

# Game Project Overview

**Game Title:** Spectre Labs

**Game Genre:** Top-down adventure puzzle rooms

**Description:** You've signed up to be a test subject for an obscure organization and they put you inside a closed room and the only thing they tell you is to find a way out. They equip you with one of their prototype devices that connects you to the spectral world. Using problem-solving skills you must pass through the levels and uncover the secrets of the mysterious organization.

## Features:

- Ample amount of levels
- Lots of sound effects
- Graphics
- Cut scenes
- Background music
- Enemy guards
- Detailed storyline
- Spectral Device
- Different puzzles in each room

## Addictive Features:

- Action and graphics
- Captivating story
- Beating the game
- Sense of accomplishment
- Discovery

Description	Time
<b>Start of School - January 13th, 2019:</b> <ul style="list-style-type: none"> <li>- Created simple sprites and objects for my game (initialize, fade, player, buttons, walls, floors, doors)</li> <li>- Created basic versions of rooms (title screen, level 1, tutorial, feature testing)</li> <li>- Finished title screen with moving selector cursors</li> <li>- Coded fade to black between rooms through the fade object</li> <li>- Coded player movement and three different types of buttons that activate when walked over</li> <li>- Coded sliding opening door when a certain button is stepped on</li> <li>- Coded push block that's constrained in an area with floor objects</li> <li>- Started working on ghost recording</li> </ul>	~10 hours
<b>January 17th, 2019:</b> <ul style="list-style-type: none"> <li>- Kept working on ghost recording and got it almost working</li> </ul>	30 mins
<b>January 20th, 2019:</b> <ul style="list-style-type: none"> <li>- Started coding ghost recording to accept new recordings in the current game without having to restart the game, still errors in the code</li> </ul>	45 mins
<b>January 30th, 2019:</b> <ul style="list-style-type: none"> <li>- Ghost recording code got too messy and broken</li> <li>- Restarting file and entire feature</li> </ul>	1 hour
<b>February 1st, 2019:</b> <ul style="list-style-type: none"> <li>- Resized room of game to have more tiles</li> <li>- Tried to figure out a sort of aspect ratio for the room</li> <li>- Planning to use a zoomed in camera that moves around with the player</li> <li>- Need to move the title screen options and selector code</li> </ul>	1 hour
<b>February 16th, 2019:</b> <ul style="list-style-type: none"> <li>- Coded one-way walking floor tiles</li> <li>- When the player tries walking into each of the tiles in a certain defined direction, they are unable to move that way</li> <li>- Added commenting to all of my code in every script and process possible</li> </ul>	2 hours
<b>February 23rd, 2019:</b> <ul style="list-style-type: none"> <li>- Fixed the title screen selector dots and moved the text of "start game" and "tutorial" to the center of the new sized room</li> <li>- Used reference objects to control the movement of the dots</li> </ul>	45 mins

<b>March 1st, 2019:</b> <ul style="list-style-type: none"> <li>- Continued working on the title screen selections, trying to make the selector move flawlessly</li> <li>- Deciding whether or not to use a different movement method for the player in my game; thinking about using isometric style and art for the main part of the game</li> </ul>	1 hour
<b>March 7th, 2019:</b> <ul style="list-style-type: none"> <li>- Finished coding the revised title screen selection and it now works perfectly</li> <li>- Started coding the player to stop moving before it tries pushing the push block into the edge of its boundary</li> </ul>	1 hour
<b>March 17th, 2019:</b> <ul style="list-style-type: none"> <li>- Researched using a top down 2.5D perspective rather than isometric because isometric is too rotated</li> <li>- Researched using paths rather than a whole script of code to control the ghost recording of the player</li> </ul>	1 hour
<b>March 20th, 2019:</b> <ul style="list-style-type: none"> <li>- Created new file names for game versions in the form of (NAME_TBD_V1,1)</li> </ul>	20 mins
<b>March 24th, 2019 NAME_TBD_V1,1:</b> <ul style="list-style-type: none"> <li>- Changed the title screen background and text colour</li> <li>- Worked on starting cutscene with scrolling text that appears letter by letter <ul style="list-style-type: none"> <li>- I used a list to store each letter per line and add each one onto a string to display the text; when a line ends, it triggers a script that moves the drawing y position down and changes a variable to the next line list (The text starts printing on another line when one finishes but it deletes everything else that was drawn)</li> <li>- The text will outline the storyline of the game and maybe give a few instructions on how to play the game</li> </ul> </li> </ul>	3 hours
<b>April 4th, 2019 NAME_TBD_V1,1:</b> <ul style="list-style-type: none"> <li>- Changed how I display the starting cut scene text <ul style="list-style-type: none"> <li>- I'm using a string copy rather than inserting the next letter in the string each time. I copy one more character each time to print out the phrases</li> <li>- Instead of coding separate lines and strings that need more code, I learned about using the # symbol to create a line break in the draw_text command</li> <li>- I've finished the basic scrolling text I was looking for and will continue on working on more features</li> </ul> </li> <li>- Setup views for my main game</li> </ul>	2 hours

