Possession

Game Design Document

You are a soul trying to get through a middle age Asian themed village with the help of three elements, fire, wood and water.

A mock-up of the game's play area.
Here you can see the HUD as well as the player, a lost soul and two fire enemies.

Contents

1. General Game Overview

You are a soul trying to get through a middle-aged Asian themed village with the help of three elements; fire, wood and water. Depending on your choices in-game you are either the one to conquer the village or save it from evil.

2. States & Modes

When starting the game there will be a start screen of group 12's logo. You can see a flowchart of our states and modes below this paragraph. When the start screen has faded away, the start menu will be shown on the screen. The game's main menu's interface has four options to choose between; Play, Options, How to Play and Quit. If you choose to press quit the game is closed down. When how to play is pressed a screen explaining how you play the game and the game controls show up. If you press options you can adjust the game's master volume, effect volume and background sounds volume, and you are also given a fullscreen option.

By pressing play you start the game. The in-game's interface consists of the GUI with the elemental points, an indicator of which element is selected and lost souls-counter as well as the play area. On the title screen of this document you can see a mock-up of the game screen. The elemental points are shown in the upper right corner as well as the indicator of the selected element, and the lost souls counter is shown in the upper left corner. When pressing the Esc-key in game, the pause screen will appear. You can either choose to resume the paused game or quit the game and go back to the main menu.
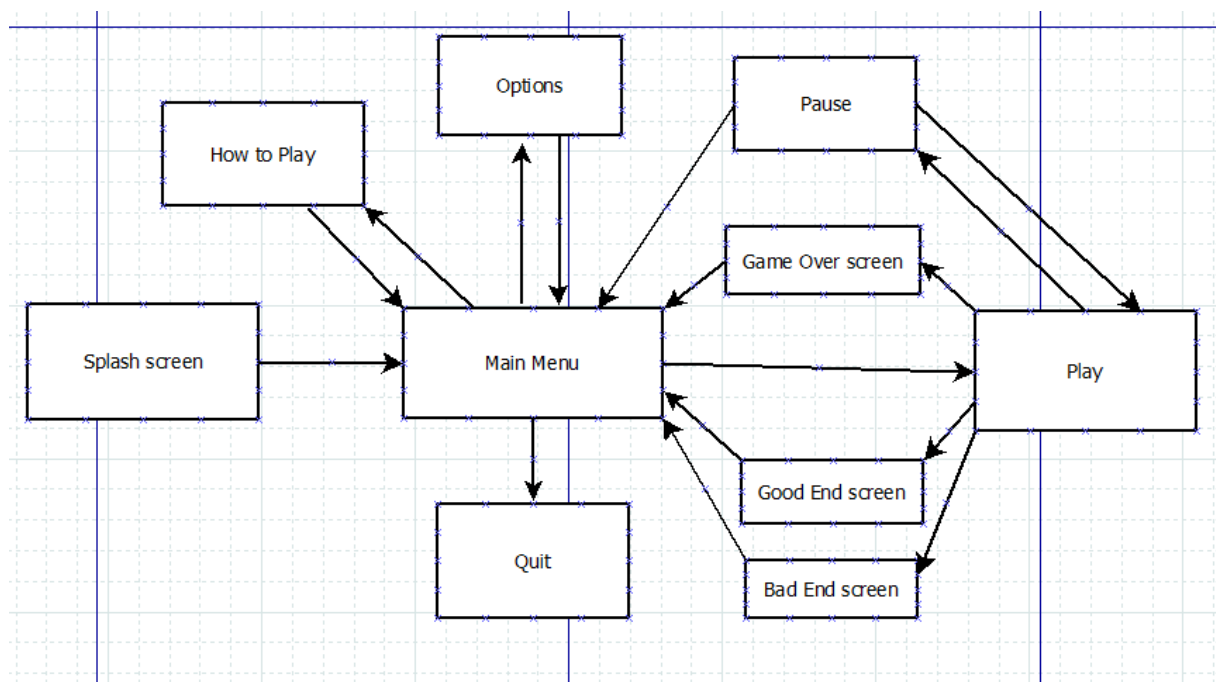
When the game ends, either by losing or winning, you will return to the main menu. However, there will be three different game over screens. If the player loses the game, there will be a screen telling the player that she lost the game. When the player wins the game, depending on what karma she has received during the game, she will either be shown a screen showing the evil version of the player character where she is the conqueror of the village, or if her karma is positive she will be shown the nice version of the player character where she is the village's hero. The karma system is further explained in the resources section below.

3. Graphical User Interface

An example of the game's GUI can be seen on this document's first page. On the mock-up of the game screen you can see the elemental points in the upper left corner as well as the counter of lost souls in the top right.

The elemental points are divided in the three types of elements; fire, water and wood. To indicate what element is currently used, the current element will be bigger and in the middle of the other elements. The icons will tell you what the elements are. Then, there are the elemental points' bars around the icons. The coloured ones are points that the player currently has, and the grey elemental points are to show the maximum amount of points that can be had, which is ten. When you have a certain amount of elemental points, you will receive a power up. In the updated version of the GUI, there will be indicators of when a power up will be received. The indicators are small swirls that emerge from the bar, and they can be seen in the picture below. More information about the power ups can be found in the Player section. The lost souls counter is seen on the upper right corner. They are visually represented by icons of lost souls.

The elemental points and lost soul icons for the GUI.

When the player switches between elements, the indicator will be updated to show what the currently used element is. The elemental points in the circle bar around the element icon will be updated when elemental points are lost or obtained. The player loses elemental points when hit and can obtain elemental points from either sacrificing/releasing lost souls or when encountering an altar. When a lost soul is picked up by the player, it will be added to the counter, and when a lost soul is used the counter will decrease. Elemental points, altars and lost souls are all further explained in the Resources paragraph.

The non-diegetic type of GUI is used in the game, because of the vital information that has to be visible for the player at all times. To know what element you are using or what element to switch into is important when fighting enemies, so that the player effectively can use the element that does more damage on the enemy and avoid using the element that will give the enemy advantage, doing more damage on the player when she is hit by the enemy or it's projectile.

The elemental points are vital because they represent the health of the player, they show when a power up is received and they also show what elements can be used. The grey/empty elemental points are visible so that the player knows how the maximum amount of elemental points that can be held, so

that she does not feel cheated when she sacrifices/releases lost souls and is not given the correct amount of elemental points because the maximum is reached.

The lost souls in the HUD are important for the player to let her know that there is lost souls that can be used. They will also be able to tell the maximum amount of lost souls that can be held, since the player cannot pick up more lost souls when the maximum of five lost souls are carried.

4. Avatar

The abilities that this avatar has are to switch between the three elements possessed, to shoot projectiles of the currently chosen element type and sacrifice or release lost souls. The avatar is placed in the center of the screen and is able to move in eight directions. The restrained mobility of the avatar is that she can't leave the foreground.

The health of the avatar is represented by the elemental points (more information about them in resources). When all elemental points are lost in all element types the avatar dies, a game over screen will be shown and you will return to the start menu.

The element system, the damage the character makes and/or takes, can be found in Elements in the Rules section, as it all depends on the current element of the avatar and the element of the enemy. The player has two types of power ups that are available in all elemental types. The first power up is given when seven elemental points are had in an element, then the player will receive double shot. Then the player shoots, there will be two projectiles shot instead of one. The projectiles will be shot in a 15 degree angle. When the maximum amount of elemental points are had in an element, which are ten points, the final power up will be given to the player.

The final power up is triple shot, where the player will shoot one horizontal projectile and two diagonal projectiles which are shot in the same angle as the double shot's projectiles. When the player loses elemental points and is below the required amount for a power up, the power up is lost.

The controls are of the avatar are the arrow keys to move, the A-key to sacrifice a lost soul, D to release a lost soul, Ctrl to switch elements and space bar to shoot.

The player's avatar is visually represented by a human-shaped, mask-wearing soul that has a shadow-like body with fading legs. Nine different animations of the avatar are required; walk, idle, getting hit, death, attack/shoot, first encounter with a lost soul, sacrifice lost soul, release lost soul, and spawn.

Moving the character will result in the walk animation being shown and the sound of footsteps being played, and when no input is given or the avatar is not hit by anything, the avatar will be idle. When the avatar is hit by either an enemy or an enemy projectile, the avatar will switch into the hit animation and a sound will be played. An attack animation and a sound will be played when the player shoots, and sounds will be played when the player picks up or sacrifices/releases a lost soul.

The spawn animation will only be shown in the beginning of the level. There is a dark silhouette which looks like a body hanging from the branch of a tree, and the character is seen jumping out of the silhouette. You can see a sketch of the player's spawn below. When the spawn animation is done the player will be able to control the character. The death animation will be played when the player loses the game. The body of the character will fade away and the mask will drop with a sound playing when it hits the ground.

A sketch of the player in the beginning of the game.

5. Controls
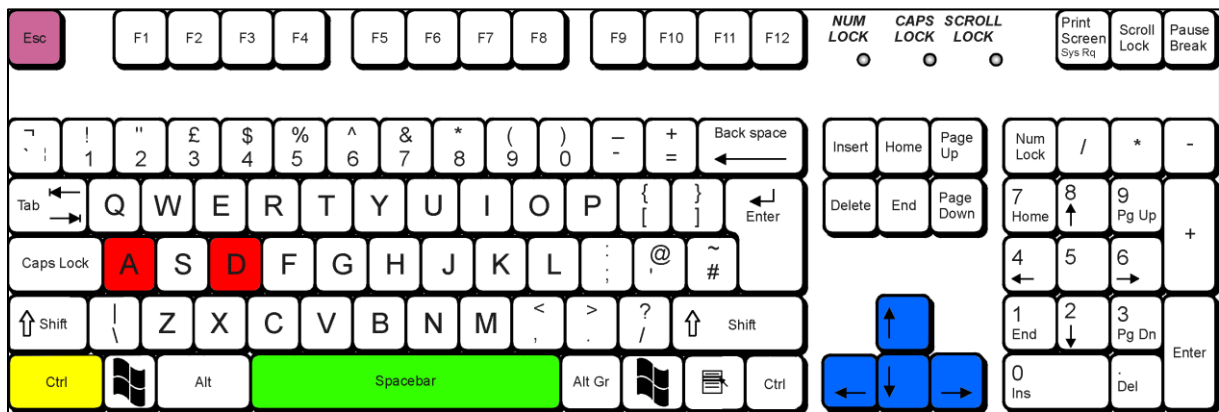
These are the game's controls when played on a PC:

The avatar of the player can be moved with the arrow keys, here coloured blue. The yellow Ctrl key is to switch between elements. The red keys, A and D, are to either sacrifice lost souls (A) or release lost souls (D). The green space bar button allows the player to shoot projectiles. When you press the Esc-key, the game will pause.

