PURPLE

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Game Overview

The "Purple" game is a puzzle and combat game using colour coded puzzles, and features the story of two lovers, blue and red, who can Merge to become Purple and escape throughout the world together.
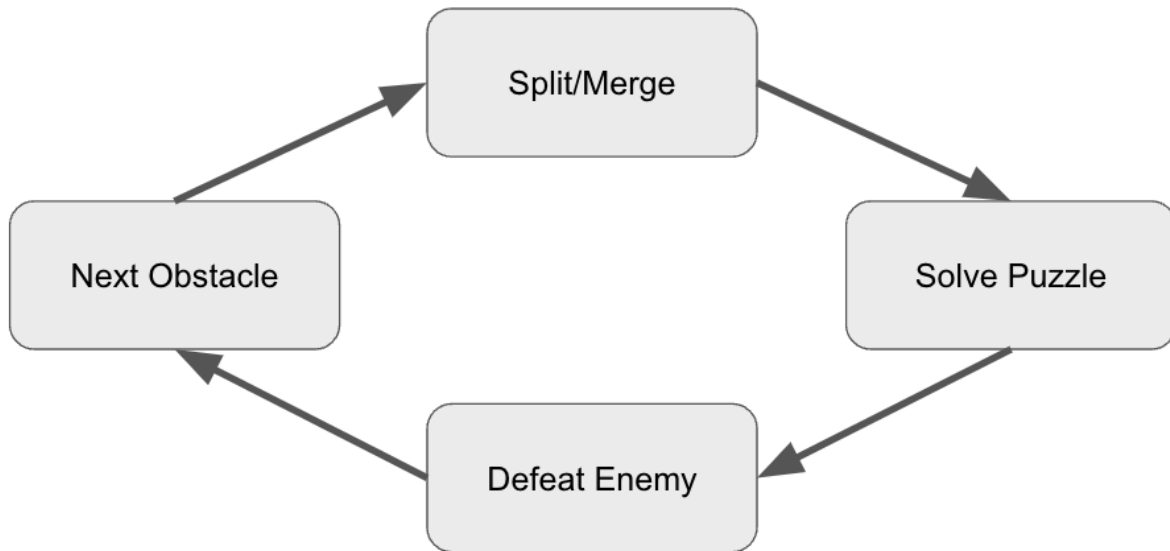
Unique Selling Points

- **Merge and Split**
  When Navy and Coral are close to each other, they can Merge into purple, changing the experience from controlling two characters at once to simply one. This mechanic can be used to access different color-coded puzzles, or for combat by using Purple's Hammer.
- **Colour-Coded Puzzle Interactions**
  Puzzles will be solved using color as the key. Only the blue character Navy can use blue switches and only the red character Coral can use red switches. Purple can use purple switches so Merging/Splitting is key to solving the puzzles.
- **Weapons**
  Navy, Coral, and Purple all have their unique weapons with their strengths. Navy uses a Pole that uses melee attacks and can be used to vault over Spike Pits. Coral uses a Barrel which can be thrown to deal damage on enemies and also activate certain switches from far away. Purple's weapon is a Merge of the Navy's and Coral's weapons, which makes a Hammer. Purple's Hammer deals more damage while being slower to attack.

Gameplay

Mechanics

- **Color-Coded Switch Activations**
  Every switch has a color that dictates which character can use it. There are also other interactions that are color-coded such as the teleporter. The level is navigated by use of these which will force the player to use their two playable characters in different ways.

Game Loop

```
        ┌──────────────┐
   ┌───▶│  Split/Merge  │────┐
   │    └──────────────┘    │
   │                        ▼
┌──────────────┐      ┌──────────────┐
│ Next Obstacle │      │ Solve Puzzle │
└──────────────┘      └──────────────┘
   ▲                        │
   │    ┌──────────────┐    │
   └────│ Defeat Enemy  │◀───┘
        └──────────────┘
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Game Features

Compelling narrative

- A deep, romanticized story centered around two lovers who must fight against the oppressive kingdom they once called home..

Rich Puzzles

- Immersive brain-scratching puzzle levels to get through with various colors in consideration to get characters past the level.
- Various sorts of interactions like triggers, levers, platforms, pressure pads, switches, etc to advance further in the level. Players must solve physical puzzles and challenges by using interactions to advance themselves, through space.

Stunning Visuals

- Cutting-edge graphics and visuals bring the prismatic-cartoony art style to life, creating a breathtaking gaming experience.

