

Integrated Project 2 (Games)

Team 8

Samurai Kitchen

Game Design Document

Designers

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1. Purpose

This Game Design Document for 'Samurai Kitchen' provides an overview of the game, the teams design process and gameplay mechanics that the team have iterated and integrated throughout the development of the game. This document will show and explain the thought process of the team throughout the development process; elaborating on all ideas that were suggested, and which of those ideas that were implemented into the final game. The team had to make sure to take into account all constraints, such as the platform, the stakeholder, and the time limit in order to develop a playable game that suited the target audience, which is 12-15 years old.

2. Reference Games

- ☐ Call of Duty: Dead Ops Arcade
- ☐ Smash TV
- ☐ Dead Nation
- ☐ Swarm
- ☐ Zelda Ocarina of Time

3. Target Audience

Samurai Kitchen is targeted towards 12-15 year olds. The team felt as though this was an appropriate age range for the target audience due to the details of the art and concept of the game. The art style of the game makes it seem quite cartoonish, which would generally target younger audiences, however the concept of 'killer sushi' and the game being based around violence persuaded the team to set the age range slightly higher than children. The brief of it being a local multiplayer game also influenced this age decision as it is generally children / teenagers who would play a video game with a few of their friends. The game will be developed for playability on a PC, using gamepads.

Design Logs will be uploaded weekly to the games social media page:

<https://www.facebook.com/SamuraiKitchenExperience/>

This is done in order to create awareness of the game and receive community feedback.

4. Specification



4.1 Design Process

The design process began by evaluating the stakeholder constraints and the teams technical expertise. During a number of meetings, the whole team actively participated in the design process, proposing ideas and analysing how those ideas could affect the player, playtesting and reviewing archetype games and giving early feedback.

By mutual agreement, the team decided to focus on two main ideas:

1. A stealth game, where either the players need to work together to reach the end of the level, or against each other in a race. Both would involve AI that would 'catch' the players if they weren't sneaky enough.
2. A team based game. Three players work collaboratively in a round based shooter, and one player controls a 'horde', which would create a 3v1 scenario. This idea seemed to stick, however the team were aware from the start how the balancing issues may cause problems.

The team's initial idea was to create a top-down 2D game, for multiple players to play on the screen at one time. However, after a deep analysis of the various possibilities the team reached the conclusion that according to the teams experience and knowledge, the game should be designed in an angled perspective view, with a 3D environment surrounding 2D player sprites. This decision was made due to the skill level of the artist team.

Two early stage prototypes were constructed to show the teams vision of what they want to do with these ideas.



After the production of the two early prototypes, the team finalised on the team based, 3v1 style game. The team then went on an iterative session of refining the main mechanics, core features of the game, while discussing possible features and assets that would suit.

4.1.1 Playtest Report

One common response from the testers was that players felt like the horde player was at a disadvantage to the chefs. This was due to the trap layout, and the general damage that both the chefs and the horde could deal. Players felt like the horde almost couldn't even get close to the chefs as they would just run away quickly, or shoot the horde down too easily. Another problem players were finding with the sushi was that it was unclear what the horde was controlled with, and it was also too slow to move. This made gameplay for the horde player become boring and tedious at some points from trying to move the horde around so slowly.

In order to counteract the problems with the horde, the team decided it was best to split the horde up into two separate groups, which are controlled separately using the left and right analog sticks. The two hordes had an indicator of which horde was controlled by which stick, to indicate clearly and inform the player and so they don't get mixed up between the two. The speed of each horde was significantly increased, allowing for quick and free movement around each map. Having two separate hordes for the player to control allowed for potential strategic advantage by being able to flank a chef from two sides, allowing gameplay to become a lot more enjoyable and spontaneous.



4.2 Gameplay Mechanics

Encounter and Extreme Mode: Favour a 5 waves to the end system. However the strength and amount of Sushi is drastically increased in the *Extreme Mode*. The *Extreme Mode* allows more experienced Survivor players to feel challenged. Through the great sushi buff, The *Extreme* mode also allows for less experienced sushi players to win more often. Both parties work against each other in a 3vs1 scenario.

Teamwork: The 3 chefs have to co-operate and use their weapons ranges and effects in harmony to overcome the blood thirsty horde of Sushi and strike it down !

The Sushi / Horde Player: Can use both left and right analog sticks to master the art of *sushi boarding*. This is an easy to learn but hard to master mechanic. If learned and practiced, this mechanic proofs as great advantage for the Sushi player to efficiently decimate the 3 chefs.

Traps: Survivors can time the use of traps with X efficiently to maximize damage done.

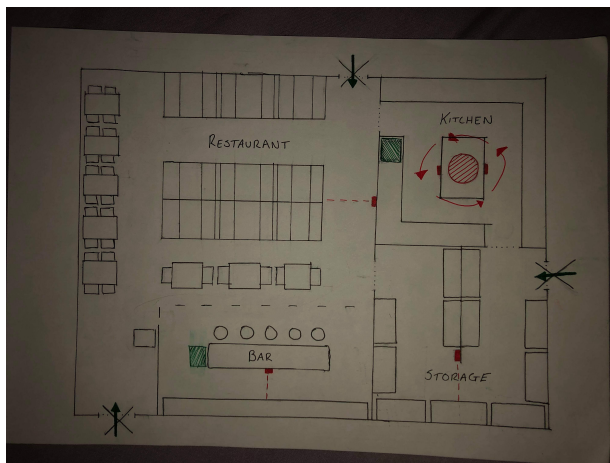
Skillshots: The survivors seemingly control the path of their weapon projectiles through the directional use of the *right analog stick*. This is a great skill based mechanic to increase the survivors control sensitivity and the outcome of the game.

Party Roles: Are distributed new each round and can be picked in the *character selection screen*.

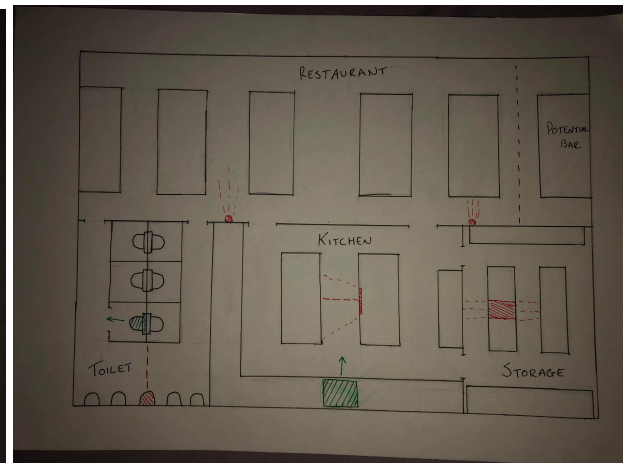
4.3 Level Design

The level design of the two maps were generally meant to allow for plenty of free movement since there will be 3 players and a horde moving around inside. The design team tried to take into consideration the generic layout of a restaurant without creating too many 'choke' points, where players could filter the horde into a narrow corridor, making it easier to win. Initially, two layouts were sketched up for two separate maps. These were colour coded to label entry points and trap placement, green being entry points / spawn points for the sushi, and red being trap placement.

Map 1



Map 2



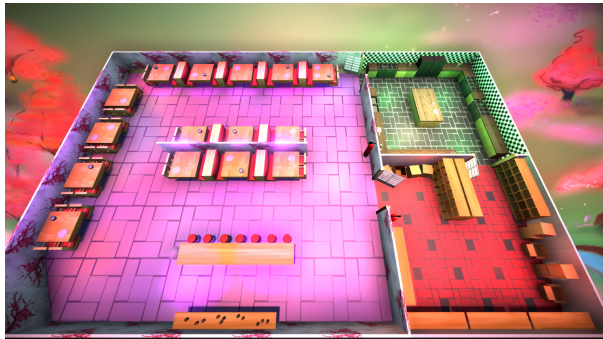
Concept Maps



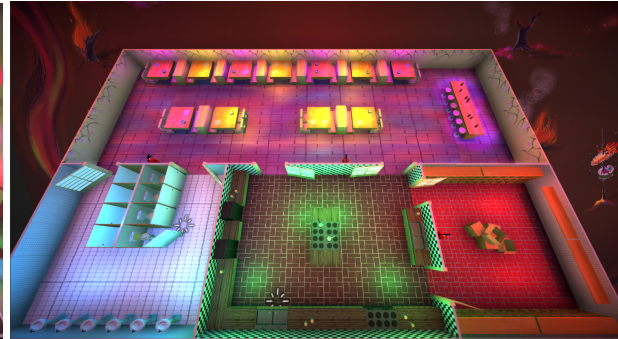
After the initial plan was constructed for the two maps, it was time to create these in unity in versions of white boxes. This was mainly so the programmers could start implementing code into direct game objects, and once the artists had provided game assets, they were implemented into the map which replaced the white boxes. The level design changed from the

initial sketches, due to when the team were playtesting it, a common consensus was that it was too narrow and it made it almost difficult to move. The final iteration of the two maps try to achieve this open space as much as possible, while still keeping the generic natural feel of a restaurant.

