

3D Technologies For The Web

Maze Game – Documentation

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Game Scenario/Plan

In my game scenario the user must navigate a mysterious maze which features ADW's or Alien Defence Walls. These guard the CODE device which is easily visible at the centre of the maze. They also block maze routes so that the player is forced to find a new one.

The player must collect four hammers, which (on collection of final/fourth) will destroy the ADW's and reveal a navigation aid.

Once CODE is found and collected, the user is instructed to return to the spaceship and escape!

Execution

1. *An external maze design, which features a network of routes, only one of which will lead to the centre of the maze.*

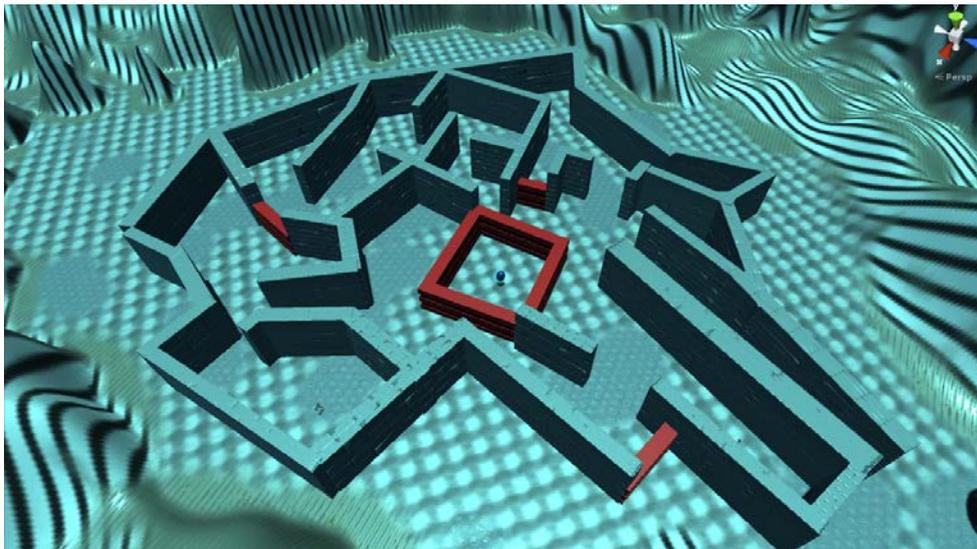


Image of Maze from above.

My maze features a number of routes, which either lead the player to collect hammers or result in a dead-end. Although there is no exact route to the CODE device, by collecting the hammers the user gains access to collect it at the centre of the maze.

2. *An object or system that attempts to hinder the player's progression through the game.*