Combat

- Wispy combat mechanics with a new camera perspective, offering engaging battles against enemies that stop the player from solving puzzles. Depending on the character and the color, the player uses different attack styles like melee for the coral, close-ranged for the navy, and far-ranged for both of them fused together. They deal different damages and have various power-ups and cooldowns depending on the colors.

- Navy's main attack is Jab by pressing 'F' on the keyboard and 'Left Trigger' for the controller. The attack is jabbing with the Pole. The new attack pattern involves a three-hit combo. Certain areas can be vaulted using Navy's Pole for puzzle solving.

- Coral's main attack is Weight Throw by pressing 'H' on the keyboard and 'Right Trigger' for the controller. The attack is throwing Coral's Barrel at a close distance. This attack can activate certain switches for Coral on top of being a far ranged attack.

- Purple's main attacks are Hammer Swing and Hammer Shot. Hammer Swing is used by pressing 'F' on the keyboard and 'Left Trigger' for the controller. The attack is a swing using the Hammer. Hammer shot is used by pressing 'H' on the keyboard and 'Right Trigger' for the controller. The attack is firing the top part of the Hammer at a far distance, which then reforms. The new attack pattern involves three attacks in a combo which is finished in a ground hammer slam.

- Enemies come in different forms, a large round shadow that uses a punch attack, and a slender taller blue guard that uses a piercing attack.

Split/Merge

- The game's main mechanic lets characters split and merge, which changes their colors to solve puzzles according to colors.
- This also changes their way of perceiving the world as their stats change too.
- The attack damage dealt increases as well as the health and stamina increases too.

Characters

Navy

Is the youngest in their generation to make squad leader and was en route to make captain until that fateful day when they met Coral and everything changed.
Uses a Pole as their weapon of choice and can use it to vault over pits

Coral

Is a passionate construction worker but always had a longing for adventure, and eventually got that wish.
Uses a Barrel as their weapon of choice and can shoot it long distances.

Purple

Is the combination of Navy and Coral and encompasses both of their desires and is a being of their love for one another.
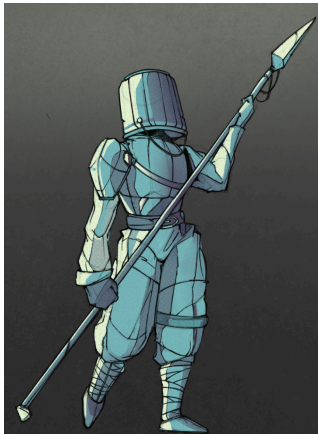
Uses a Hammer composed of Navy's Pole and Coral's Barrel to deal heavy damage and knock tall objects over.

Enemies

Shadows of the King

Piece of the Rainbow King come to life to do the King's bidding from a distance, and is tasked with recovering deserters.

Blue Guard

Tasked with keeping the Rainbow Kingdom safe and carrying out the law of the Rainbow King.

The Rainbow King

Is the ruler of the Rainbow King and is a malevolent and vicious ruler who drains the colour from all neighboring lands to keep their kingdom bright in hue.

Mechanics

- The Navy has a Pole that can be used to vault over pits and traps. Coral has a weight that can be placed on weight-sensitive objects and can be rolled to hit hard-to-reach areas. Purple has a Hammer for attacking. These are the base variants of the weapons and upgrades are found throughout the game.

Upgrades

- There is a spike upgrade to Purple's Hammer, a spring upgrade to Navy's Pole, and a psychic upgrade to Coral's Weight. The spike hammer deals more damage, the Spring Pole has higher jumps, and the Psychic Weight allows the player to manually control where the weight can go aside from the usual dropping or rolling.

Abilities

- Navy (who is blue) can use any blue color prop such as hitting a blue switch, pushing a blue door, etc. Coral (who is red) can use any red color prop such as hitting a red switch, pushing a red door, etc. Purple can use any purple color prop such as hitting a purple switch, pushing a purple door, etc.
- Merge Navy and Coral to become Purple. Split Purple to become Navy and Coral.

Animations

New animations for pushing switches/buttons.

Lore

A day like any other, except fate had a say. Coral did something they were not supposed to. They left their post as they saw an infiltrator enter the Royal Palace. Concerned for the kingdom they bolted and saw guards surrounding the intruder. The intruder unfortunately had an explosive and was prepared to take every guard with them. In a split second, the Navy saw that a red worker was about to be collateral damage and leaped into them to try and save them, which resulted in being Merged into Purple. They succeeded in surviving the explosion but they did an unforgivable act. Merging across the spectrum is forbidden and they will be executed for this act. Purple, a brand new being who is both Navy and Coral, acts quickly and runs for it. Can they survive? Purple never felt this sensation

before, that is to say, neither did Navy or Coral, so what are they feeling? Why does being Purple feel... correct?

Enemies

The Rainbow King

In the vibrant and diverse land of Chromatica, nestled at the heart of the sprawling Rainbow Capital, there ruled a tyrant whose name struck fear into the hearts of all its citizens – the Rainbow King. Once a mere mortal, the Rainbow King rose to power through dark and forbidden means, wielding authority over the realm with an iron grip. He is the reason Merging outside the spectrum is outlawed. He gained all of his power by forcefully Merging with criminals which is why he is rainbow coloured. Anyone caught attempting such forbidden Merging faced severe punishment, creating an atmosphere of fear and submission across Chromatica.

The Shadows

The generic enemy the player will encounter throughout the player's adventure. The shadows are pieces of the Rainbow King who are sent into the Wilds to recapture deserters to the capitol and make them prisoners, ultimately resulting in being Merged with the King.

Non-Playable Characters

Mint is a fellow deserter who left the Capitol after Merging. He gives the player the first upgrade, the Spike upgrade, and he has the power of omnipotence and can break the fourth wall to talk directly to the player.

Gum is a bored and grumpy fellow who does not talk very much but gives brilliant puzzle advice to further advance the player in the game. He talks on his own principles and answers whenever it's right.

Mint and Gum always pick on each other which shows the player that they both don't like each other but actually, they do care about each other. Sometimes they

both help the player to come up with a new idea combined with both their wiseness.

Level Design

The player will have to navigate throughout the level by interacting with color-based buttons, switches, and doors so there are certain areas where Navy is needed and some areas where Coral is needed and of course, both and Purple are needed.

The player is introduced to each element intuitively as the level progresses. Elements include the colored doors, switches, and buttons as well as others. Using the Hammer the player can get objects out of the way to progress.

The levels in the Prism Wilds and beyond have both puzzle attributes along with combat to another level of gameplay.

Narrative

Navy spent their whole life as a guard. They knew their purpose and they were content with it. The Navy always made sure to follow orders and bring honor to their troop. This all came into question when they met Coral. Coral is a construction worker in the Rainbow Capitol and they have helped build much of the city as it is seen today. They thought there was more to life than the Capitol but felt they did not have much of a say in their life and just accepted things would never change. All until a fateful encounter with the Navy proved that thought wrong.

After they met and Merged, they knew they had to escape the Capitol and the rule of the Rainbow King, so this is their journey.

Locations

Rainbow Capital

A dystopian city that is surrounded by a giant wall, preventing anyone from escaping. This is ruled by the Rainbow King, who rules with an iron fist. Everyone is divided into classes depending on their color: Reds are workers and one of the lower classes, Blue are guards and soldiers and are respected, Yellow are royalty and high status, Green are gardeners and landscapers, Orange are hunters,

farmers and butchers, Purple are leaders and generals. When two colors Merge outside of their spectrum, there is confusion about what class they are in, so it is Outlawed. (see image below)
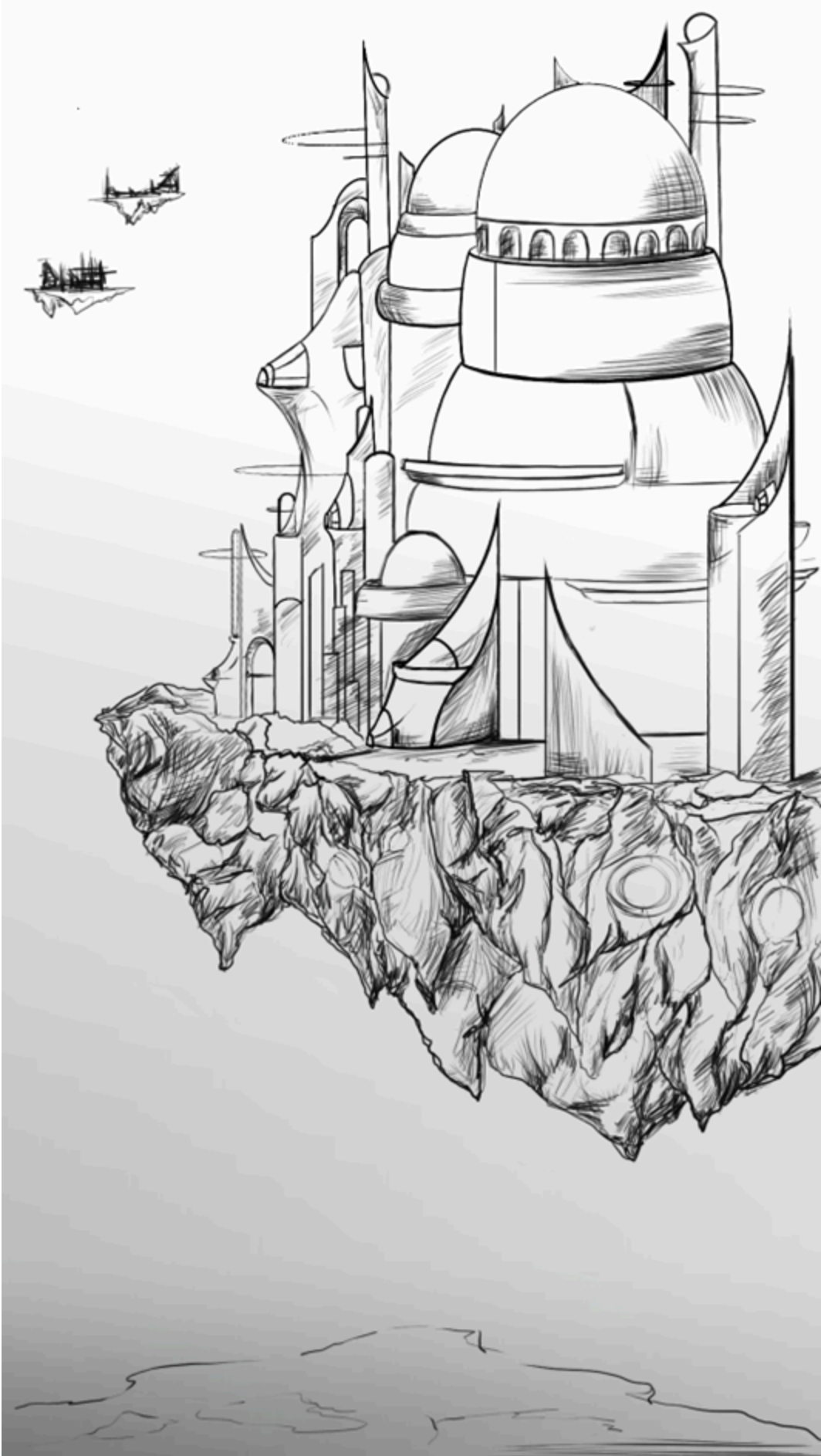
Prism Wilds

Uninhabited lands that are dangerous and forbidden to enter. The resources that once flourished throughout the Wilds are being siphoned into the Rainbow Capitol, depleting the resources, in turn making it hard to survive. As the player explores the Wilds in the game, the player will face tough challenges like tricky landscape puzzles and unfriendly creatures that have changed because of resource-draining. The rainbow capital, which looks nice, is actually causing a lot of problems by taking away all the resources from the wild. The shadows of the Rainbow King infiltrate this land to search for deserters from the capital and bring them back by any means necessary.

Ambient Dust

Barren stretched lands with almost no life activity with more and more energy drawing atmosphere. They are being guarded by soldiers known as Achromatics who dwell in the dark times and have strong constructs between them that they use for defense. Players will progress in the story while solving complex environment puzzles by using strategy and fighting the soldiers at the same time. This is the place where they will be using the merge and split mechanism the most. Red and Blue will be helping each other even when they are not merged to make the journey easier for each other with the motive to merge again in the end to fight a boss. Levels based in this world would be a little more complex and strategy-based compared to the Prism Wilds having more boss fights.

Art Style

The art style is similar to Steven's universe where the characters are constructed with simple shapes and given form upon finalizing the shape of the character. We think of using the same method with our characters by pushing that shape language further by exaggerating already given features. The same criteria will apply to the enemies and other characters. The props will be designed to look larger than their holder (final fantasy, dark souls, god of war, etc.) When wielded they will appear in their holder's colors, and they will also gain more designs personalized to the character. The weapons will bring the cartoony effect to our game and they will also look very impactful to our character's adventures. The weapons would have to be designed to have a much softer and more interesting look to match our characters.

