily.