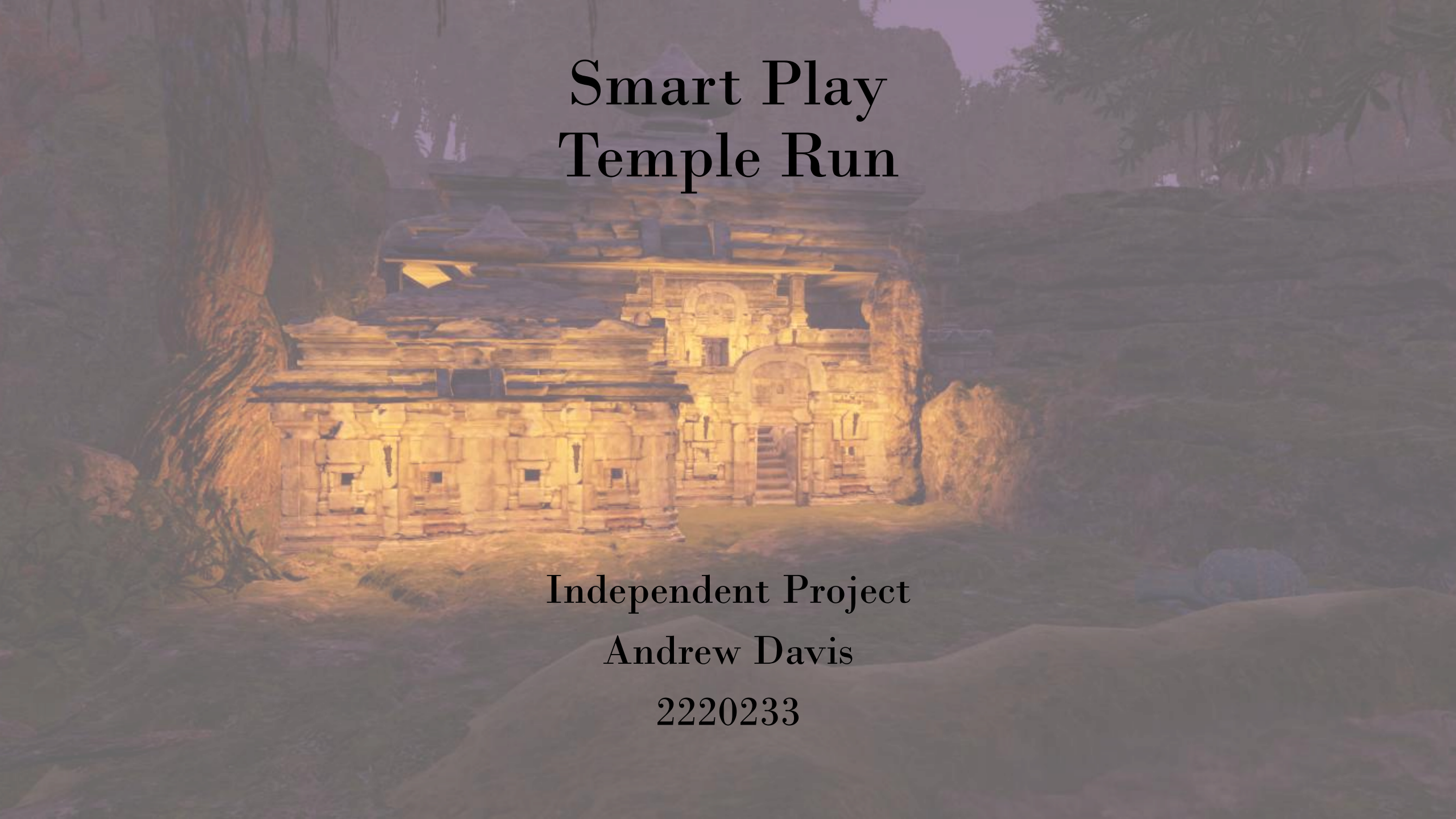




Smart Play Temple Run

Independent Project

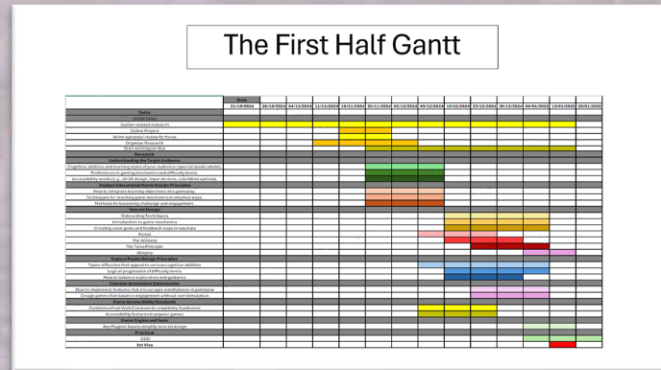
Andrew Davis

2220233

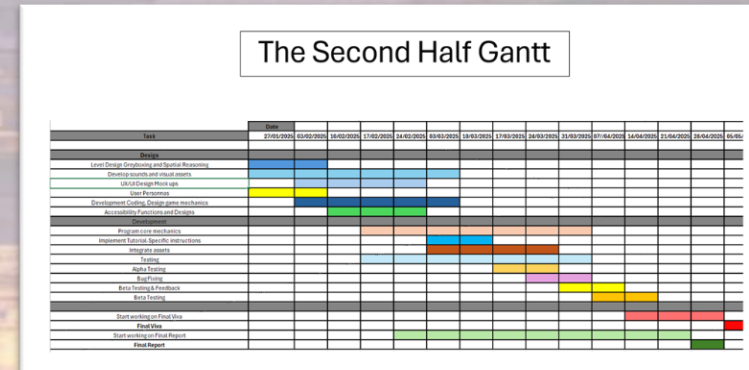
Recap/Synopsys

- Name of project – Smart Play: Temple Run
 - Intentions
 - Highlighting relevant case studies
 - Research and literature that informed
- Project planning process, including the Gantt charts

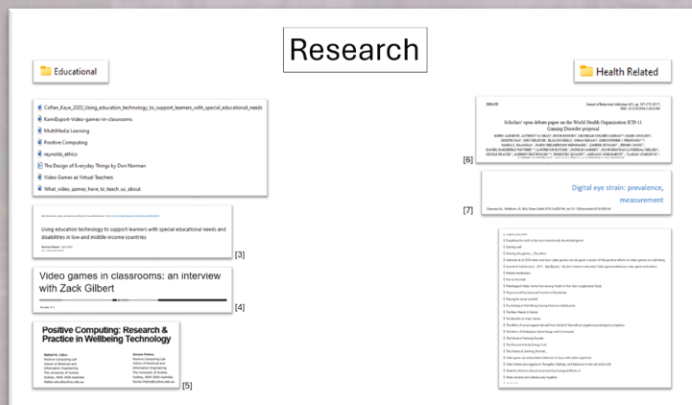
Recap



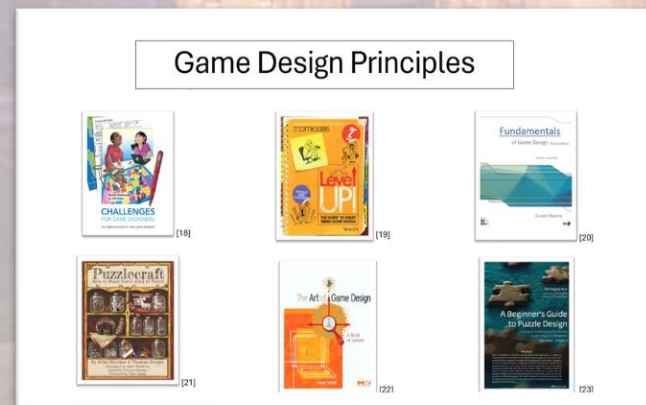
[Figure 1: Gant chart for 1st half of the project]



[Figure 2: Gantt chart for 2nd half of the project]



[Figure 3: Research Journals, Reports and articles]



[Figure 4: Books on Game design, puzzle-craft]



