

# Design Document

## Concept

*What you have to do for that level*

- Player has to walk around the level and interact with certain items
- player's spaceship has malfunctioned and has to carry out an emergency landing
- After crashing, the player has to check on the spaceship's core, and walk around the area
- The player will meet with an npc and talk to them, and do some tasks for the npc
- The npc has a crystal that is powerful enough to charge up the player's crystal, which will help the player go back home. However the npc dropped his crystal in a well in a cave
- The player will go into a cave to retrieve the crystal for the npc, and it back outside
- The player then gets teleported back to her ship and places the core, and the player can go back home

## Environment

*Layout of the level*

- On the ship
  1. The room is circular, with a wall in the middle, which divides the control panels and the recreational rooms
- Outside
  1. It is a grassy area, with some trees and puddles around the area
  2. There are 2 main areas, the "walking part" ( where the player is to walk a distance before seeing something) and the npc area
  3. The 2 areas are divided by a small river, where the player has to cross by jumping on lily pads in order to get over
  4. In the npc area, the place has slightly more decorations like a water well, more flowers and mushrooms, and the npc's resting area
- Cave
  1. Suppose to look like an indoor ruin, with a small river. There are surrounding pillars with candles as light sources. There is a wall and a gate that separates the first area and the second area that has the well.

## Beginning

*How the level starts*

- The player starts in her spaceship, there is background music and some beeping sounds coming from the control panels. The player will have some monologue and will have to walk around and interact with their surroundings
- Health and sprint bar will not be used in this area

## Ending

*How the level ends*

- The level ends when the player successfully retrieves the crystal for the npc, and places their powered core on the ship

## Goal

*The objective of each level*

- The ship before crashing
  1. Walk around and interact with items around the ship
  2. Push the emergency lever and enter the second scene which is the crash

- The ship after crash
  1. The player to pick up card and exit the spaceship
- Outside
  1. The player is to pick up the core and started walking in the direction of the path
  2. Player has to jump over lily pads to get across the river
  3. The player is to talk to the npc at the end of the area and perform tasks for him
  4. Enter the cave to help the npc retrieve his crystal
- cave
  1. Cross over the river on the bridge
  2. Retrieve the crystal
  3. Go back out
- Outside part 2
  1. Give the npc his crystal
  2. After being teleported back to the ship, place the core

## Challenge

*Obstacles to overcome and reach goal*

- In the Outside scene, the player has to avoid the puddles of water or any form of water otherwise they take damage
- In the Cave scene, the player has to go down the well to retrieve the crystal, but has to climb back up by jumping on rocks

## Reward

*What the player gets when the level is completed successfully*

- The player gets to advance to the next scene
- The player gets to power their core and go home

## Way of Handling Failure

*What to do when the player fails to complete the level*

- The player must restart the scene again

## Understanding Constraints

- This level should take about 10-15 min
- The game has some nicely implemented audio that gives players an immersive experience
- The time I should take to design the level is 2 weeks
- Players are required to have an understanding of keyboard key movements (e.g. WASD for moving around, spacebar to jump)
- The platform this game will be on is PC
- Target audience is anyone interested in playing chill and fun games with some story to it
- STORYLINE:  
You are a cat from the planet of Meowa and you are returning home from a solo mission on another planet. However, halfway through the journey, your ship starts to malfunction because your core has lost its power, and you crashed on an unknown planet. Your mission is to find a way to power your core and get back home to your family
- Player is not bounded by anything, player can only jump once, and has a health bar, thus player should take note of their health otherwise they would die
- Level Detail and Micro Constraints