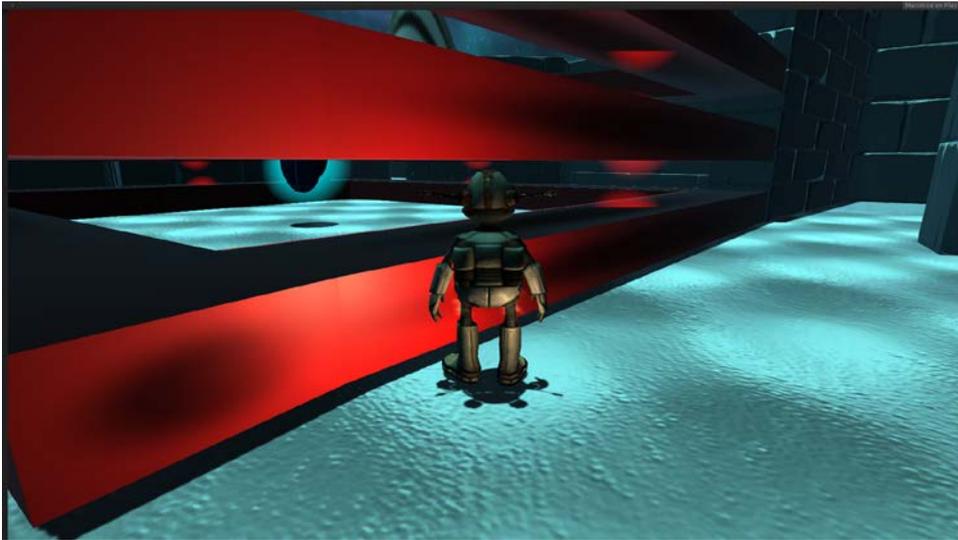


Image of ADW's blocking CODE

My hindrance is named ADW or Alien Defence Wall, these block access to the CODE device which also makes it difficult to navigate to different areas of the maze.

3. *Objects for the player to collect, which the player uses to complete his mission in finding and returning with the CODE device.*



Image of spinning hammer

I am using a prefab (*ref.1*) of a hammer which needs to be collected, there are four of these in total and by collecting them they will remove the ADW's. Thus allowing access to the CODE device.

4. A player maze navigation aid that is enabled via a required task or challenge.



Image of mini-map enabled and the enabler (four items collected).

By collecting all four hammers, this also reveals a camera overlay which displays a birds-eye view of the maze. This is intended to help the player find the CODE and exit the maze. Also attached above Lerpz is a sphere which aids the legibility of the Mini-Map so that the user can see where they are.

5. A dynamic HUD to show the game state in terms of object acquisition and game progression.

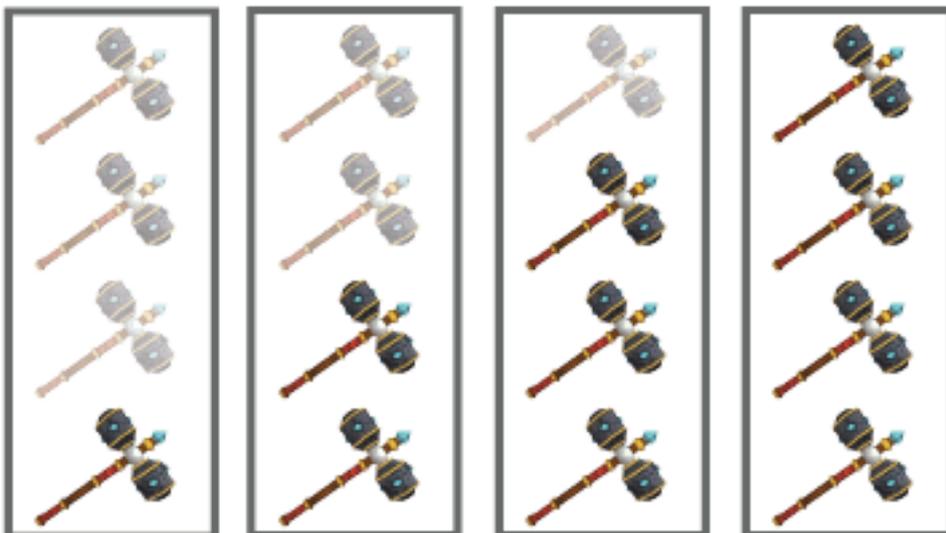


Image of HUD acquisition design.



Image of HUD acquisition in game – 2 collected.

My dynamic HUD element will show 4 hammers slightly faded. As you acquire each hammer the display will update to show the hammers at 100% opacity.

During the game, progression is shown via text feedback which displays on screen. This informs the player of what to do and what has happened.

- a.) If you attempt to leave in the spaceship without the CODE device, the following message is returned: "You must collect the CODE device to fix your spaceship."
- b.) Once all 4 hammers are collected the following message appears: "The Alien Defence Walls have been removed successfully! Find the CODE Device!"
- c.) On collection of the CODE device, the following message appears "CODE collected! Now return to your spaceship to escape."



Image of A.

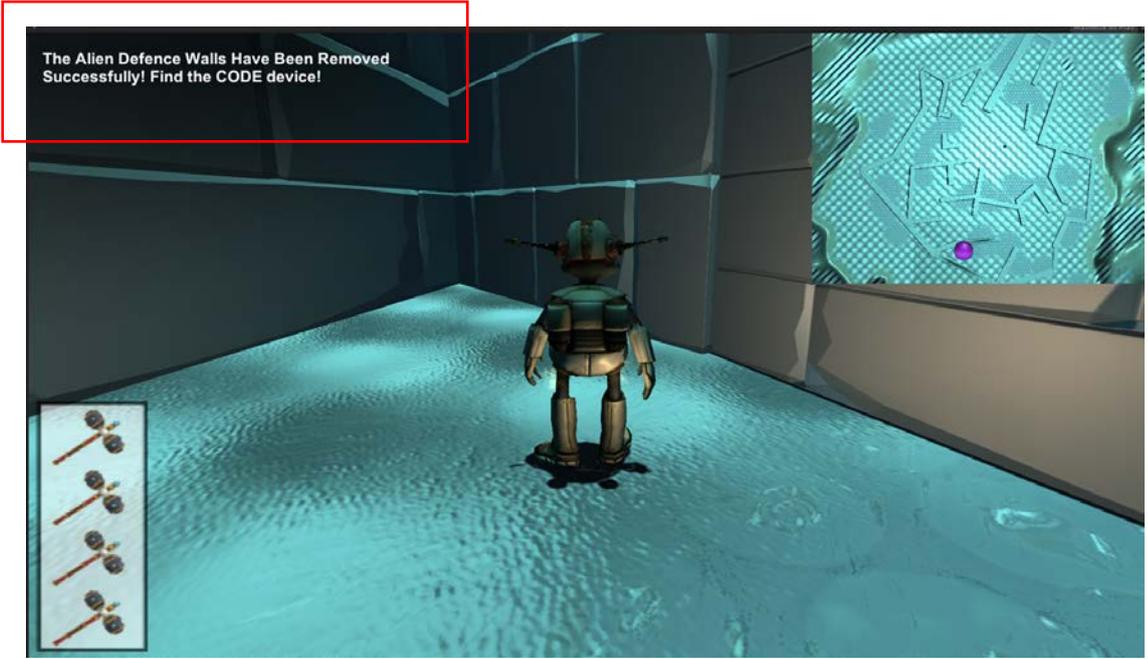


Image of B.



Image of C.

6. A splash screen at the start describing the game objective, player controls and any items that need to be collected to assist the player in advancing through the game.