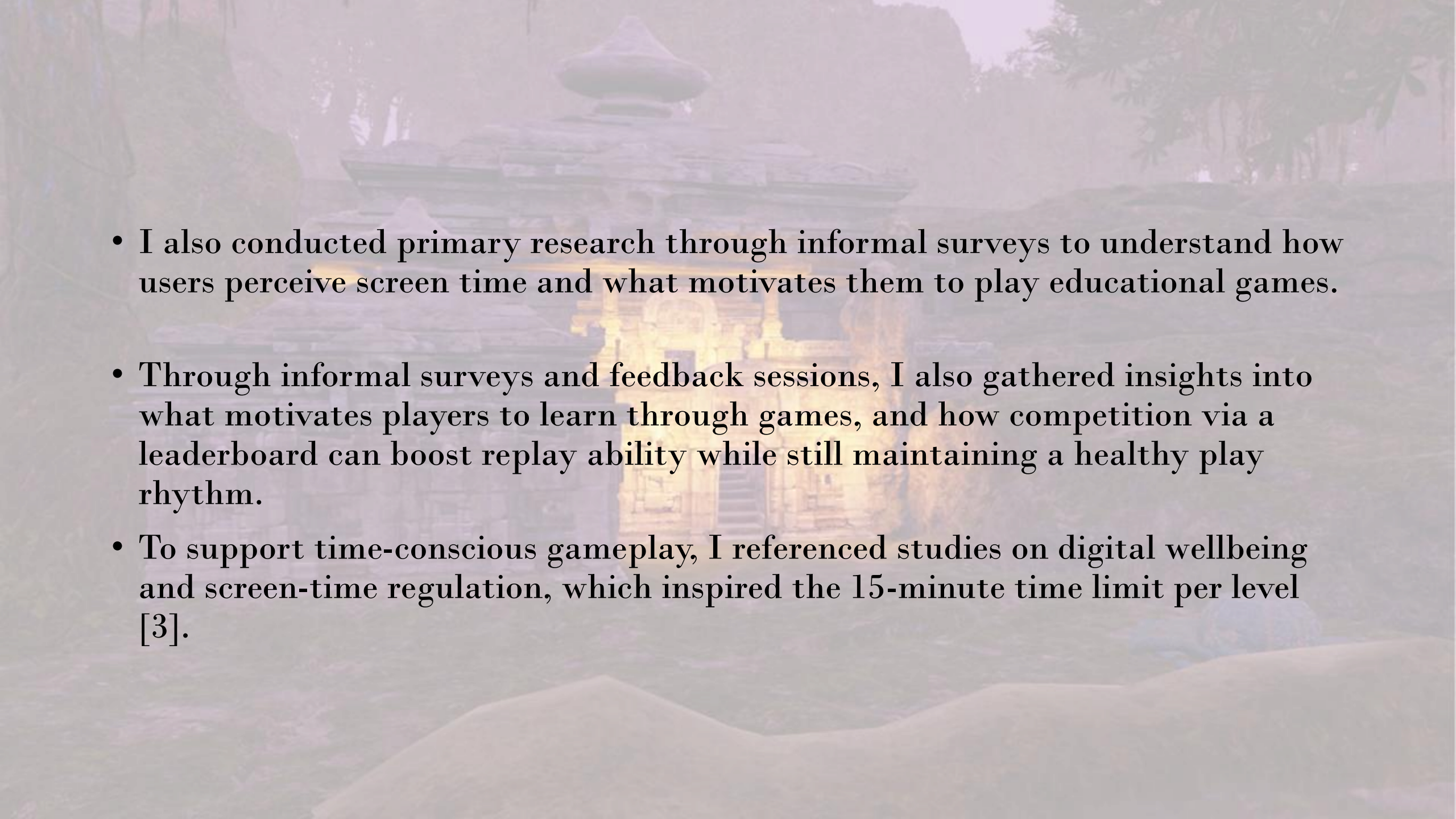
[Figure 5: Case Studies from Report]

Design Approach?

My design decisions were grounded in research on game-based learning, cognitive engagement, and digital behaviour.

James Paul Gee's learning principles in games shaped how I structured the puzzles and learning outcomes [1].

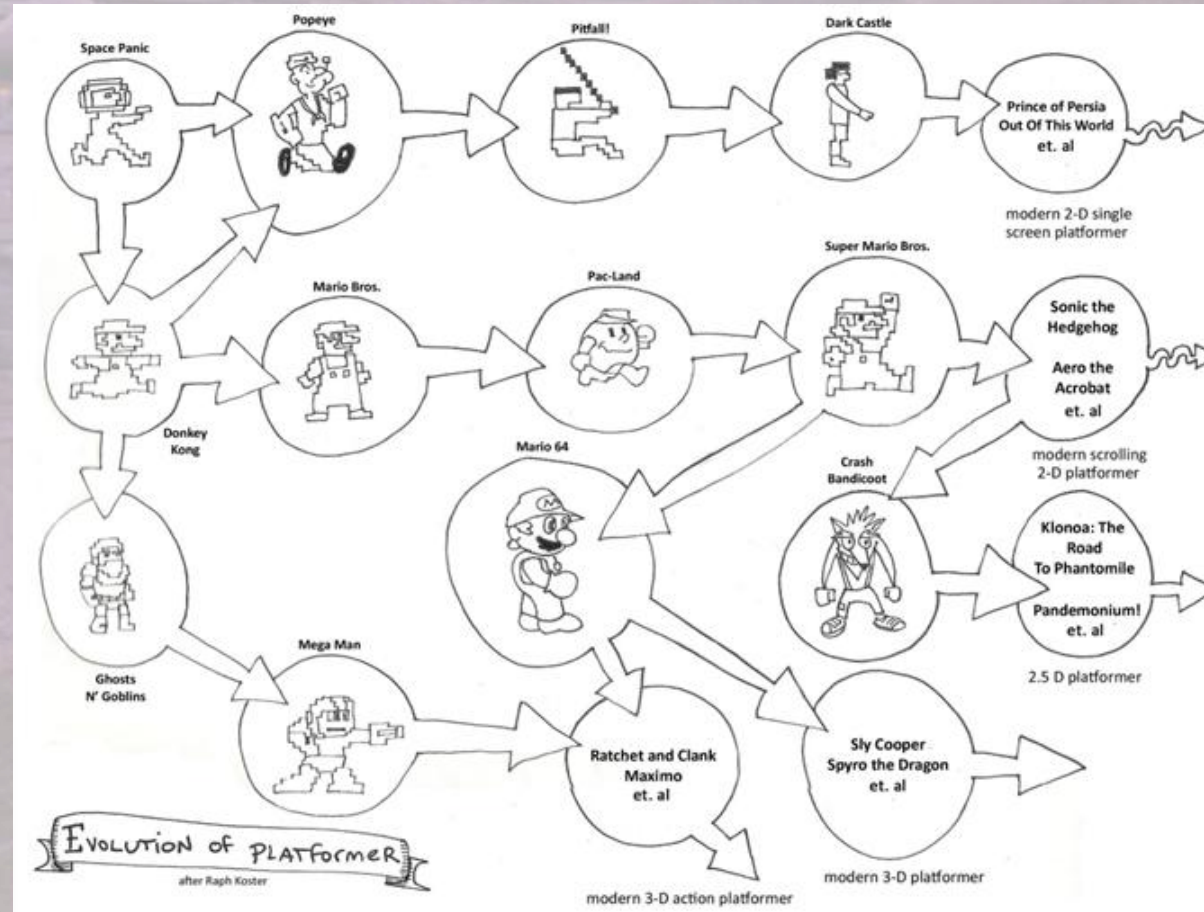
To maintain immersion and engagement, I referred to Mihaly Csikszentmihalyi's theory of 'flow', making sure gameplay balanced challenge with the player's skill level [2].

- 
- I also conducted primary research through informal surveys to understand how users perceive screen time and what motivates them to play educational games.
 - Through informal surveys and feedback sessions, I also gathered insights into what motivates players to learn through games, and how competition via a leaderboard can boost replay ability while still maintaining a healthy play rhythm.
 - To support time-conscious gameplay, I referenced studies on digital wellbeing and screen-time regulation, which inspired the 15-minute time limit per level [3].

Core Objectives

- Create Time Managed puzzle-based levels.
- Embedding educational content within immersive exploration.
- Building a Leaderboard system to promote replay and reflection.

Demographics & Game Design



[Figure 6: Iterative design principles as shown by Scott Rogers: level up]

Leaderboard System

LEADERBOARD		
Name	Race Tutorial	Time
Name...		00:00:00
Name...		00:00:00
Name...		00:00:00
Name...		00:00:00
Name...		00:00:00
BACK		

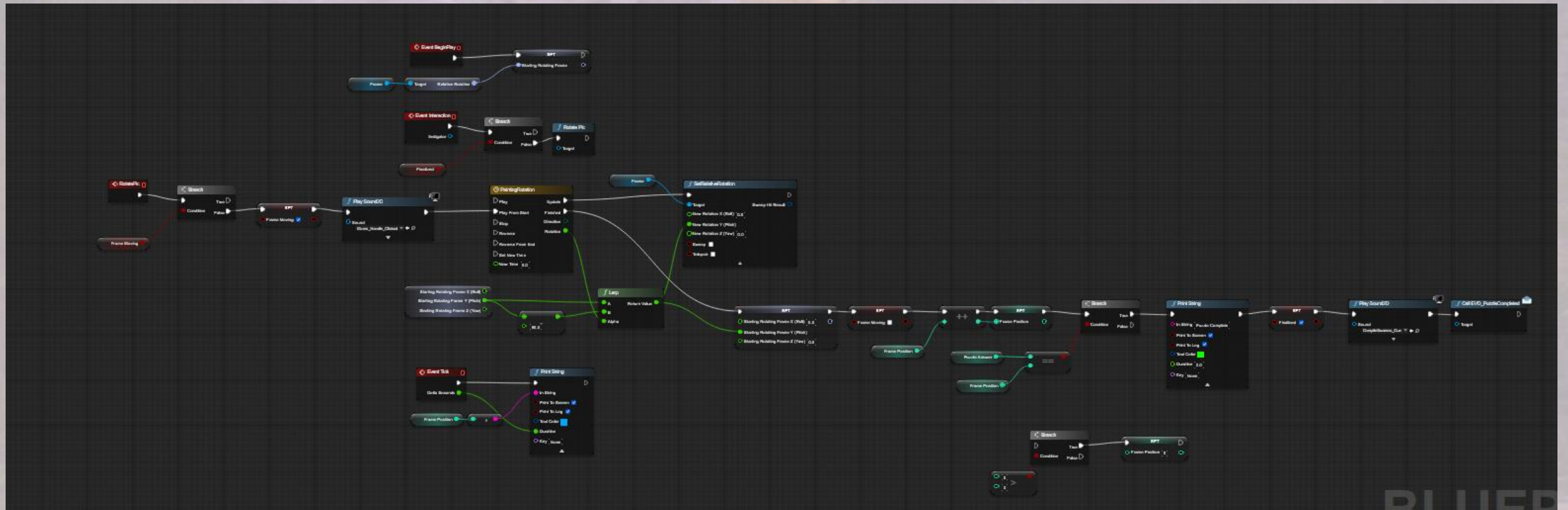
[Figure 7: Leaderboard widget]