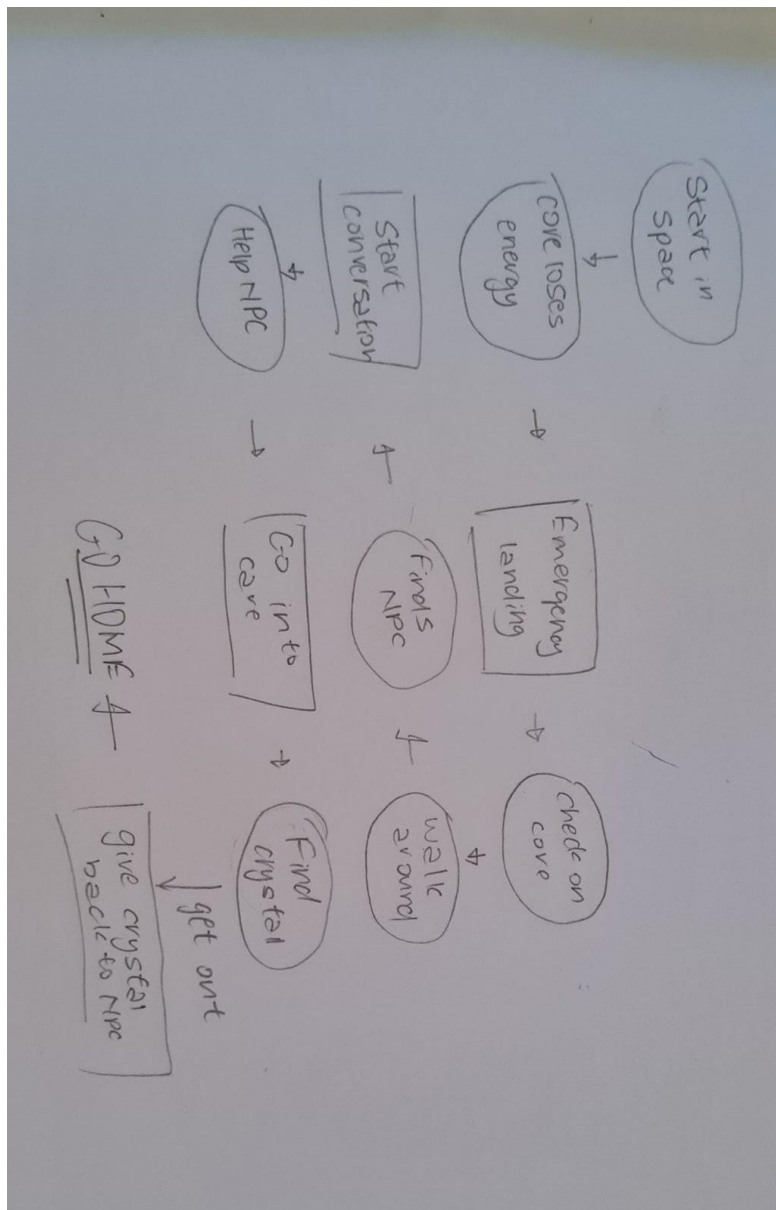
1. This game has no puzzles or combats, it is more focused on story-telling
2. Player has to find a way to power their core (that lost its energy when travelling home)
3. There is an NPC that has a crystal that is strong enough to power the player's core, help the NPC get his crystal and you can go back home

## Brainstorming & Structure

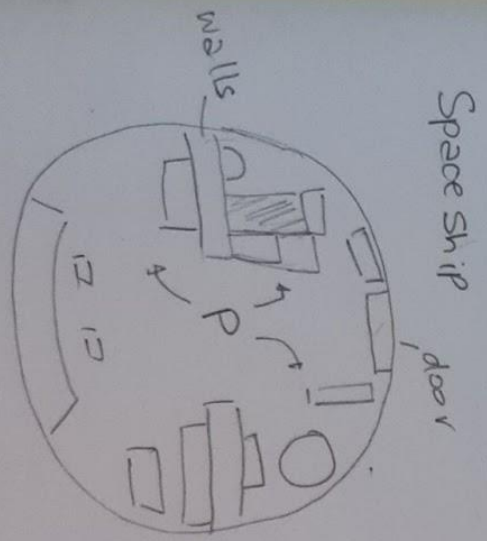
Brainstorming:

- Initial Idea:
  - Thought about making a trading game which also involved having security around shops who carry water guns, which shoot when player is insight. However the coding aspect of the game may not be completed in time due to the duration of the project
  - Another idea was to make the game into a sneaking & stealing game, however that idea was scrapped as I could not think of a storyline for it, as the theme was crashing on an unknown planet, so I thought it was slightly unreasonable to sneak around and steal something from an unknown planet (as you do not even know what the planet has)
- Final Idea:
  - Finally, I brainstormed an idea about making it a story based game, where the player gets to sit back and enjoy the dialogues the character has, and do simple tasks such as collecting items and talking to an NPC. Since the story was leaning towards a somewhat funny storyline, I tried to think of a way for the NPC's interaction to have some kind of quirky personality
- Areas in the game
  1. Before the Crash (Spaceship)
    - This level is safe, there are no potentially dangerous objects around, so the player will not take damage
    - Player also does not have a health or stamina bar, this is so that the player will not assume that there are potential threats in the level
    - This level focuses on interacting with objects around the spaceship
  2. After the Crash (Spaceship)
    - The ship is still safe, however, there is a power outage so the scene will look dark
- 3. Outside
  - The planet is green and has trees and some flowers
  - Health and stamina bar shows here
  - Still no combat, but there are hazards here that deal damage to the player (water puddles, river)
  - Player will meet an NPC here and will start a dialogue with him
- 4. Cave
  - The cave has only one hazard with is a river
  - It looks like an indoor ruins

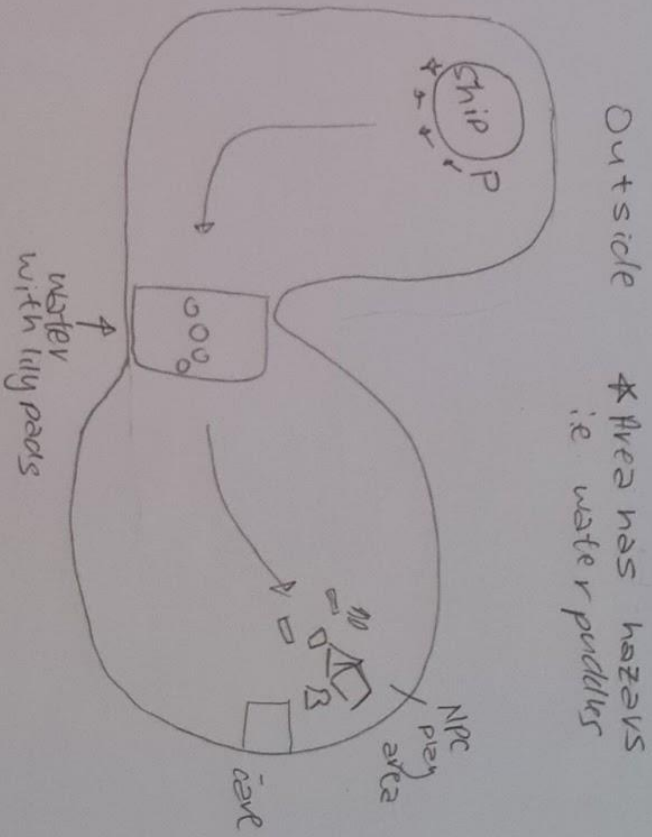
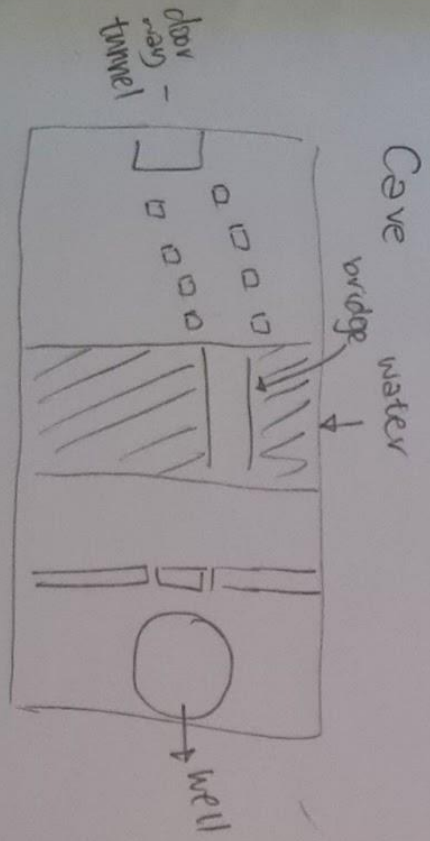
## Bubble Diagram



Rough Map



P-player  
+ - ore



# Asset List

- Textures
  1. White metal/plastic (for spaceship)
  2. Materials with emission (for lights)
  3. Grass
  4. Wood
  5. Dirt (pathways)
  6. Stone (stone walls/cave)
  7. Water - slippery
  
- Models
  - Spaceship
    1. Control table
    2. Pilot chairs
    3. Table
    4. Globe
    5. Normal chairs
    6. Bookshelf
    7. Bed
    8. Extra spacesuit
    9. Exit door
  - Outside
    1. Exterior or spaceship
    2. Crystal core
    3. NPC ghost
    4. Tents
    5. Logs
    6. Grass
    7. Water
    8. Flowers
    9. Mushroom
    10. Stones & rocks
  
- Sounds
  1. Space ambience
  2. Control panel beeps
  3. Crash warning siren
  4. Pick up sounds
  5. Forest ambience
  6. Water flow ambience

## Walkthrough

- Before the crash (Spaceship)
  1. You will spawn in the middle of the spaceship. Wait for the monologue to end, you are walk around the room and interact with some items
  2. Items to interact with is the control panel, the globe, and the bed
  3. After interacting, a siren will go off, saying "computer malfunction", wait for the monologue to end, then push the red emergency button
- After the crash (Spaceship)
  1. The spaceship will be dark, wait for the monologue to finish, then collect the key card that is on the table
  2. Use the key card to exit the spaceship
- Outside
  1. Walk around your ship and check on your core, it should be located at the back of the spaceship