To navigate in the menu you use the blue keys to go up or down in the list of options and to choose an option you press spacebar. In the options of the game, the volume meter can be changed by pressing the left and right arrow keys.

6. Non-player Characters/Enemies

6.1 The Elemental Enemies

The three main enemies are made of water, fire or wood. These enemies appear in waves, spawning outside of the screen. They all attack the player on sight and they have the same restrained mobility as the player, they can't leave the foreground. The elemental enemies are not smart, but they will follow and try to kill the player until they or the player is defeated. To kill the enemies you have to shoot them until they lose all their health, which is five health points.
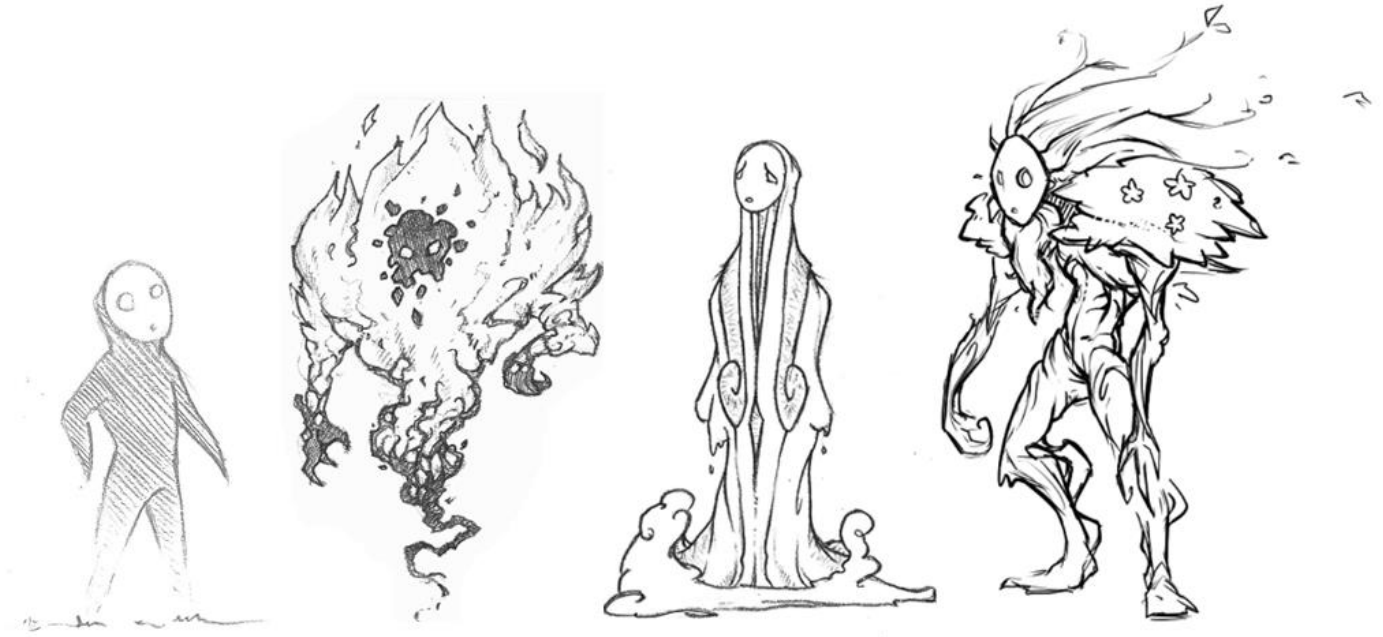
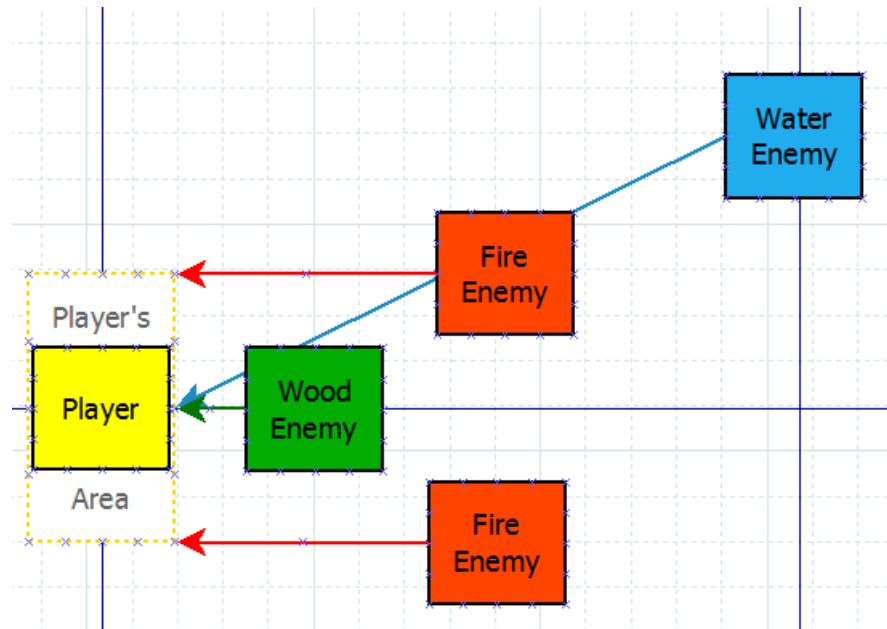Thumbnails of the player and the three elemental enemies – fire, water and wood.