Puzzle Interaction Demonstration



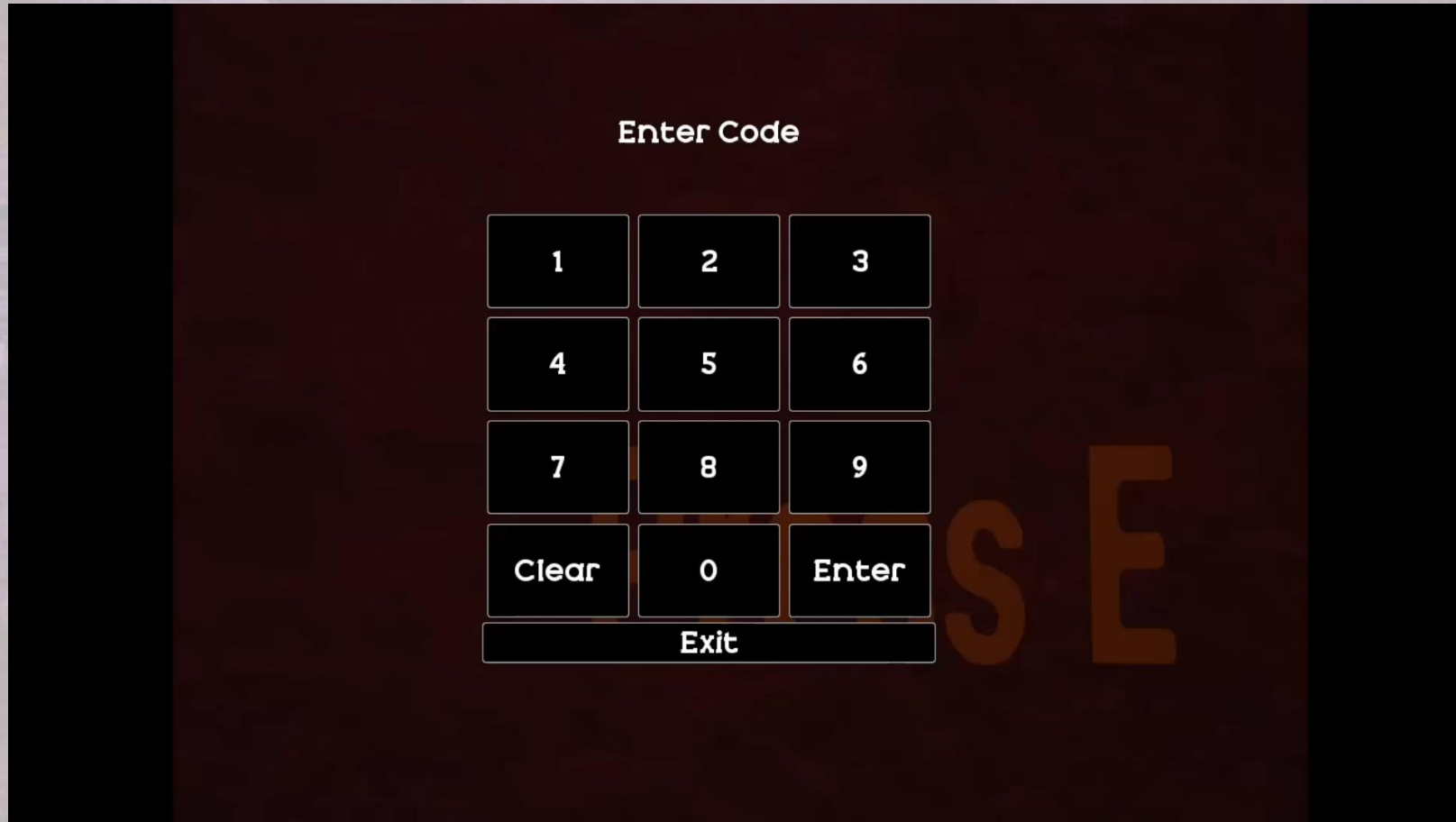
[Figure 8: Puzzle Interaction]

Puzzle Blueprints



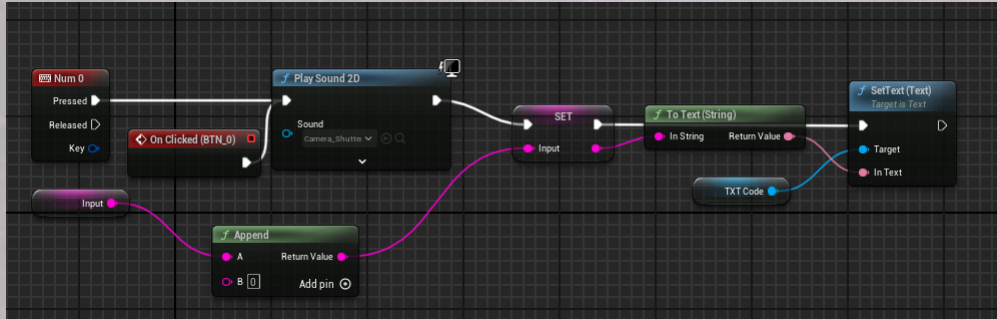
[Figure 9: Call function to turn the picture and register it at the correct location]

Number Pad Demonstration

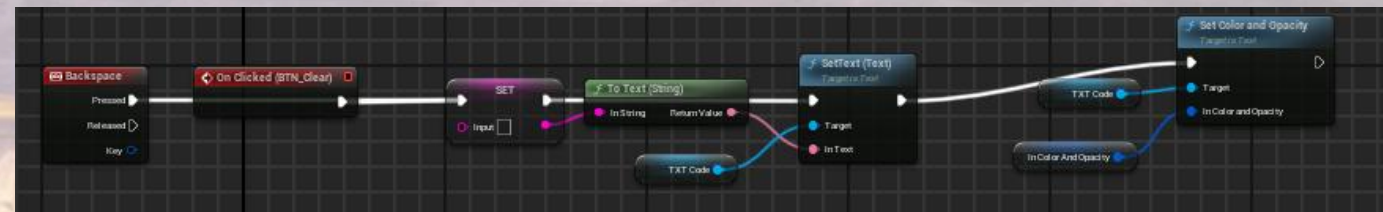


[Figure 10: Entering code from puzzles]

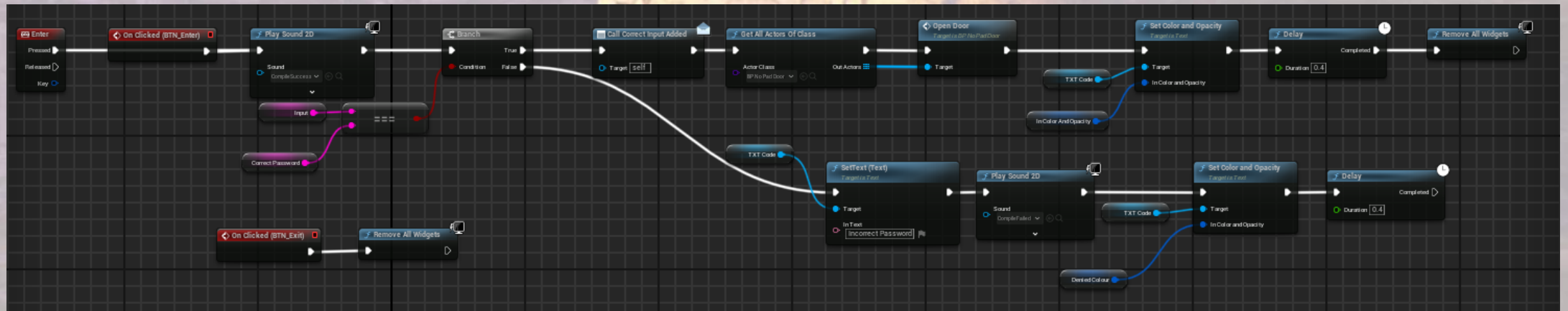
Number Pad Blueprints



[Figure 11: Input code for numbers]

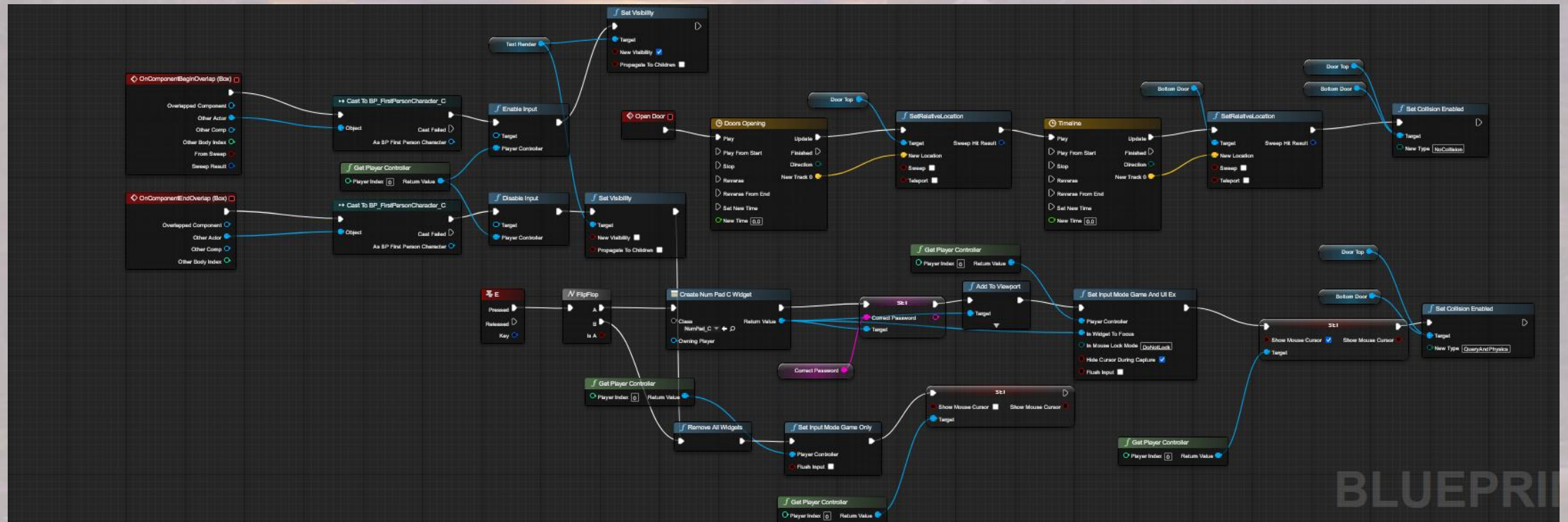


[Figure 12: Input code for backspace]