Map 1



Map 2



4.4 Characters

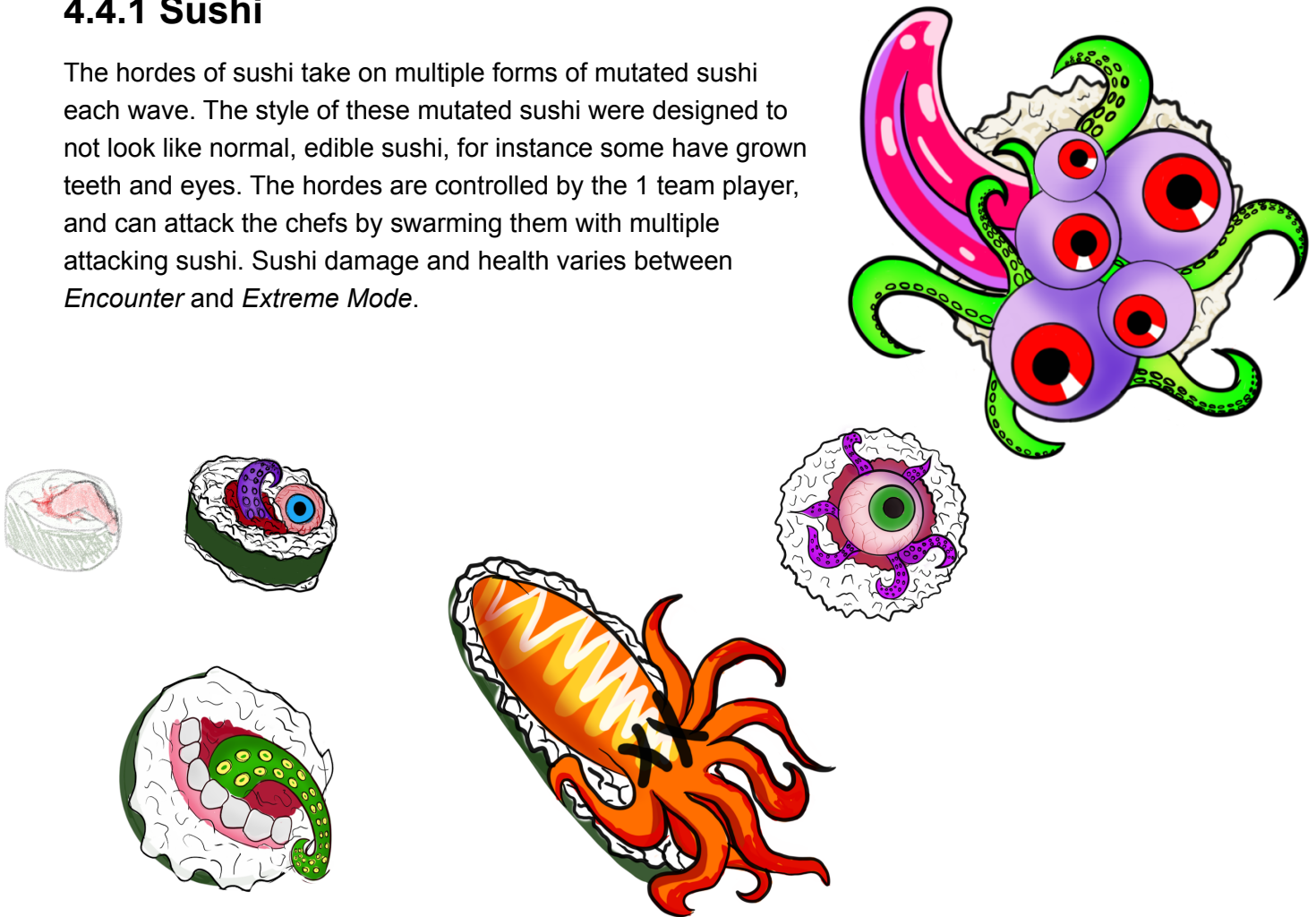
The game accommodates up to 4 players, therefore there needs to be 4 different characters or entities for these players to play as at the one time. Due to the 3v1 format that the game achieves, the team of 3 are all chefs, and the 1 is a horde of sushi. The 3 chefs all have their own identity; Fat Chef, Lean Chef, Crazy Chef.