What differentiate the elemental enemies from one another are their attacks, their attack range, their visual representations and strengths/weaknesses.
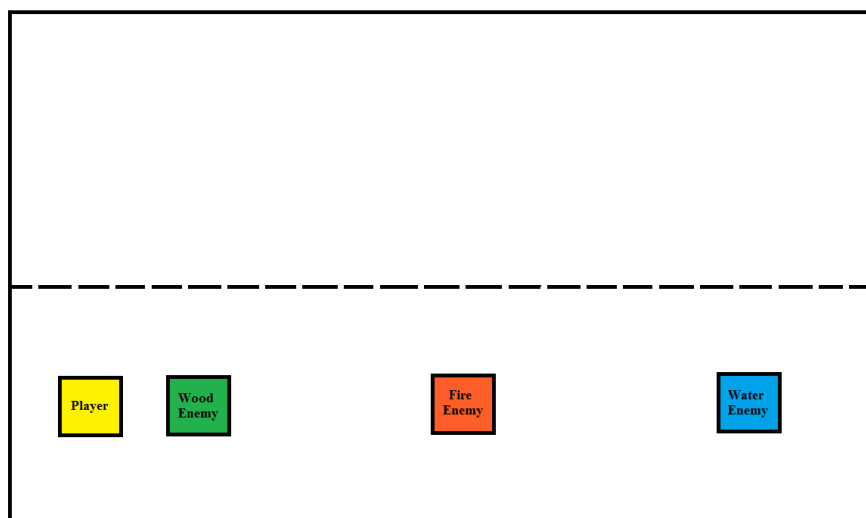
Here you can see the approximate range of the three enemies in comparison with the game screen. The yellow square is the player, the green square the wood enemy, red/orange the fire enemy and blue the

water enemy. The dotted line represents the end of the foreground. The water enemy's attack range is long; they can attack the player even if she is on the other half of the screen. The fire enemy's attack range is medium and the wood enemy's is short.


In the picture above you can see how the three elemental types of enemies will attack the player.

The wood enemy does not shoot projectiles. The wood enemy comes within a short range from the player and then it uses melee attacks to hit her center.

The fire enemies often come in groups and will target a point a little above or underneath the center of the player. These points will be within the hitbox of the player. When they are in mid-range from the player, they will fire projectiles in a horizontal line.

The water enemy can shoot diagonal projectiles. The water enemy has an invisible polygonal area (seen in the picture below), and if the player enters this area the water enemy will start shooting at the player.
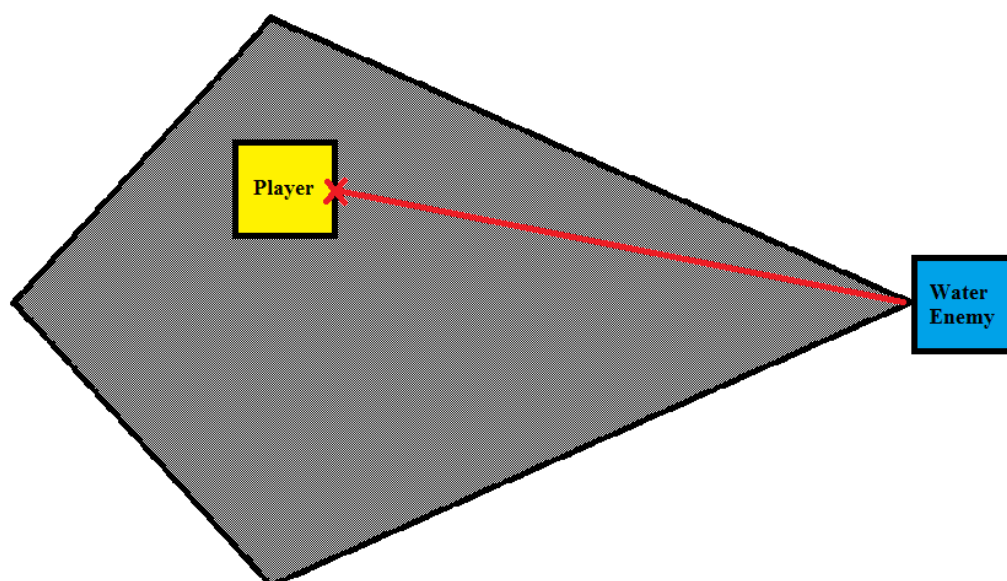
All elemental enemies have five health points. The enemies lose health by getting hit by the player's projectiles. How much damage the enemy does and how much damage it takes depends on the elements. You can read about the elements system in the Rules section under the title Elements.