[Figure 13: Call function for correct or incorrect code with sound played and animation for door to open]

Door Opening Blueprints



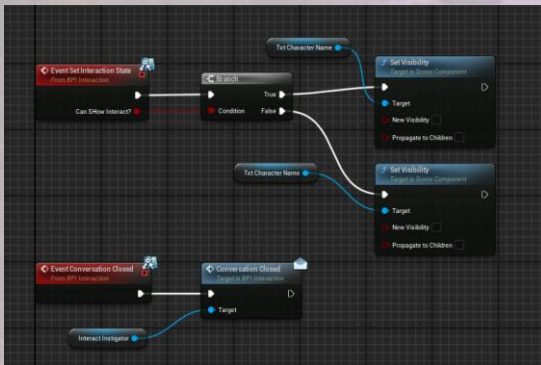
[Figure 14: Call function to open coded door]

Environmental Demonstrations

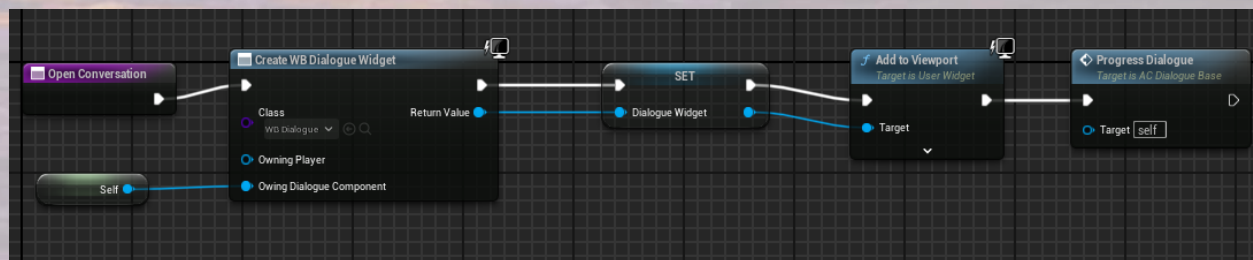


[Figure 15: Demonstration of Narrative engagement]

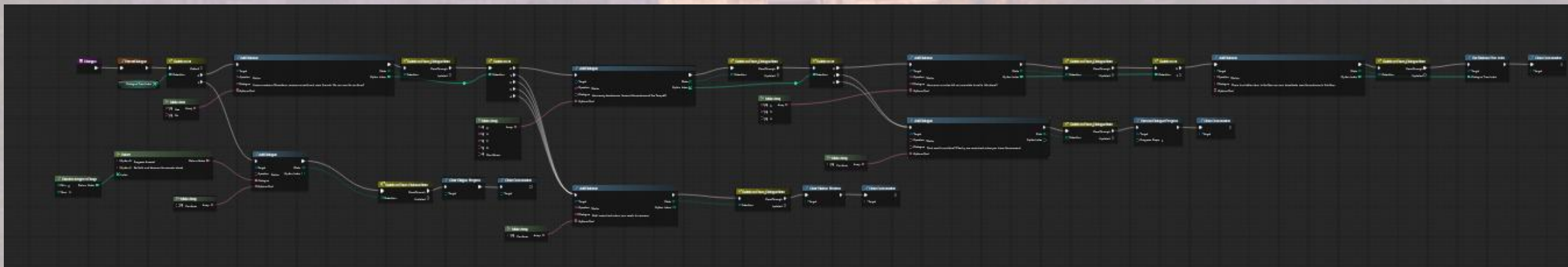
Dialogue Blueprints



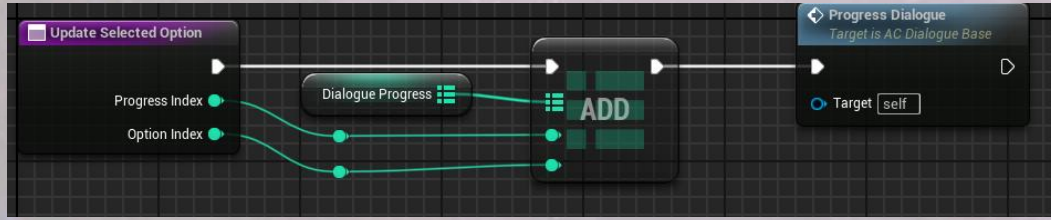
[Figure 16: Does object implement Interact Interface?]



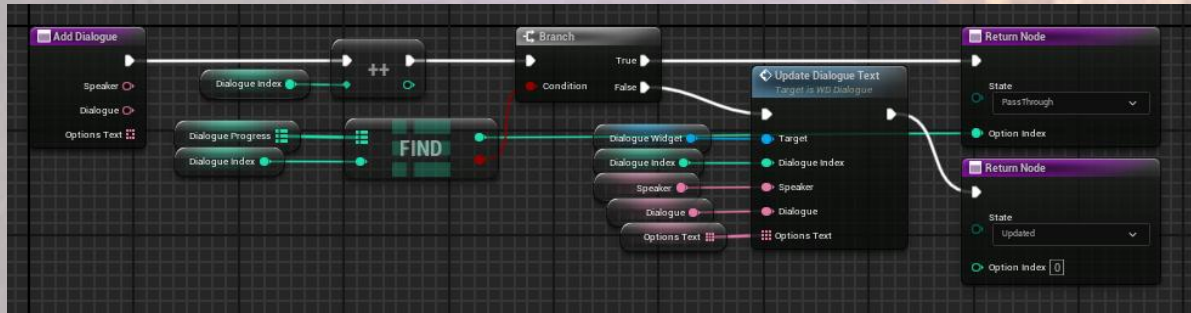
[Figure 17: Call function to open conversation]



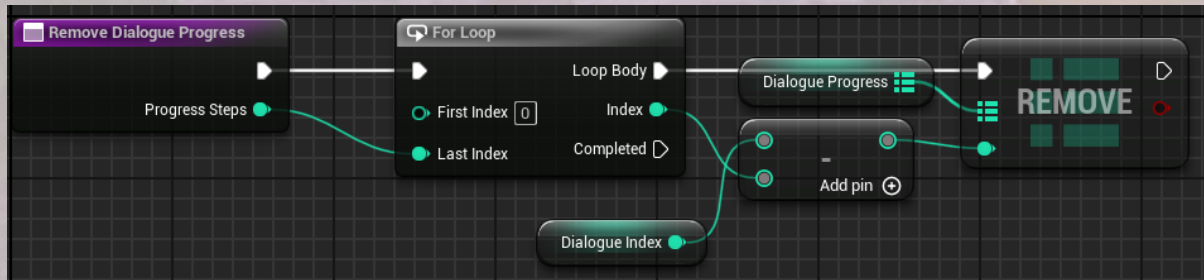
[Figure 18: Dialogue Tree]



[Figure 19: Call function to update conversation]



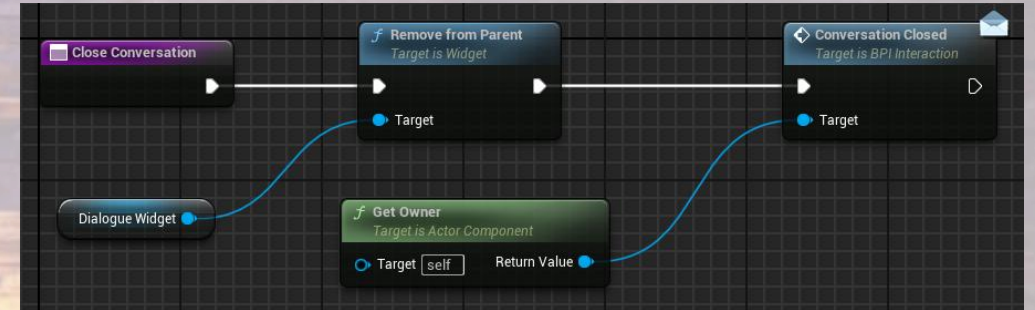
[Figure 21: Call function add dialogue]



[Figure 23: Call function to remove dialogue progress]



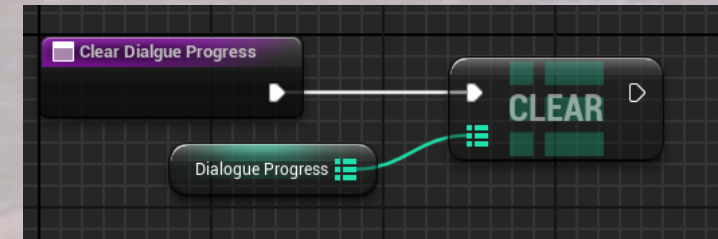
[Figure 20: Call function to set dialogue index]