The weapons are also going to be in two pieces. Red and blue will have one part of the weapon and when they get close the weapon becomes a whole (the barrel

and stick equals hammer is a good example). These weapons have to be constructed in a useful way to help with level design as well as enhance the player's journey. The other weapon example in pre-production artwork was a crank and wheel, and the last one was a shaft and a spike ball. When designing these props/weapons we need to be mindful of their use and impact to the level.

The only things that have to be red and blue are characters coral and navy and also the props/weapons in the environment can be colors coordinating to the game colors.
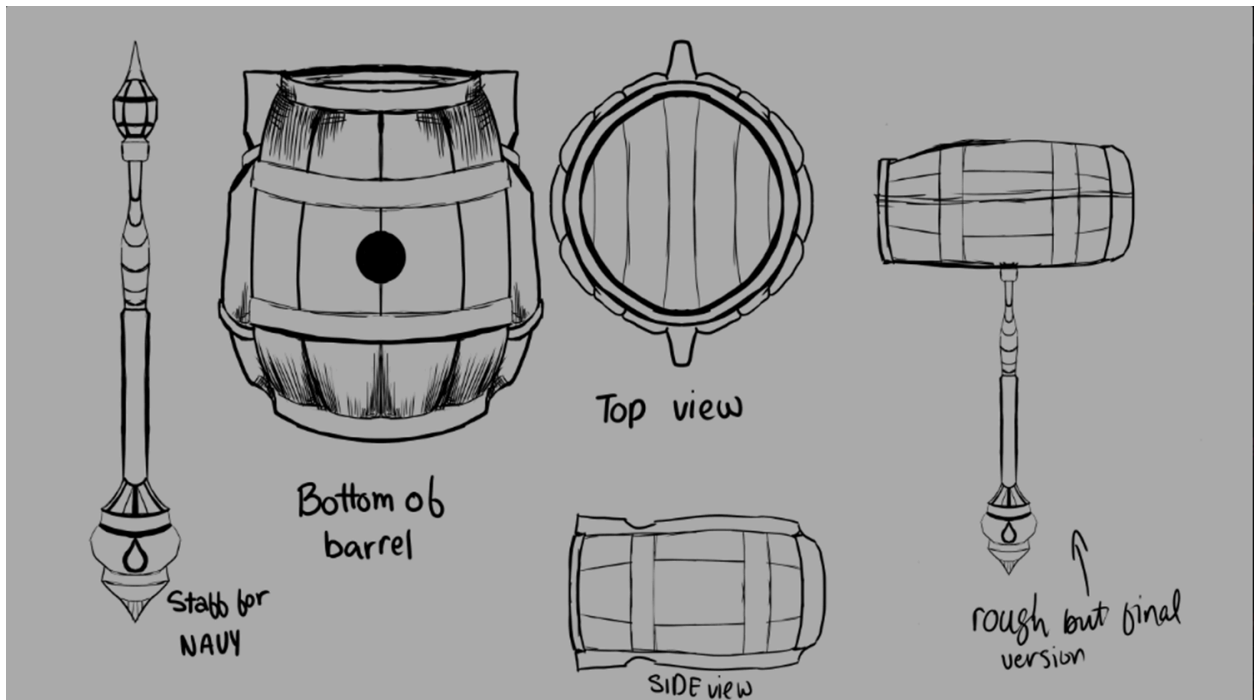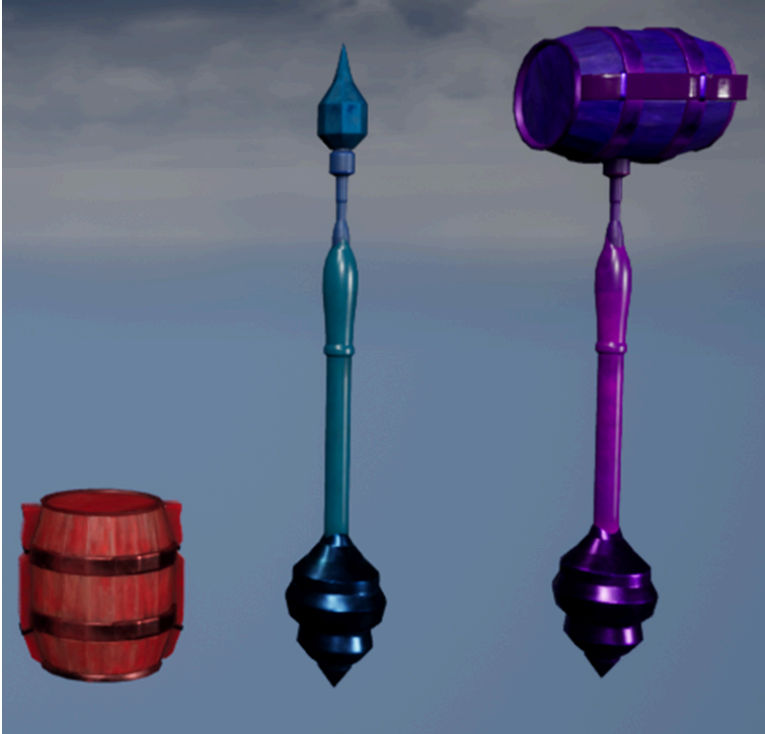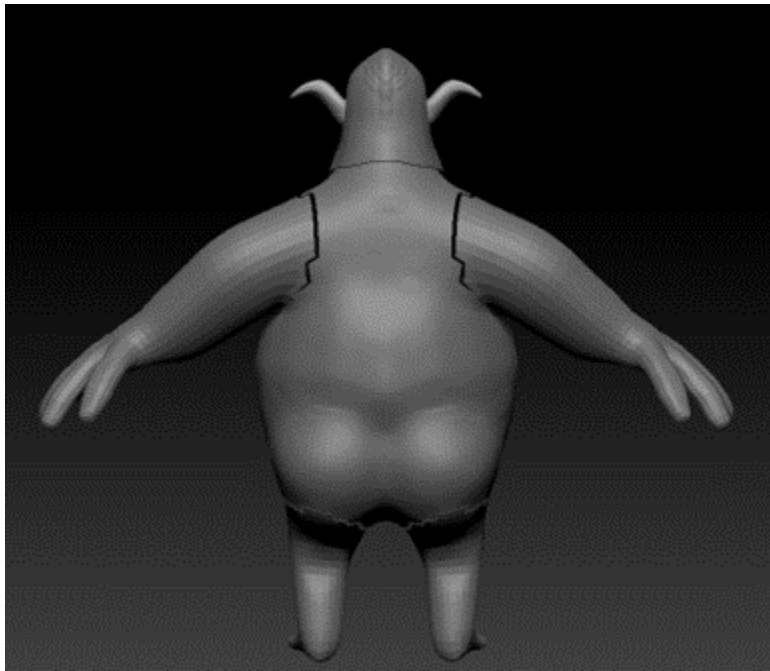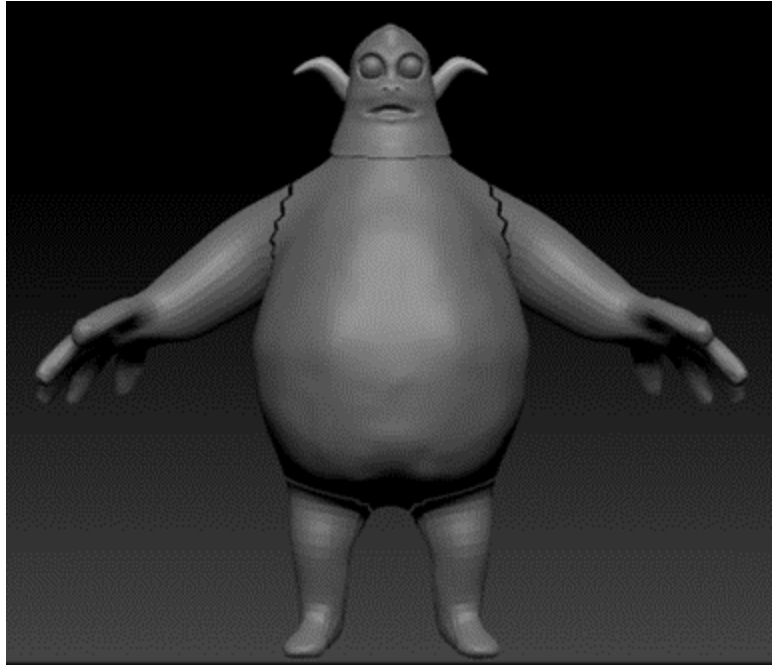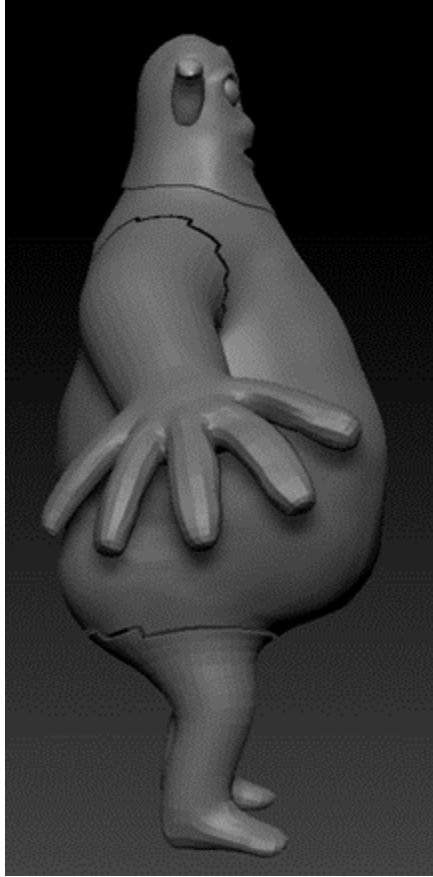
Optimization