The required animations for each enemy are idle, move, attack/shoot, getting hit and a death animation. All enemies have different visual representations that match their elemental type. The projectiles that the enemies shoot are depending on the elemental type as well. The fire enemy's projectile is a fire ball and the water enemy's projectile is a round water ball. The wood enemy does not have any projectiles as it uses melee attacks. The enemy will play sounds when they are attacking, when they are hit by the player's projectiles and when defeated.

6.2   The End Game Boss

The end game boss is able to use all three elements. Just like the elemental enemies, the boss has the same restrained mobility as the player and is not able to leave the foreground. The boss will switch between the three elements which all have different attacks.

When the player is at the end of the level, the boss will appear. The boss has 50 health points, and she does and takes the same damage as the player and elemental enemies, which can be found in Elements in the Rules section.

The fire attack of the boss will have a medium range, just like our fire enemies. The attack will be several projectiles moving towards the player in a formation that is possible to avoid.

The water attack water attack will have a long range; the boss can hit the player even if she's on the other side of the play area. Like the water enemies, the boss is able to shoot water projectiles in a diagonal angle.

The wood attack will have a short range. When attacking while using the wood element the boss will use melee attacks.

In the first half of the boss fight, the boss will randomly switch between the elements every five seconds to attack the player. However, when she has lost half of her health her speed will increase and she will check the player's currently chosen element and then switch into the same element or the stronger element every second.
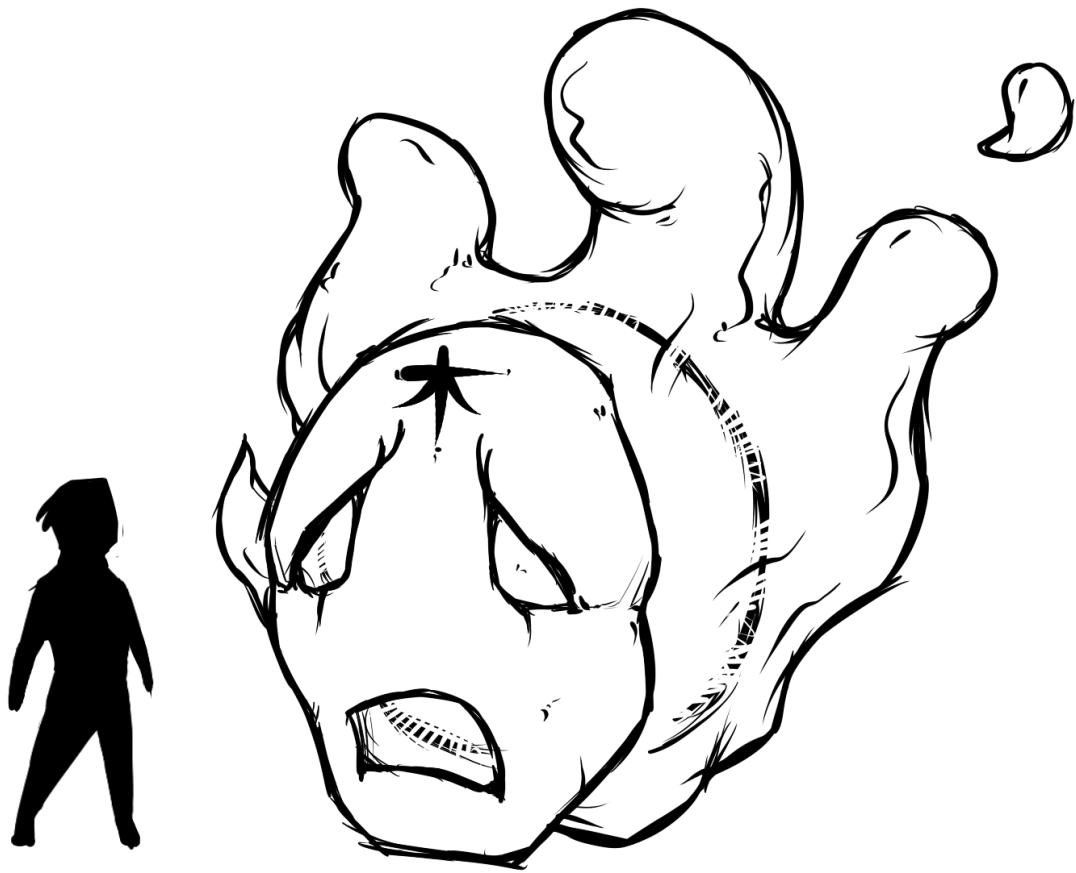
The end game boss' size in comparison with the player.