[Figure 22: Call function to close conversation]

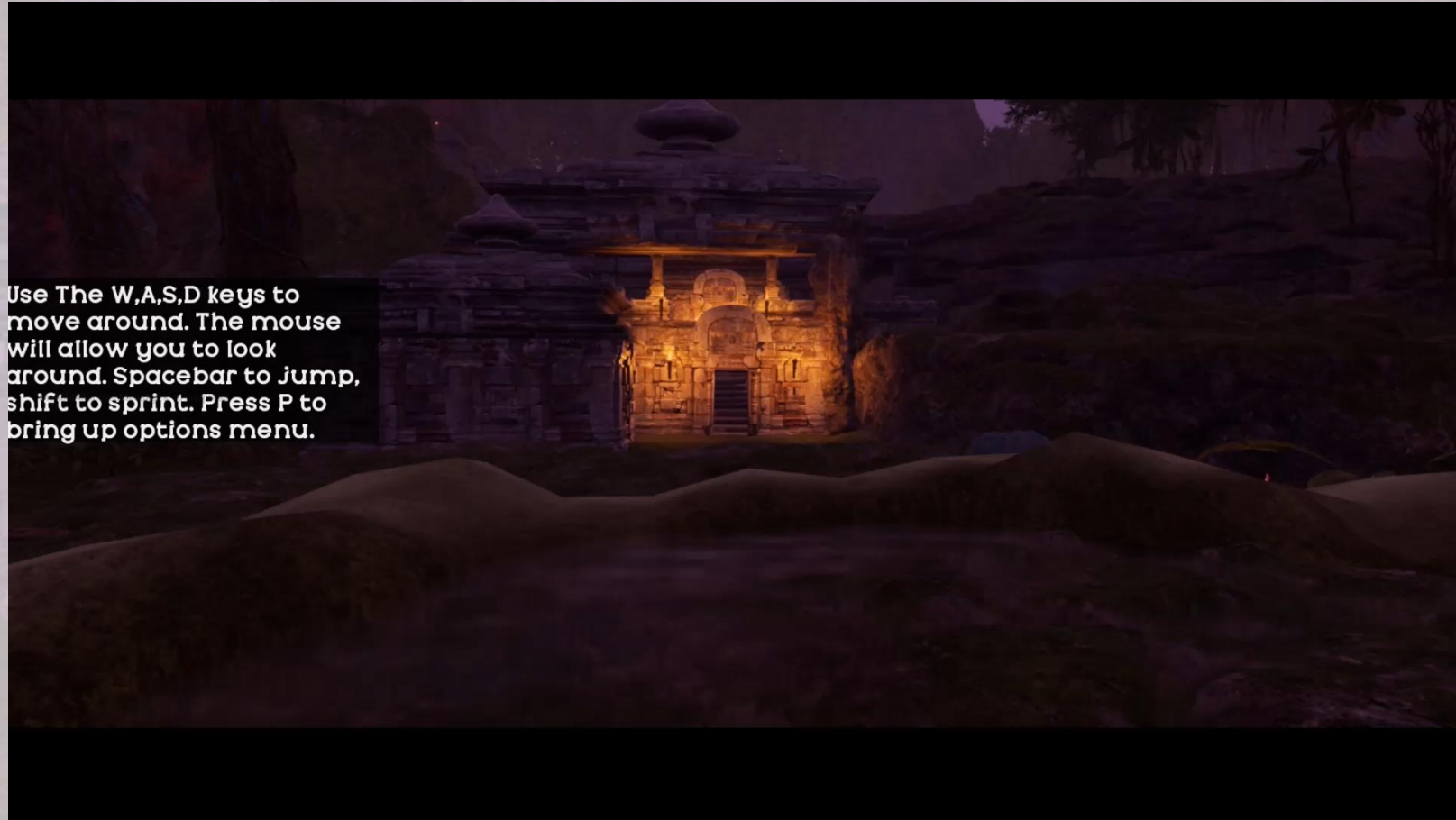


[Figure 24: Call function to progress dialogue]



[Figure 25: Call function to clear dialogue progress]

Notification Demonstration



[Figure 26: Footage showing notification system]

Notification Demonstration



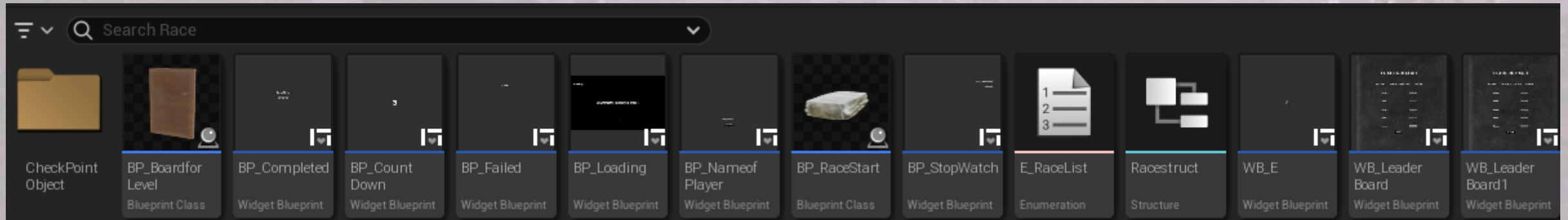
[Figure 27: Hints to progress]

Timer Demonstration

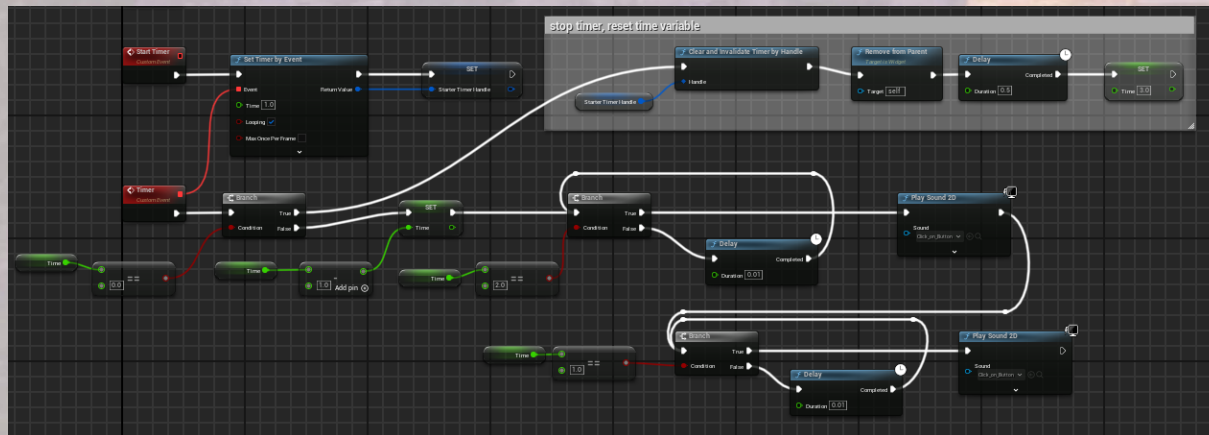


[Figure 28: Countdown and timer display]

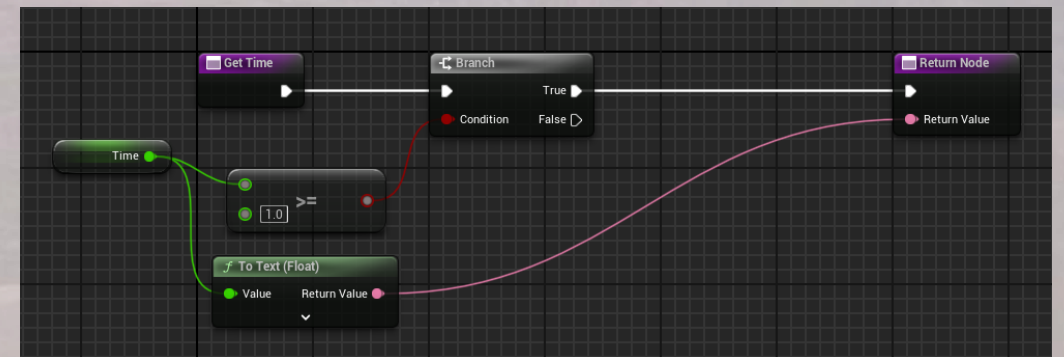
Timer Blueprints



[Figure 29: Blueprint components to create the race aspect of the level]