Keeping the level optimized only the characters and objects within their radius will be a full high poly render with a reduced polygon count this will be efficient to use on our characters, enemies, and also our props/weapons. Anything that requires movement will need to have a reduced amount of poly count. The environment will be a challenging part in terms of optimization to have a radius box attached to the characters mesh which will show assets within that radius in all of their glory and assets outside of the radius circle to be more painterly manner it will not be distracting since the level will be designed in a manner that these two would blend.

The coding will mainly be visual (blueprints) which will use various components offered by the engine like interfaces, blend spaces, etc.

Assets

Various forms of models are imported into the engine like FBX, audio formats in WAV, and textures in any image format. The bridge between the software used and the engine will be compatible so that it can be maintained throughout the version control and file history.

The assets are managed and hosted in cloud file systems which are not maintained in the version control as they are not going to be used multiple times throughout the production.
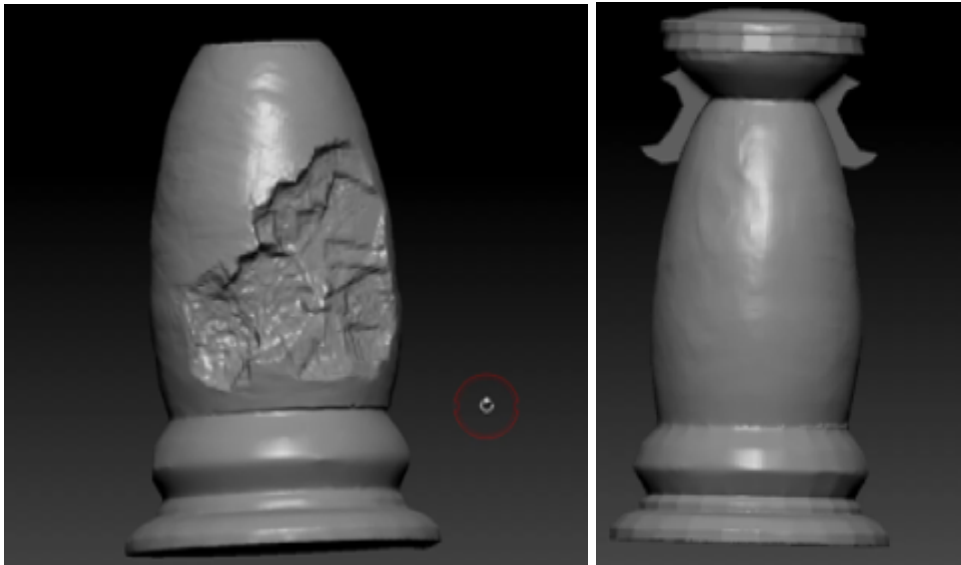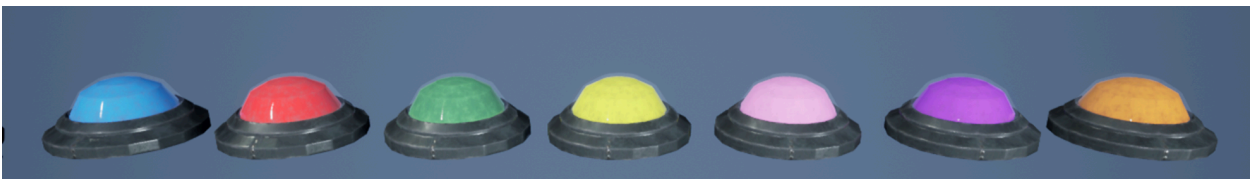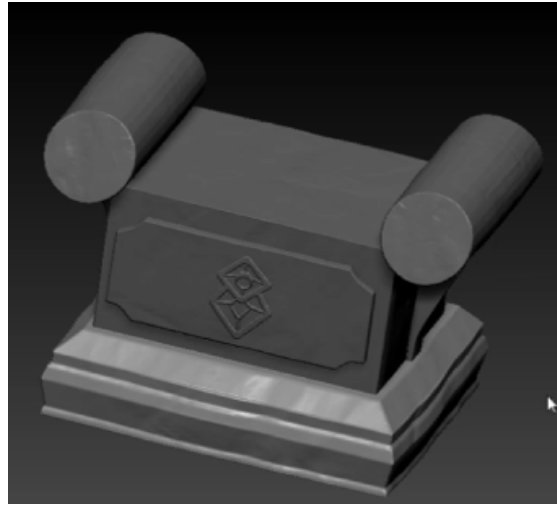
UI

Start menu options:
New Game - Lets you start a new game
Load Game - Lets you load the game that was saved earlier.
Save Game - Saves the current state of the game to the nearest checkpoint.

Settings - Delivers all the options for changing maps, audio, graphics, and display.
Quit Game - Quits the game without saving anything.

Legible use of fonts that depict the game style as well as the information that it should display. The textures used are seamless and blend into the