<ul style="list-style-type: none"> <li>- I used a 4:3 aspect ratio that divides by 32 pixels so it fits the tiles in the room while being easily scaled for visual ported resolution. I used a slightly larger but also 4:3 resolution to visually display and port the game so there's no stretching in the image. The view follows around my player with a zoomed in view of the room</li> <li>- NAME_TBD_V1,1 final: <ul style="list-style-type: none"> <li>- Changed colour theme of title screen</li> <li>- Fixed title screen selectors</li> <li>- Added scrolling text for starting cutscene</li> <li>- Setup basic views for gameplay</li> </ul> </li> </ul>	
<b>April 8th, 2019 NAME_TBD_V1,2:</b> <ul style="list-style-type: none"> <li>- Watched tutorial videos on how to use paths</li> </ul>	45 mins
<b>April 10th, 2019 NAME_TBD_V1,2:</b> <ul style="list-style-type: none"> <li>- Started working on the ghost recording feature with a new code idea <ul style="list-style-type: none"> <li>- I used paths instead of lists and maps saving to a file</li> <li>- I got my player to record points to a path every step when a key is pressed and another ghost object to playback that path when another key was pressed</li> </ul> </li> </ul>	1 hour
<b>April 12th, 2019 NAME_TBD_V1,2:</b> <ul style="list-style-type: none"> <li>- Finished coding the main function of the ghost recording feature using a different method than paths <ul style="list-style-type: none"> <li>- I used two lists that hold the x and y positions for the recording and record each coordinate with a timer every step</li> <li>- I playback the recording by setting the ghosts x and y to the right one in the list using a timer</li> </ul> </li> <li>- NAME_TBD_V1,2 final: <ul style="list-style-type: none"> <li>- Added basic ghost recording feature</li> </ul> </li> </ul>	1 hour
<b>April 12th, 2019 NAME_TBD_V1,3:</b> <ul style="list-style-type: none"> <li>- Minor updates to the ghost recording feature <ul style="list-style-type: none"> <li>- Tried to foolproof the recording and playback keys as much as possible so there's no way to break the code by hitting the keys wrong</li> <li>- Ghost object fades away once the recording is complete</li> </ul> </li> </ul>	45 mins
<b>April 16th, 2019 NAME_TBD_V1,3:</b> <ul style="list-style-type: none"> <li>- Updates to ghost recording <ul style="list-style-type: none"> <li>- Added faded player that stays where you started the recording</li> <li>- Added some colour effects to make interpreting things easier</li> </ul> </li> </ul>	1 hour & 30 mins