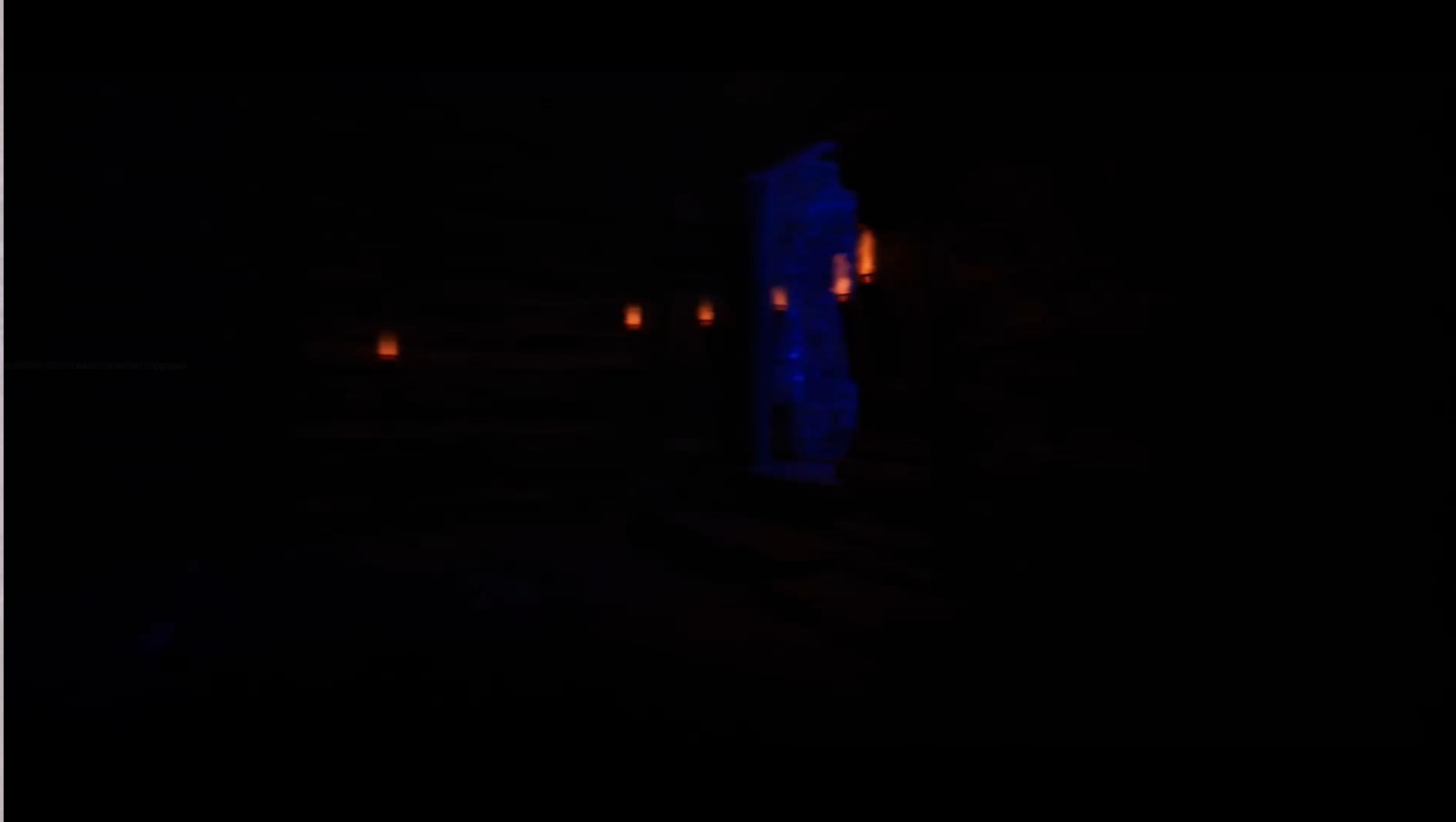


[Figure 30: Call function to initiate countdown]



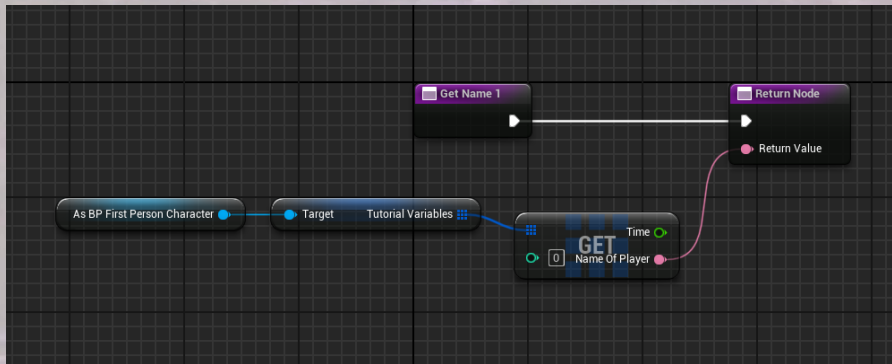
[Figure 31: Call function to get time]

Leaderboard Demonstration

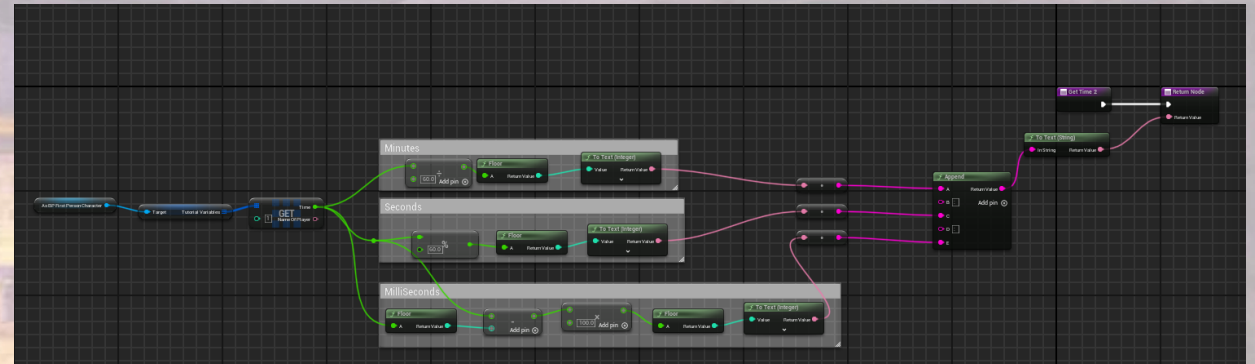


[Figure 32: Completed level Leaderboard finish]

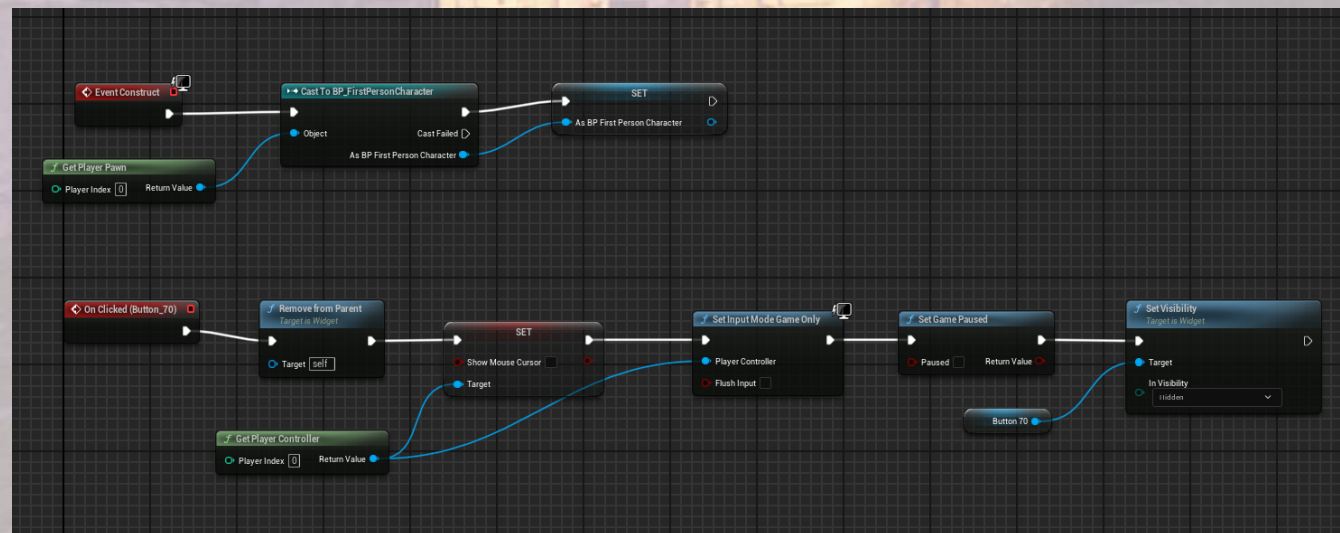
Leaderboard Blueprints



[Figure 33: Get Player Name function]



[Figure 34: Get Player Time Code]

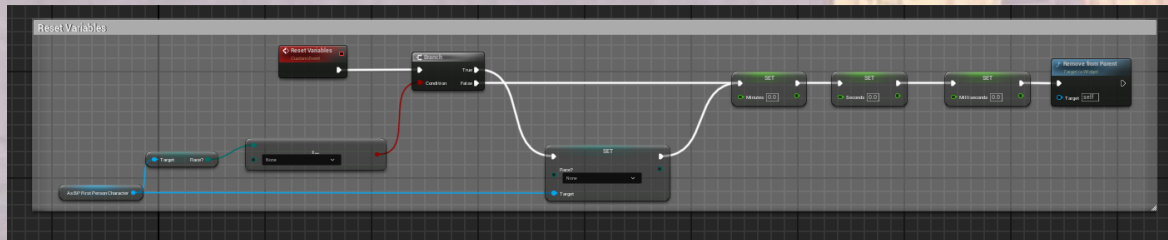


[Figure 35: Input settings for completed race time]