graphical interface which is good for user experience. The main user interface is inspired by various generic AAA templates having similar feelings as compared to other games so that the user learning curve is not too steep.

Character Health Bar
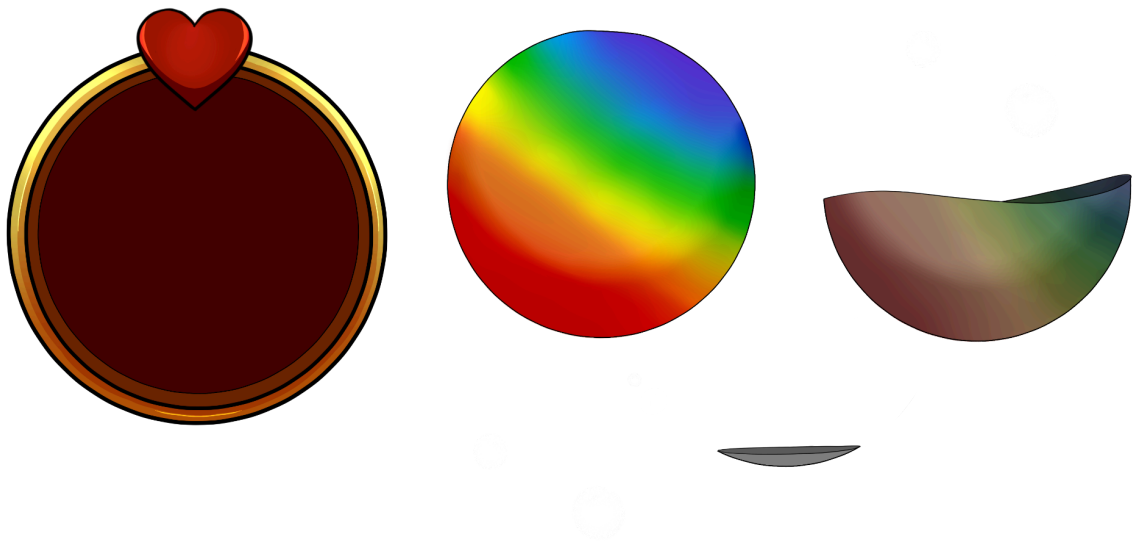
Audio

Music

The Ethereal and mystical soundtrack conveys that this is another alienated world with a nostalgic ambiance of wonder. Various narrative sequences will have some background music to increase the overhaul realism of the gameplay.

SFX

Various sound effects for weapons and handheld objects. Different noises for hit, splash, attack, interact, trigger, merge/split, etc. They can change pitch depending on the activities and circumstances. Also, small detailed sounds like footsteps, collisions, etc will make a huge impact to get the players satisfied with their gameplay.

Reference

1. *https://miro.com/app/board/uXjVNLPJOIU=/*