The Fat Chef has been designed as a fat, slow, greasy chef, the Lean Chef as a nimble and delicate chef, and finally the Crazy Chef as a wild and mad chef. This instantly paints an image of these three chefs for the players just from this description, which is exactly what the design team was after. The chefs all have their own weapon, in order to attack the hordes of sushi.

4.4.1 Sushi

The hordes of sushi take on multiple forms of mutated sushi each wave. The style of these mutated sushi were designed to not look like normal, edible sushi, for instance some have grown teeth and eyes. The hordes are controlled by the 1 team player, and can attack the chefs by swarming them with multiple attacking sushi. Sushi damage and health varies between *Encounter* and *Extreme Mode*.



4.4.2 Weapons (Chefs)

Since there are three distinct characters, the design team felt as though it was appropriate to allocate each of them with their own unique trait, and in this case, we done this through their weapon.

The Fat Chef uses a bottle of ketchup to squirt at the horde of sushi. This in theory shouldn't cause any damage as it is simply a bottle of sauce, however due to the specification of the brief, the team felt it would work as it sounds 'weird and wacky'. However, this character moves slower than the rest due to the weight of the character.

Effect: Slows enemy sushi.

Damage: 1 damage per second.



The Lean Chef has the ability to throw kitchen knives at the horde of sushi. Due to the setting of the sushi restaurant, it was appropriate to make this character throw these knives. These knives cause high damage to the sushi, however the player can only throw one at a time.

Effect: Normal speed.

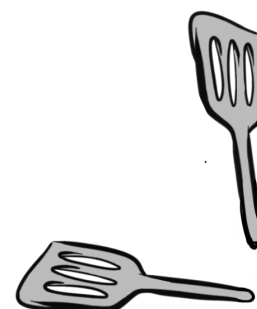
Damage: 50 per hit.



The Crazy Chef uses two spatulas to furiously swing away at the horde of the sushi. The team felt as though this team could potentially be at a disadvantage due to only being able to attack in close quarters, which ended up being the case after playtesting. To resolve this issue, the damage of the spatulas was greatly increased, adding the effect that this chef is 'crazy'. This character also moves the fastest out of the three due to the close quarters combat.

Effect: High speed.

Damage: 75 per hit.