2. Open the core's door and collect the crystal
3. Walk up the path until you see a river
4. The player is sensitive to water, it is advisable for you not to get in touch with water
5. Jump over the lily pads to get across
6. You will see a small red tent with a small red guy standing in front of it, talk to him
7. Once the conversation is over, collect 3 purple mushrooms, 2 yellow flowers and 4 stones and give it to the NPC
8. You will then enter the cave with the npc
- Cave
  1. You now have to walk over to the well that is at the end of cave, you have to cross the bridge to get there
  2. You will encounter a gate, just walk towards it, the gate will open
  3. Jump down into the well and get the crystal
- Outside 2
  1. Talk to the NPC
  2. After that, place the crystal down, and you will be teleported to the outside of your ship
  3. Place back the core and walk towards your door
  4. END OF GAME!!

## Spatial Theory

- I designed the environment in ways that attempts to not show everything at first, but only when they walk through a certain distance, for example:
  1. In the Spaceship, it is a regular spherical shaped room divided by a wall and an opened doorway, the player is spawned facing the window which allows the player to see the planets outside of the ship, which should naturally draw the players attention to the control panel in front. When interacting, I placed 3 different interactions in 3 different corners of the sphere so that this makes the player go around the entire ship to explore. Only one of the corners do not have an interaction because it is already very packed with control panels, TV and a table, which has a particle effect coming out of it
  2. Outside, the terrain is quite big, so the player will have to walk a bit before reaching the actual play area. This is to somewhat give the players a short rest before playing again after the crash. The terrain is also designed to be L shaped, so that the player cannot see the entire scene immediately after leaving the ship. The player will also have to cross a body of water by jumping on lily pads, this makes the player look down, which drags their attention away from the main thing a little longer, so that when the player finally sees the red tent, they will be much closer to it, and will be able to reach the area quickly
  3. In the Cave, the area is just a rectangle, however, what is blocking the player's view is the pillars and bridge, and a wall. This is so that the player cannot exactly see what is ahead of them, but as the player gets closer, the player will be able to see a light that comes from the crystal that is down in the well, which will draw the players towards it

## Credits in Asset Store

Megapoly.Art Vintage Control Room -

<https://assetstore.unity.com/packages/3d/environments/sci-fi/megapoly-art-vintage-control-room-190538>

Sci-Fi Styled Modular Pack - <https://assetstore.unity.com/packages/3d/environments/sci-fi/sci-fi-styled-modular-pack-82913>

Sci-Fi PBR Props - <https://assetstore.unity.com/packages/3d/environments/sci-fi/sci-fi-pbr-props-118783>

Low-Poly Simple Nature Pack - <https://assetstore.unity.com/packages/3d/environments/landscapes/low-poly-simple-nature-pack-162153>

Terrain Texture Pack Free - <https://assetstore.unity.com/packages/2d/textures-materials/nature/terrain-textures-pack-free-139542>

Free Low Poly Nature Forest - <https://assetstore.unity.com/packages/3d/environments/landscapes/free-low-poly-nature-forest-205742>

Simple, Low-Poly Decorative Plant Assets - <https://assetstore.unity.com/packages/3d/vegetation/simple-low-poly-decorative-plant-assets-252714>

AA 3D Low Poly Nature Pack - <https://assetstore.unity.com/packages/3d/environments/aa-3d-low-poly-nature-pack-227820>

Earth & Planets skyboxes - <https://assetstore.unity.com/packages/2d/textures-materials/sky/earth-planets-skyboxes-53752>

Translucent Crystals - <https://assetstore.unity.com/packages/3d/environments/fantasy/translucent-crystals-106274>

Little Ghost (Free) - <https://assetstore.unity.com/packages/3d/characters/little-ghost-free-229325>



Future Beeps LITE EDITION - <https://assetstore.unity.com/packages/audio/sound-fx/future-beeps-lite-edition-63357>

Sc-Fi Music - <https://assetstore.unity.com/packages/audio/music/sc-fi-music-214312>

Ultra Sci-Fi Game Audio Pack Vol. 1 - <https://assetstore.unity.com/packages/audio/sound-fx/ultra-sci-fi-game-audio-ui-pack-vol-1-155417>

Nature – Essentials - <https://assetstore.unity.com/packages/audio/ambient/nature/nature-essentials-208227>

The ancient forest of the fairies - <https://assetstore.unity.com/packages/audio/music/the-ancient-forest-of-the-fairies-210914>

8 – BIT Diversity Collection: FREE EDITION (14 Sounds) - <https://assetstore.unity.com/packages/audio/8-bit-diversity-collection-free-edition-14-sounds-32655>