The visual representation of the boss will be somewhat like a lost soul but wearing a mask like the player. In the first half of the boss fight, when switching between elements her colour will change, as well as her projectiles and her attacks. When half of her health is lost, she will turn yellow and stay that colour for the rest of the fight and her facial expression will also change, making her look angrier than before. Her attack and projectiles will stay the same as before. When losing health, her facial expressions will gradually change. The boss' required animations are; spawn/introduction, idle, move, attack/shoot, getting hit and death animation. The idle, move, attack/shoot and getting hit animations should be available in all three colours and with all different facial expressions.

7. Resources

The resources of the game are the elemental points, lost souls and karma.
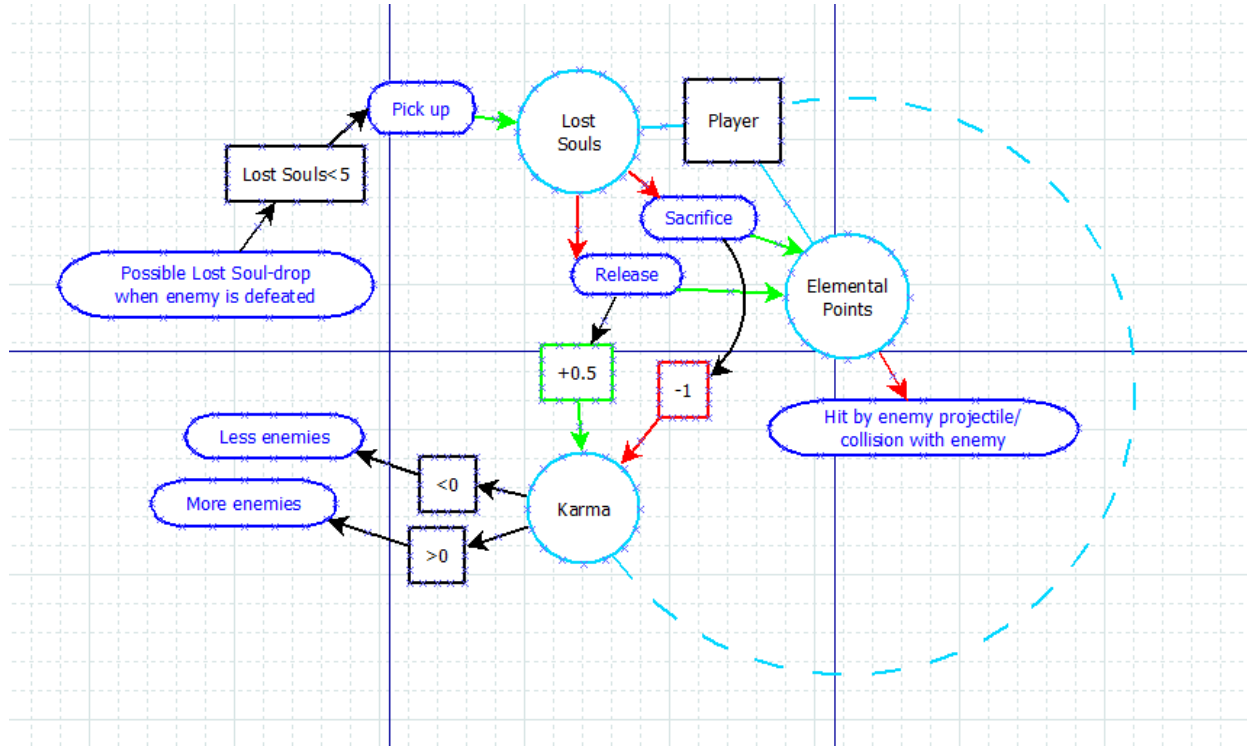
7.1 Elemental Points

The elemental points work as both health and power-up system. The player is given one point of each element in the beginning of the level and the maximum amount of elemental points for each element that the player can have is ten. The points can be obtained by either sacrificing/releasing lost souls. When enough points are collected the player will gain power-ups that are described in the Avatar section. If you're out of points in an element you can go to altars placed across the map and be given one point of the empty element. You can read more about the altars in the Level Design section.

You lose elemental points when hit by either an enemy or an enemy projectile. When you run out of points in an element you can no longer use that element, and if you lose all points in all elements you lose the game and you are returned to the start menu.
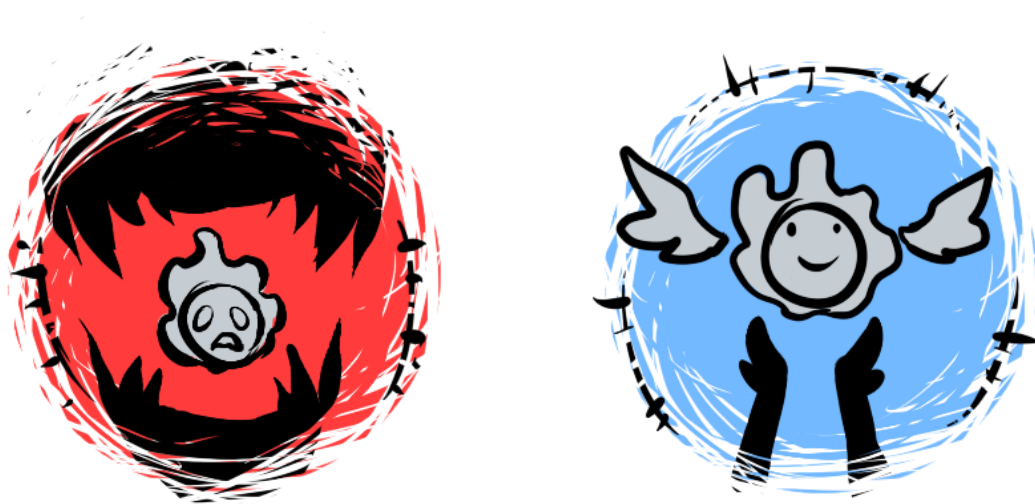
7.2 Lost souls