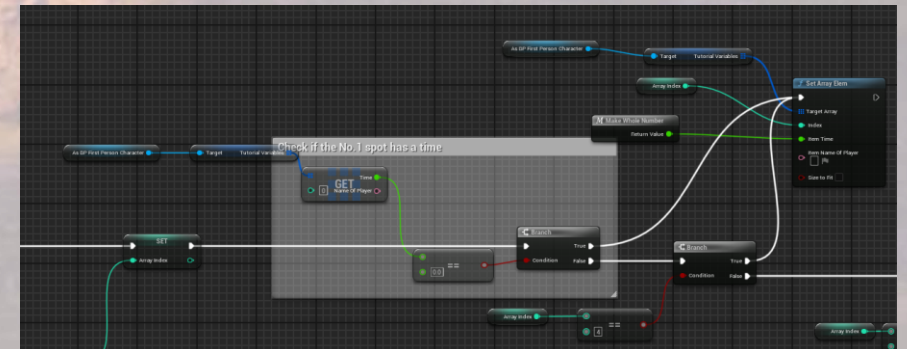
Leaderboard Blueprints



[Figure 36: Starting and stopping stopwatch]

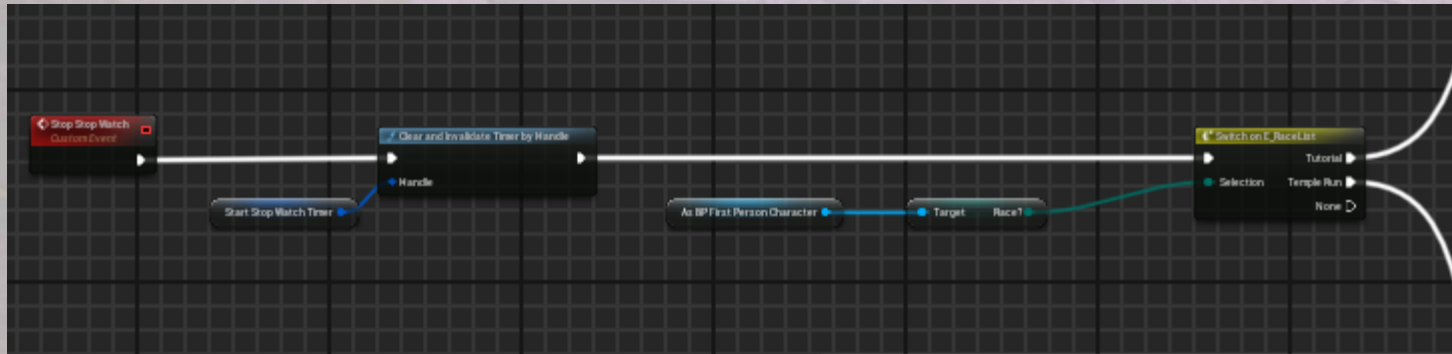


[Figure 37: Function to call Reset Variables]

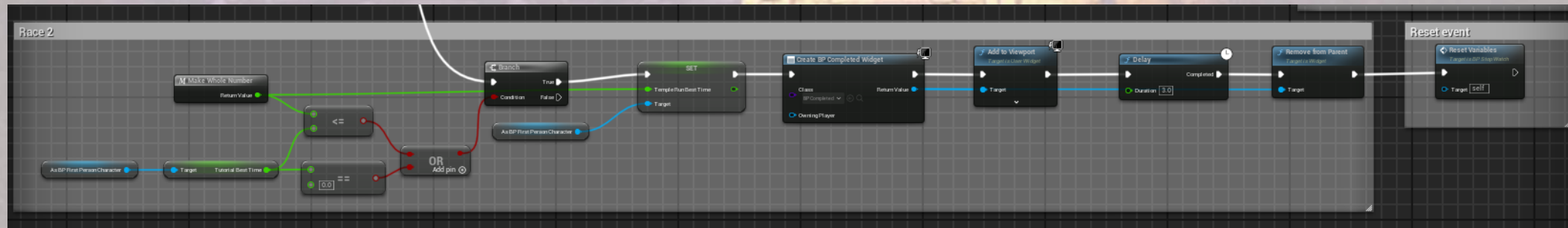


[Figure 38: check if no.1 spot is taken]

Leaderboard Blueprints



[Figure 39: Call function which race to apply leaderboard]



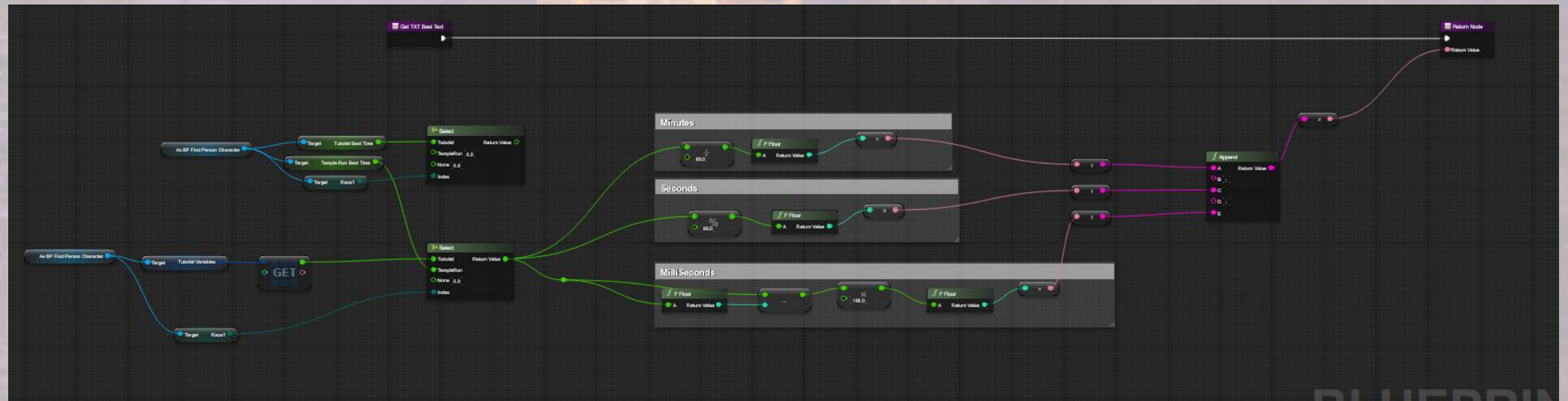
[Figure 40: Non tutorial race Leaderboard]

Leaderboard Blueprint



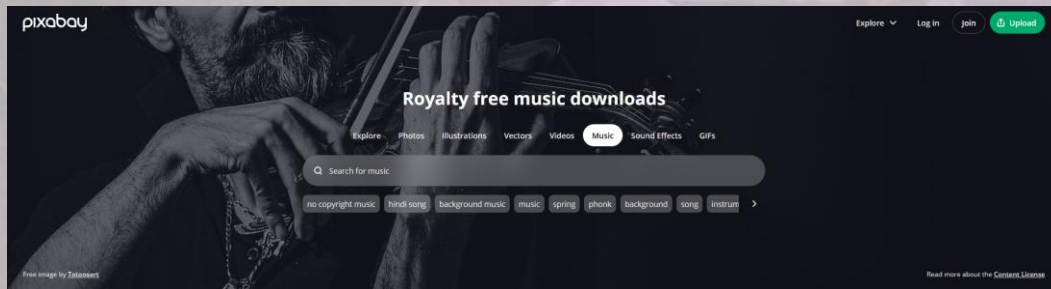
[Figure 41: Shows how to calculate the timer score by check down the list to see if your time is greater than the previous]

Leaderboard Code



[Figure 42: Call function to get best time]

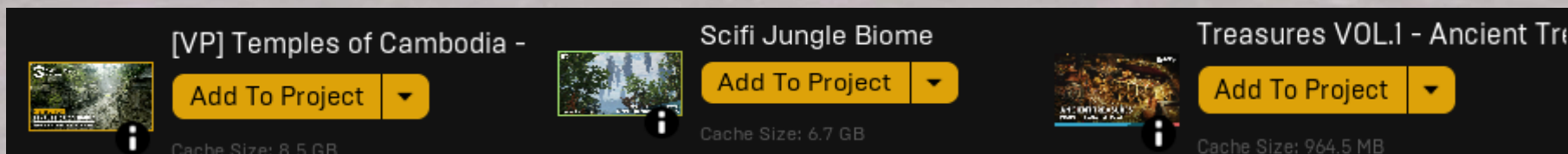
Assets



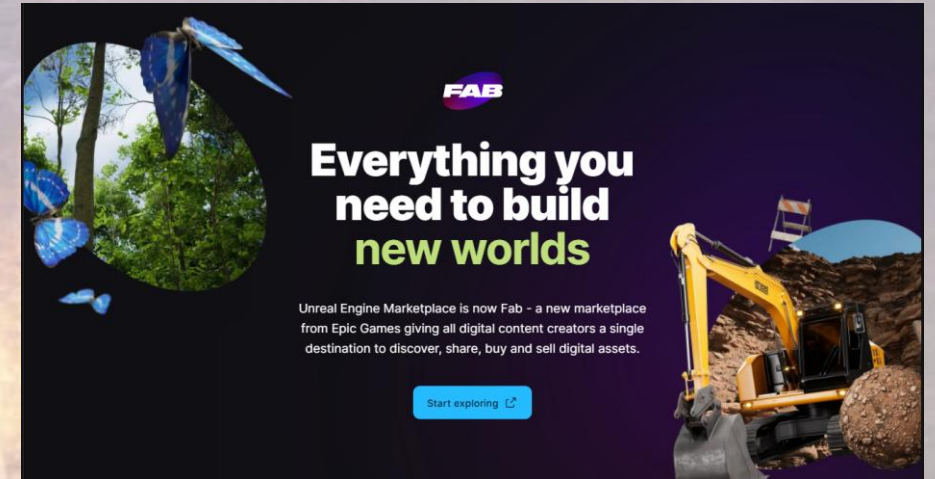
[Figure 45:Homepage to Pixabay]