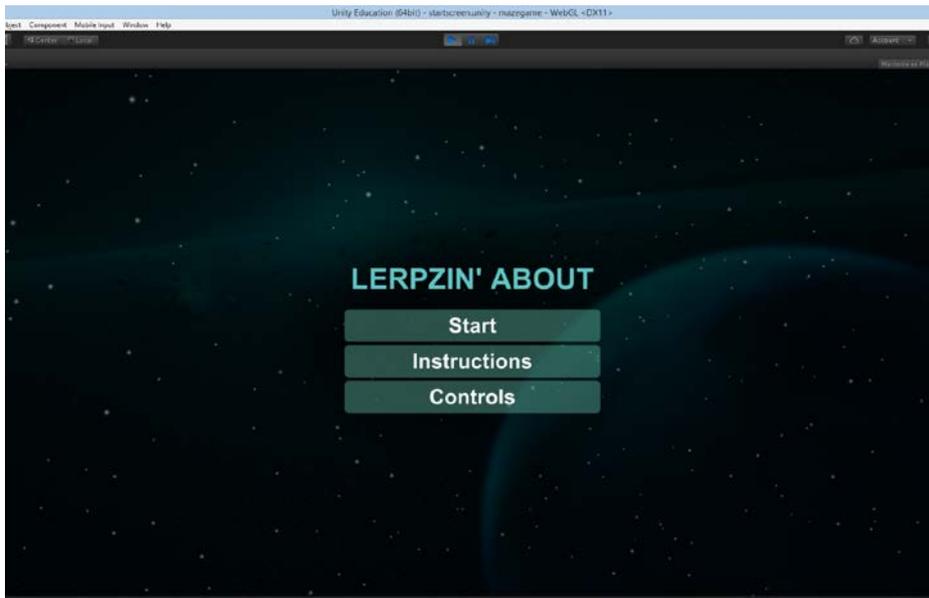


Image of start splash screen

After following a tutorial (ref.2), I built on what I learnt to produce the start-menu Splash Screen. It features a UI menu which allows the user to navigate to play the game ('Start'), read the instructions ('Instructions') and view the controls ('Controls').

The instructions convey what the user needs to do, what to collect, what to avoid and how to complete the game.

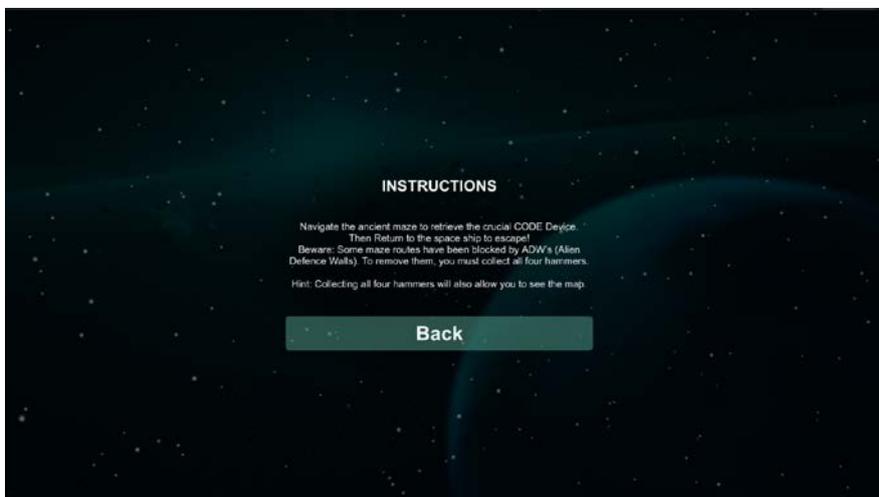


Image of start splash screen – Instructions

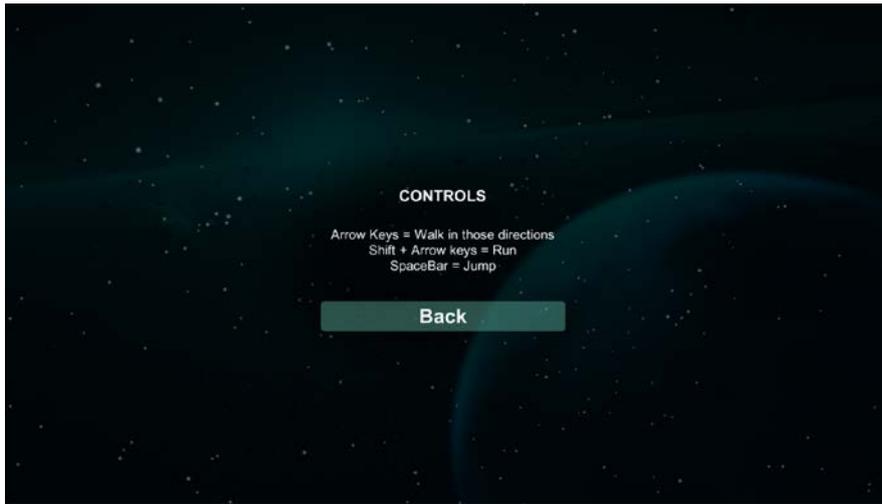


Image of start splash screen – Controls

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7. Also a splash end-of-game screen with an appropriate message to the player.