- Started designing levels	
<b>April 26th, 2019 NAME_TBD_V1,3:</b> - Worked more on designing levels - Reworked level completion code - started adding dialogue code	1 hour & 30 mins
<b>April 30th, 2019 NAME_TBD_V1,4:</b> - Created new version of the file to work on dialogue code and possibly rework movement system slightly - Worked on dialogue code a bit - Started working on snap to grid movement	45 mins
<b>May 8th, 2019 NAME_TBD_V1,4:</b> - Worked on snap to grid when the ghost recording finishes <ul style="list-style-type: none"> <li>- While I was moving around as a ghost I would be sent back to my player but be in the middle of a movement code script. This meant I was sent back but kept moving to finish the move code that was started as a ghost</li> </ul>	1 hour
<b>May 9th, 2019 NAME_TBD_V1,4:</b> - Added snap to grid for the y axis movement (does not work)	1 hour
<b>May 10th, 2019 NAME_TBD_V1,4:</b> - Added code that does not allow the recording to stop until the player is perfectly on the grid. This ensures the recording finished on a tile spot and the player goes perfectly back on the grid - Created new version of file to work on level design. - NAME_TBD_V1,4: <ul style="list-style-type: none"> <li>- Added basic dialogue code</li> <li>- Fixed ghost recording feature</li> <li>- Started setting up levels</li> <li>- Fixed some views</li> </ul>	20 mins
<b>May 10th, 2019 NAME_TBD_V1,5:</b> - Started setting up more levels - Made sure dialogue worked by the level	30 mins
<b>May 11th, 2019 NAME_TBD_V1,5:</b> - Added more buttons <ul style="list-style-type: none"> <li>- Started setting up multi button activation</li> </ul> - Added levers to the game	30 mins

<b>May 15th, 2019 NAME_TBD_V1,5:</b> <ul style="list-style-type: none"> <li>- Coded levers</li> <li>- Coded freezing the player when dialogue is playing</li> <li>- Planned out all rooms for the game</li> </ul>	1 hour
<b>May 15th, 2019 NAME_TBD_V1,5:</b> <ul style="list-style-type: none"> <li>- Started designing more rooms</li> <li>- Fixed views a bit</li> </ul>	30 mins
<b>May 19th, 2019 NAME_TBD_V1,5:</b> <ul style="list-style-type: none"> <li>- Worked on new sprites for my game</li> <li>- NAME_TBD_V1,5: <ul style="list-style-type: none"> <li>- Setup all rooms for game</li> <li>- Added more buttons and levers</li> <li>- Dialogue features</li> <li>- New sprites</li> </ul> </li> </ul>	1 hours
<b>May 21th, 2019 NAME_TBD_V1,6:</b> <ul style="list-style-type: none"> <li>- Started V1,6 to work on fixing pushblocks in the game</li> <li>- Worked on more sprites for game</li> </ul>	1 hour & 30 mins
<b>May 21th, 2019 NAME_TBD_V1,6:</b> <ul style="list-style-type: none"> <li>- Added pushblock feature so you can't push it into a wall</li> </ul>	30 mins
<b>May 23th, 2019 NAME_TBD_V1,6:</b> <ul style="list-style-type: none"> <li>- Edited more rooms</li> <li>- Added buttons that require both to be activated to trigger something</li> <li>- Edited more sprites</li> </ul>	2 hours
<b>May 24th, 2019 NAME_TBD_V1,6:</b> <ul style="list-style-type: none"> <li>- Refreshed almost all sprites</li> <li>- Completed designing first level</li> <li>- Revamped dialogue function</li> <li>- NAME_TBD_V1,6: <ul style="list-style-type: none"> <li>- Fixed pushblocks</li> <li>- Redid all sprites for game</li> <li>- Added more buttons</li> <li>- Redesigned first level</li> </ul> </li> </ul>	4 hours
<b>May 27th, 2019 NAME_TBD_V1,7:</b> <ul style="list-style-type: none"> <li>- Finished level one and started working on level two</li> <li>- Started working on setting up boss and lead up to it</li> </ul>	1 hour

