**Trapped Alive Game Design Document**

A shape-shifting puzzle game about science and simplicity

**2. Game Overview**

**2.1 Game Concept:**

**Trapped Alive** is a game where the player controls 4 distinct shapes; a square, circle, rectangle, and triangle; each with their own abilities. To traverse the levels, the player must change shape at the correct place and time. They will need to figure out how to get to the end of the levels. The main idea we are trying to push is **~~simplicity~~**~~.~~

**2.2 Genre:**

**Trapped Alive** is an intuitive puzzle platformer for deeper thinkers. Because of the Indie atmosphere it will have, players should play with an open mind and think about each level on a deeper level.

**2.3 Target Audience:**

This game’s target audience will be gamers who enjoy not only gaming for fun, but also to learn and get something out of it. Also people who enjoy artistic games will enjoy this game. Anyone who plays indie, puzzle, or platform games will have fun playing this game.

**2.4 Game Flow Summary:**

To complete the game, the player must traverse a set of levels. To complete a level, the player must utilize the different shapes’ skills to solve many different puzzles such as getting to the shape changers, turning on a moving platform or unblocking a part of the level. These small puzzles combine to create the level on a big scale. In order to create non-frustrating gameplay, heavy tests will be put on each level to make sure the player can win in any given situation to eliminate the frustrating need to restart when stuck.

**2.5 Look and Feel:**

We want this game to feel smooth and fun. We plan to create fun, exciting and challenging gameplay that stretches the mind of our players. This game, although fun and cutting edge gameplay will be quite simple on the art side. Our visuals will be made up of pixel art because it is easy enough to do with mouse and it is our first game.

**3. Gameplay and Mechanics**

**3.1 Gameplay:**

3.1.1 Game Progression:

Players will start out with a given shape in any given level. They will need to utilize the shape’s given abilities to maneuver through the level in order to change shape at a shape changer. Once at a shape changer, the player will turn into whatever shape is shown by the shape changer. Each shape has its own different abilities and the player will have to utilize them to solve puzzles in order to finish the levels and thus progress the game.

3.1.2 Mission/Challenge Structure:

In this game, there will be no side missions. The main game and collectables are all there is. The game can be played without finding collectables, however the collectables will enrich the story. The main collectable in the game is the journal pages. These pages will further the story by displaying the scientists’ journal pages.

3.1.3 Puzzle Structure:

Throughout the game, the only way to win is by completing puzzles. In the beginning, the answers to the puzzles will be quite simple and objects in the environment will point to the solution. As the player advances in the game, the puzzles will continually get more challenging. There will not always be a clear path to completion of the level and the player will need to utilize everything around him to solve the puzzles. There are many pieces that contribute to the puzzles in this game. There are levers, switches, buttons, shape changers, moving platforms, and of course the shape abilities.

3.1.4 Objectives:

There are many different objectives in this game. The first is each individual level. Getting to the end of a level in this game is the simplest objective. In order to do that, the player must start at the beginning and get to the end by solving puzzles. Therefore, each individual puzzle is actually an objective also. Optional objectives within each level also include the collectable pages which may or may not require solving different puzzles. Aside from each level, finishing the game is the main objective. Players can either finish it fully by collecting all of the collectables and things like that or just finish the last level. 100% completion is not necessary.

3.1.5 Play Flow:

To keep this game smooth, we will make sure each and every puzzle is thoroughly tested and bug free. Bugs include getting stuck somewhere, making the player backtrack a long distance and frustrating the player in any way (apart from making the puzzles hard). The game will run smoothly and have as quick of loading times as possible to keep the player intrigued in the game.

**3.2 Mechanics:**

3.2.1 Physics:

Due to the fact that this game is set on Earth, physics will remain the same. Gravity will be the same, the shapes will fall and gravity will affect all the game objects the same. If there is a crate that slides off of the edge of a platform, it will fall. The shapes will be able to jump and will fall to the ground; there will be no flying of shapes. The only shape that can slightly defy gravity is the triangle which can wall jump up and down tall walls under the circumstance they are close enough together.