[Figure 47: Music and sounds folder]



[Figure 48: Selection of free plugins used to assist creating smart play]



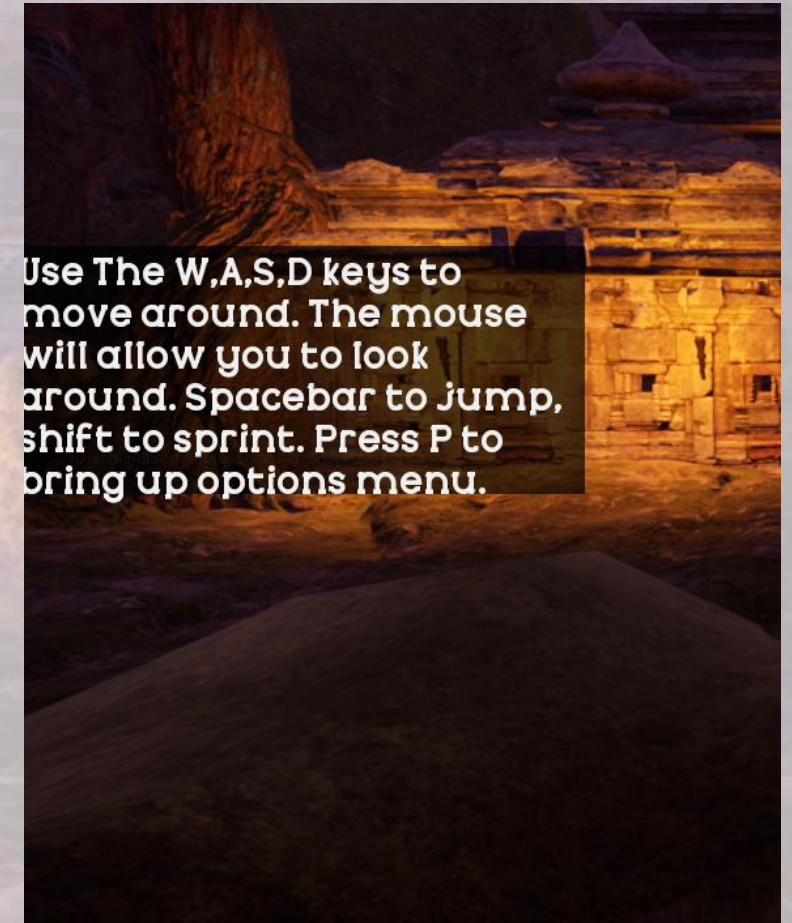
[Figure 46: Homepage to FAB library]

Evaluation and reflection



[Figure 49: Initial help notifications before user feedback]

Through playtesting, I improved visual lighting and added narrative prompts to guide players organically. These changes significantly improved player experience and taught me the value of iterative feedback loops in game design [6] [7].



[Figure 50: Help notification after user feedback]

Transferable & Professional Skills

- Project planning and time management
 - Clear communication
 - Academic
 - Profession

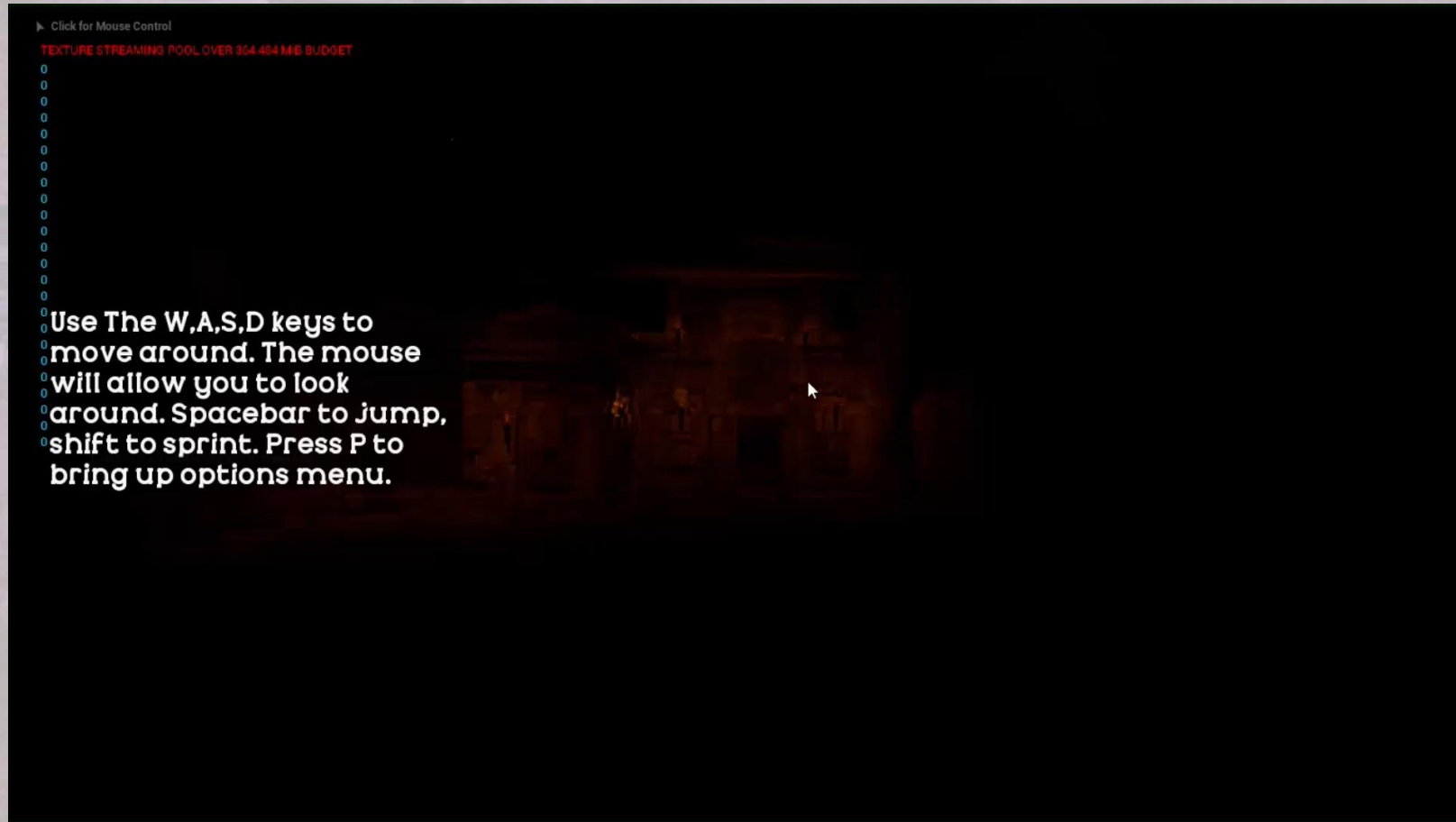
Conclusion & Q&A

In summary, *Temple Run* is a first-person educational puzzle game designed to balance play and learning through mindful mechanics.

With time-limited levels, environmental puzzles, and a competitive leaderboard, it transforms screen time into a focused, engaging, and educational experience.

Thank you for listening—I'm happy to take any questions.

Playtest Demonstration



[Figure 51: Quick run through of Temple Run]

Table of Figures

Figure 1: Gant chart for 1st half of the project

Figure 2: Gantt chart for 2nd half of the project

Figure 3: Research Journals, Reports and articles

Figure 4: Books on Game design, puzzle-craft

Figure 5: Case Studies from Report

Figure 6: Iterative design principles as shown by Scott Rogers: level up

Figure 7: Leaderboard widget

Figure 8: Puzzle Interaction

Figure 9: Call function to turn the picture and register it at the correct location

Figure 10: Entering code from puzzles

Figure 11: Input code for numbers

Figure 12: Input code for backspace

Figure 13: Call function for correct or incorrect code with sound played and animation for door to open

Table of Figures

Figure 14: Call function to open coded door

Figure 15: Demonstration of Narrative engagement

Figure 16: Does object implement Interact Interface?

Figure 17: Call function to open conversation

Figure 18: Dialogue Tree

Figure 19: Call function to update conversation

Figure 20: Call function to set dialogue index

Figure 21: Call function add dialogue

Figure 22: Call function to close conversation

Figure 23: Call function to remove dialogue progress

Figure 24: Call function to progress dialogue

Figure 25: Call function to clear dialogue progress

Figure 26: Footage showing notification system

Table of Figures

Figure 27: Hints to progress

Figure 28: Countdown and timer display

Figure 29: Blueprint components to create the race aspect of the level

Figure 30: Call function to initiate countdown

Figure 31: Call function to get time

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Figure 33: Get Player Name function

Figure 34: Get Player Time Code

Figure 35: Input settings for completed race time

Figure 36: Starting and stopping stopwatch

Figure 37: Function to call Reset Variables

Figure 38: check if no.1 spot is taken

Figure 39: Call function which race to apply leaderboard

Figure 40: Non tutorial race Leaderboard

Table of Figures

- Figure 41: Shows how to calculate the timer score by check down the list to see if your time is greater than the previous
- Figure 42: Call function to get best time
- Figure 43: Blueprint for all settings
- Figure 44: Display of UI widgets created in Unreal engine
- Figure 45: Homepage to Pixabay
- Figure 46: Homepage to FAB library
- Figure 47: Music and sounds folder
- Figure 48: Selection of free plugins used to assist creating smart play
- Figure 49: Initial help notifications before user feedback
- Figure 50: Help notification after user feedback
- Figure 51: Quick run through of Temple Run

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