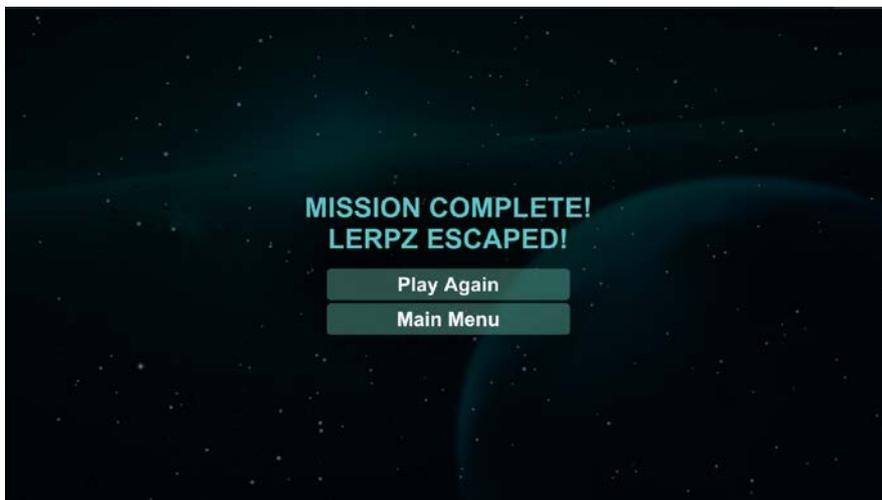


Image of end splash screen

After colliding with the spaceship and collecting CODE a final Splash Screen is enabled. Here a final message is declared "Mission Complete! Lerpz Escaped!" The option to play again ('Play Again') is also provided along with the option to return to the start Splash Screen to view the main menu ('Main Menu').

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8. Ambience and event sounds that add to the gameplay and user experience.

Ambient Sound

My ambient sound (*ref.3*) plays on awake and in a loop across both the start screen and the game. The sound is in the style of Sci-fi which adds to the mysterious world Lerpz has found himself.

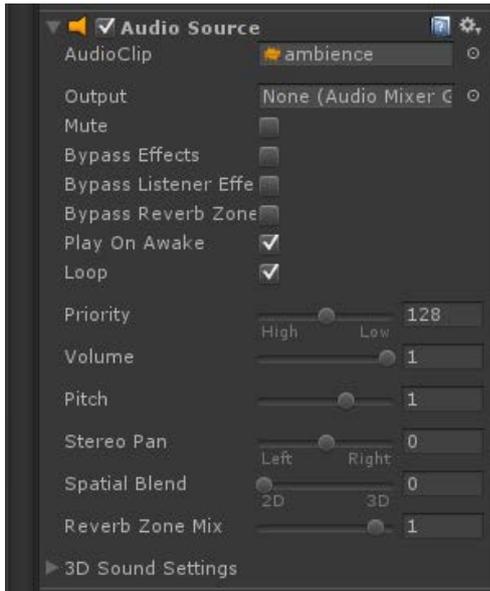


Image of Ambient sound setting

Event Sound

On collection of each hammer the event sound is triggered. This laser sound (*ref.4*) provides audio feedback to the user and adds to the overall game experience.



Image of Event Sound setting



Image of event sound connect to player collision.

ASSET SOURCES

ref.1 – Hammer Prefab: <https://www.assetstore.unity3d.com/en/#!/content/39269>

ref.2: - <https://unity3d.com/learn/tutorials/topics/user-interface-ui/creating-main-menu>

ref.3: - <https://www.freesound.org/people/InSintesi/sounds/347566>

ref.4: - <https://www.freesound.org/people/debsound/sounds/339169>

TEXTURES

<https://www.assetstore.unity3d.com/en/#!/content/13237>

<https://www.assetstore.unity3d.com/en/#!/content/13005>

<https://www.assetstore.unity3d.com/en/#!/content/64841>

PREFABS

White Smoke: <https://www.assetstore.unity3d.com/en/#!/content/20404>

SKYBOX

<https://www.assetstore.unity3d.com/en/#!/content/3392>