There is a 30% chance that a lost soul will be dropped by defeated enemies. When a lost soul is picked up, you can either press the A-key to sacrifice the soul, giving you three elemental points on the currently chosen element and one point each to the other elements, or the D-key to free the soul, giving you one point to each element. This choice will affect your karma, sacrificing gives you bad karma and freeing gives you good karma, which then affects the game's ending.

A sketch of a lost soul. Its scale can be seen in the mock up on the first page.

When a lost soul is used it will cease to exist. The lost souls only require an idle animation and an icon for the counter in the HUD. There will be audial feedback when a lost soul is picked up and when they are sacrificed/released. When sacrificed, there will be a sound of bones breaking, and when released there will be a sound of the lost soul flying away.

The player is given one lost soul in the beginning of the map for the purpose of showing the player the system of lost souls. When picking up the first lost soul, the controls of sacrificing and releasing lost souls are shown with pictures shown above them. The picture above the sacrifice key will be a red glow and lost soul with big sharp teeth shown above and underneath it, implying that the lost soul will be eaten when this key is pressed. The picture above the release key has a light blue glow and shows a lost soul floating away from a pair of open hands, implying that the lost soul is set free.

7.3 Karma

The karma system depends on what choices the player makes in the game. When a lost soul is sacrificed you get worse karma, and when the lost soul is released you get better karma. The karma system can change the difficulty of the game. If your karma is bad/negative, there will be more spawning enemies making the game more difficult to play, and if your karma is good/positive there will be fewer enemies.

Depending on your karma you can get either the bad or good ending when winning the game.

The player's karma is never revealed to the player, except for what ending the player is shown and the sky's colour. If the player's karma is positive, the sky will have more of a blue colour, and if it is negative it will be more red.

To prevent the karma from being neutral, the choice of sacrificing a lost soul will give more bad karma than what the choice of releasing a lost soul gives you good karma.

8. Level Design

The environment of the level is mystical, dark and melancholic. It has a middle-age Asian theme, with a background with ruins of buildings of Asian architecture. There is a parallax that has several parts; clouds, mountains, the moon and the foreground. The foreground is the walkable area of the players and enemies, and this will be visible by the buildings and background objects that end the foreground area. There are several background objects placed across the map, such as trees and stone tablets. In the foreground there will be smaller details, like for example grass, which will help the player to understand the positions on the foreground.

There are two kinds of areas that our level is divided into; action areas and resting areas. The action areas are where the fighting happens. The player will meet different formation of enemies and she will be focused on defeating them.

Then there are the resting areas. The village is in ruins and there are sounds of the waling wind and the player's footsteps volume playing in the background. When there is no action happening, the player will have more focus on the background of the level, and the volume of the background sounds will be louder here than they are in the action areas. In every resting area there are altars to use.

8.1 Altars

If you're out of points in an element you can go to altars placed across the map and be given one point of the empty element. If two elements are empty when you encounter the altar you will get one point in each of those elements. When an altar has been used you have to wait 10 seconds before being able to use it again. The altars' purpose is to give the player the possibility to use the elements that they have lost and they do not have any lost souls to use.

The altar's size in comparison with the player.

8.2 Intro

This is the intro of our game's level.

The player spawns with 1 elemental point in water and sees an element altar is the only thing on the map and is placed in the middle of it. If the player ignores it and try to walk past it she will be stopped by that the camera stops and she can't walk outside the cameras range. The player goes to the altar and it give the player one point in each of the empty elemental point trees.

The player learns the altar will give her elemental points if she has 0 in something.

The player continues and sees a lost soul. It is the only thing on the map and it is shown with a pulsating glow and float in the middle of the map. If the player ignores it and try to walk past it she will be stopped by that the camera stops and she can't walk outside the cameras range. When the player pick up the lost soul a box appears and shows what you can do with it. If you sacrifice it you get three elemental points in the element that you currently are possessing (water by default) and one elemental point each in the other two. Or if she frees the lost soul and let it go to the next life the player get one point in each element.

It will be made clear what an evil action is and what is a good action. The evil choice will have a picture that is evil looking and surrounded by a red light, while the good choice button will be surrounded by a light blue colour and have a "good" picture on it.

After the player have chosen she gains the elemental points and the part of the HUD where elemental point tree show change. The player learns were she can see how many elemental points she has.

If the player chose to sacrifice the lost soul a fire enemy will spawn at the edge of the cameras range. The player then learns that there is a risk to sacrificing lost souls. The player might panic here as she might not know how to shoot, but it is the same button as she used to start the game and will probably try that button and then learn it.