<b>May 31st, 2019 NAME_TBD_V1,7:</b> - Worked on enemy spawning in boss room - Fixed door sprites and vertical doors	2 hours
<b>June 1st, 2019 NAME_TBD_V1,7:</b> - Fixed all door objects and sprites NAME_TBD_V1,6: - Worked on level design - Started on boss - Fixed a lot of sprites	2 hours
<b>June 1st, 2019 NAME_TBD_V1,8:</b> - Worked on boss enemy random movement	1 hour
<b>June 4th, 2019 NAME_TBD_V1,8:</b> - Worked on level two - Fixed multiple of same colour button in room - Revised levers and pushblock	2 hours
<b>June 4th, 2019 NAME_TBD_V1,9:</b> - Updated all button sprites	4 hours
<b>June 5th, 2019 NAME_TBD_V1,9:</b> - Worked on boss fight - Enemies - Waves - Added a script for random enemy spawning	5 hours
<b>June 6th, 2019 NAME_TBD_V2,0:</b> - Finished boss wave control - Converted a bunch of code to scripts - Added more random movement to enemies	3 hours
<b>June 8th, 2019 NAME_TBD_V2,1:</b> - Worked on player healthbar	2 hours
<b>June 8th, 2019 NAME_TBD_V2,2:</b> - Worked on enemy shooting	2 hours
<b>June 9th, 2019 NAME_TBD_V2,2:</b> - Revised start cut and storyline - Finished base of all enemy shooting	3 hours

<b>June 9th, 2019 spectrelabs_V2,3:</b> <ul style="list-style-type: none"> <li>- Fixed some dialogue triggers</li> <li>- Worked on level 2</li> <li>- Fixed multiple pushblock buttons</li> </ul>	3 hours
<b>June 10th, 2019 spectrelabs_V2,4:</b> <ul style="list-style-type: none"> <li>- Added health to enemies</li> <li>- Revised bullets, shooting, damage</li> </ul>	2 hours
<b>June 10th, 2019 spectrelabs_V2,5:</b> <ul style="list-style-type: none"> <li>- Added enemy health bars</li> </ul>	2 hours
<b>June 11th, 2019 spectrelabs_V2,6:</b> <ul style="list-style-type: none"> <li>- Finished enemy health bars</li> <li>- Revised start cut text</li> <li>- Added forcefield around boss</li> </ul>	3 hours
<b>June 11th, 2019 spectrelabs_V2,7:</b> <ul style="list-style-type: none"> <li>- Added enemy and boss sprites</li> <li>- Changed shooting to match where enemies are looking</li> <li>- Added revised laser sprites</li> <li>- Added effects</li> <li>- Added player sprites</li> </ul>	5 hours
<b>June 14th, 2019 spectrelabs_V2,9:</b> <ul style="list-style-type: none"> <li>- Revised enemy healthbars</li> <li>- Added final boss parts</li> <li>- Edited player sprite</li> </ul>	3 hours
<b>June 14th, 2019 spectrelabs_V3,0:</b> <ul style="list-style-type: none"> <li>- Fixed some player sprite glitches</li> <li>- Added more dialogue to storyline</li> <li>- Adjusted enemies per wave to balance game</li> </ul>	2 hours
<b>June 15th, 2019 spectrelabs_V3,0:</b> <ul style="list-style-type: none"> <li>- Worked on final boss fight</li> </ul>	3 hours
<b>June 16th, 2019 spectrelabs_V3,0:</b> <ul style="list-style-type: none"> <li>- Worked on final boss fight</li> <li>- Added some background music</li> <li>- Balanced boss fight more</li> </ul>	2 hours



<b>June 17th, 2019 spectrelabs_V3,1:</b> <ul style="list-style-type: none"> <li>- Broken pushblock against wall</li> <li>- Broken masks and collisions for objects</li> <li>- Started working on vent room</li> </ul>	2 hours
<b>June 17th, 2019 spectrelabs_V3,2:</b> <ul style="list-style-type: none"> <li>- Worked on control room</li> <li>- Finished vent</li> </ul>	2 hours
<b>June 18th, 2019 spectrelabs_V3,2 - spectrelabs_V3,8:</b> <ul style="list-style-type: none"> <li>- Finished boss</li> <li>- Worked on title screen and ending screen</li> <li>- Tried to fix bugs</li> <li>- Worked on end dialogue</li> <li>- Recorded video clips</li> </ul>	5 hours
<b>June 19th, 2019</b> <ul style="list-style-type: none"> <li>- Finalized code</li> <li>- Did full testing of main game</li> </ul>	3 hours