3.2.2 Movement in the Game:

In this game, the four shapes each have a different movement speed. The rectangle is the slowest moving shape because of its size. Then the triangle is the second slowest. Then the circle, then the square. Each shape also has a different movement ability. The rectangle can tip over and fall, but can’t get back up without a shape changer. The square can teleport to special platforms in order to bypass walls and impassable objects. The triangle can wall jump up tall narrow walls, and the circle can switch dimensions/time to access areas that aren’t there right now.

3.2.3 Objects:

There are many moving objects in our game. Things like moving platforms may be moving at the start of the game/level or may need to be turned on by a lever or button. Same goes for doors and shape changers. There may be objects in the level that can be pushed. All the player must do is run into these objects to push them. The use of objects is a necessary component in many of the game’s puzzles.

3.2.4 Actions:

In this game, there is no key you need to press to interact with levers, buttons and shape changers. Just running into them is enough to turn them on and use them. Levers and buttons will be used to turn moving platforms on and off, open and close doors and turn shape changers on and off. The knowledge and use of these types of objects are key in completing the game.

3.2.5 Combat:

Due to this being a puzzle game, combat isn’t a big part of it. The combat systems in this game are pretty subtle. There will be defense mechanisms that will either need to be avoided using line of sight stealth or shut off. If found, the player will be killed and must restart at the last checkpoint/saved game.

3.2.6 Economy:

This game doesn’t really have an economy because there is nothing to buy or sell to add to the game. Adding an economy seems more like a hassle and bad game development than a benefit to this game. The only feature in this game that can kind of be thought of as part of the economy are the journal pages. These Easter Eggs are hidden around the game to supplement the story line and give the player vision into the lives of us, the creators. By picking up these pages, the player gains knowledge and spends more time playing the game. Another example is the record Easter Egg. These hidden records can be found and spent to play different music while playing the game.

3.2.7 Screen Flow:

MAIN MENU

SETTINGS

LOAD

VIDEO

KEY MAPPING

NEW GAME

GAME

PAUSE MENU

WIN SCREEN

JOURNAL

**3.3 Game Options:**

3.3.1 Key Mapping:

These settings will have a page dedicated specifically to them. In the Key Mapping page, the player will be able to set which key does what function. For instance if the player wants the ‘U’ key to move the character to the left, he would just click on the left button in the Key Mapping menu and press ‘U’ and it would switch. This menu should be easy to use and the UI should be simple to understand.

3.3.2 Video:

This settings page will have many different options such as resolution, V-Sync and graphics quality. Modifying these options will change how the game looks and the power needed to play it. It will help make the game less needy.

3.3.3 Audio:

In this part of the settings will be the music, sound effect, and overall volume control. It will also have a mute control. The page will be made up of 3 sliders with a numerical value at the end and a mute toggle. There may or may not be a music selection that you can select which Easter Egg music you want to play. If so, this will appear as a dropdown menu and the player will be able to select what they want.

**3.4 Replaying and Saving:**

In order to not frustrate the player, this portion will be needing a lot of thought and extensive testing. The game will probably save at the beginning of each level so at any point, the player can quit and start back up in the same level. There will be checkpoints in each level at which you will respawn if you die so that the player doesn’t have to restart the whole level.

**3.5 Cheats and Easter Eggs:**

In this game, there will be no cheats, but a lot of Easter Eggs. Because we tried making this game many years ago, we are putting a lot of our old stuff into it for the player to find. We have old music in the form of records and old Development Blogs we wrote. We also will include journal entries that supplement the main story as hidden pickups in hard to reach or secret places. Aside from journal entries that supplement the story, there will also be a separate journal that logs our game development process and progress so players can read about our game development journey making this game. The journals can be accessed from the pause menu and may or may not have voice acting. The music will be able to be played at a record player at the end of the game and may or may not be able to be switched in for the games background music.

**4. Story, Setting and Character**

**4.1 Story and Narrative:**