The element you are currently possessing is shown with that part of the elemental point tree is lit up a little, and the icon of the current element is bigger than the others. For example if the player has water the water elemental point tree is lit up and the water icon is larger. The player sees that that you can probably change that and discover it by testing the other buttons. During that process the player also learns how to shoot.

The player continues to walk and a fire enemy appears and starts attacking the player. She shoots at it, if she hits it with water it will be a bigger hit effect to show it does more damage. Player learns super

effective moves do more damage and have bigger hit effects.

The enemy has five points of health and a super effective attack do three points of damage. If she shoots it with wood it will do one point of damage as fire is strong against wood. If she shoots the enemy with fire it will do two points of damage.

If the player get hit she loses an elemental point in the element she is currently possessing. If she is possessing wood and gets hit by fire she loses 3 points of wood. She learns super effective moves hurt her more.

During the fight she also learns how the fire enemy attacks.

The player continues and a wood enemy appears. The same thing as with the fire enemy happens but fire does three points of damage, wood do two points of damage and water does one point of damage. During the fight she learns how wood enemies attack.

The same thing happens again but it is a water enemy this time. Wood does three points of damage, water do two points of damage and wood does one point of damage.

At the end of the fight the player is rewarded with another lost soul. But this time she only picks it up and no box appears explaining the sacrifice/free system, she will see that the lost soul counter down in the left corner will go up. If she tries the sacrifice/free buttons she will notice she do the action.

The player learns that you can save the lost souls for later.

Then the player continues and gets confronted by 2 wood enemies.
The player learns how to fight when there is more of one sort.
The same thing then happens with water and then fire.
The last fight rewards the player with a lost soul.

The player then gets confronted by a water and a wood enemy, and see how the fights work when they are mixing. Then the player fights against a water enemy and a fire enemy.

Then the player continues and this time she gets confronted by three enemies, one of each element. So she has to change between what element she is possessing to do the most effective damage to each of the enemies. One of the enemies drops a lost soul.

8.3 Battles

Battle #1
3 fire types

Battle #2
2 wood types
1 water type

Resting area #1
One altar

Battle #3
2 water types
2 fire types
One lost soul

Battle #4
4 wood
2 water

Battle #5
3 water
3 fire
1 wood

Battle #6
4 fire
3 wood
1 water

Resting area #2
One altar

Battle #7
5 water
2 wood

Battle #8
4 fire
5 wood

Battle #9
6 fire
3 water

Resting area #3
One altar

BOSS BATTLE!

9. Rules

To win the game you have to defeat the end game boss. You lose the game if you lose all elemental points in all elements. You lose points by being hit by either the enemies/boss or their projectiles.

When the game is over, the player will be shown one of the end screens and then return to the game menu.

When the boss is defeated and the game is won, the end screen shown to the player will depend on what karma she has. If the karma is positive, the end screen will show the player's avatar rebuilding the village with the help of happy looking lost souls. If the karma is negative however, the end screen will show the player's avatar standing in a triumphant pose on top of a pile of elemental enemies and in the background you can see the village in an even worse state than before.

9.1 Elements

There are three elements; fire, water and wood. These elements are part of an intransitivity cycle. An example of this relation is rock paper scissors. Fire is strong against wood, wood against water and water against wood. Here is a table depicting the relation:

Attacking Element →	Fire	Water	Wood
Fire	100%	**150%**	50%
Water	50%	100%	**150%**
Wood	**150%**	50%	100%

When the player is damaged, the amount of damage taken depends on the player's currently chosen element as well as the enemy or enemy projectile's elemental type. When hit by the superior element 3 points are lost, when hit by the same element 2 points are lost and when hit by the inferior element one point is lost. This system is the same for both the player and the enemies, but the player's elemental points are instead the enemy's health points.

For example, if the player's currently chosen element is fire, if she's hit by something of the water type she loses 3 elemental points, if she is hit by the fire type she loses 2 elemental points and if she is hit by wood she loses one elemental point.

10. MDA

The aesthetic goals for the game are gloom and loneliness. We want the game to avoid the standard sensation of a shoot 'em up. For the game to achieve the aesthetic goals, the player should notice that something is not quite right and reflect upon the situation of the village that she is in. If the player feels powerful and she is only focusing on the action parts of the game, we have failed to successfully achieve the goals. Another mode of failure would be for the player to feel as if the enemies are too strong and that there is no chance for her to defeat them.

The dynamics are the contrast between action and non-action parts of the level design. The player will pass through several waves of enemies, where she will focus on defeating them. Suddenly, the action stops when the player enters the resting areas. The volume of the waling wind and the player's footsteps will be increased, and the background will have more detailed objects to look at and reflect upon.

The influence of the aesthetics can be seen in the art style in the game. The colours are dark and grey-toned, and the Asian themed architecture creates a mystical and dark feeling for the player. The village that the player is walking through is in ruins, and the only creatures that she meets are the enemies. When focusing to achieve the aesthetic goals, the programmers focused more on coding the systems for the game, and there is an absence of content.