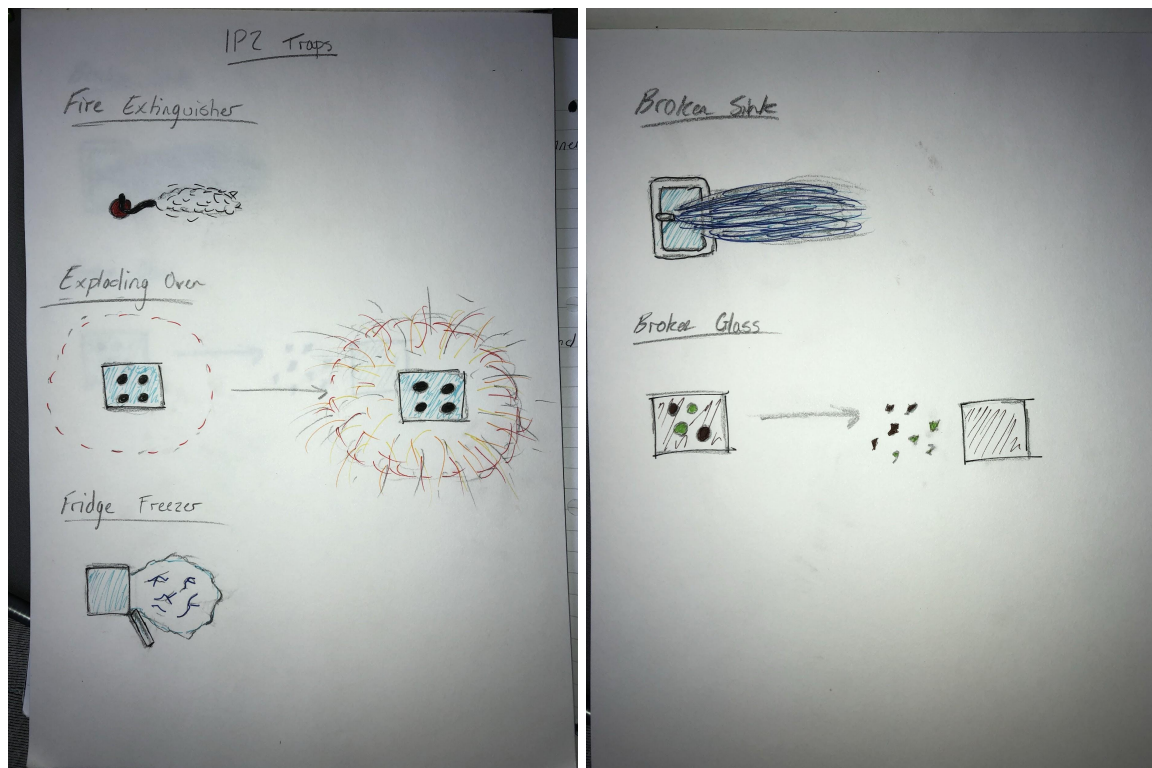
4.5 Action / Objective

Samurai Kitchen is a CO-OP survival game, which engages the player with a wave based gameplay system. The game is set within a sushi restaurant, where players are divided into 3v1. The team of three is played by three separate players, and they all take on the role of a chef, whereas the one on their own controls a powerful horde of killer sushi. The three survivor chefs are all unique in relation to each other, due to the different appearance and weapons that they all have. Traps have been installed throughout the restaurants to help the chefs defeat the horde of killer sushi. A score system is be implemented to encourage players to replay and rank against their friends. This game is set out to be a party like installment for ages 12-15. The main key term that makes the gameplay stand out in terms of other games, is the fact it is so weird and wacky, which attempts to hit the brief as best as possible. Each wave introduces a new challenge to the chefs, as the killer sushi increase in number and strength. The first team to kill off the other wins, and the round can be restarting with players selecting different characters if they wish.

The goal of the three chefs is to survive against each wave of sushi, which will progressively get harder as each wave has ended. In total there are 5 waves of sushi for the chefs to defeat, so the three chefs must work together, using their limited weapons and the traps located around the restaurant to defeat each wave of sushi. However the player who plays as the horde of sushi must use their two hordes to overwhelm, and kill each chef one by one. If they succeed in this, then the game is over and the sushi player wins.

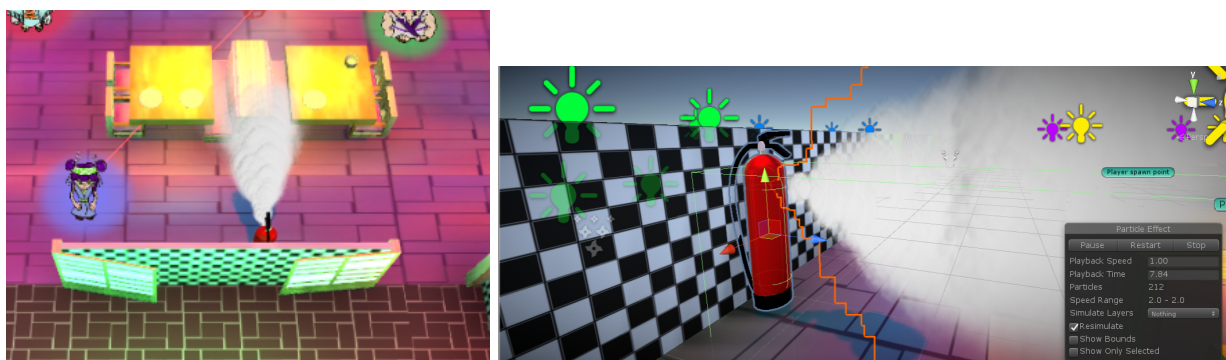
4.5.1 Traps

The environment of the game being set within a restaurant meant that the traps had to relate to items located in a restaurant. This allowed for exploration of many concept ideas when in the design process. There were five concept traps produced during this process; the fire extinguisher, the exploding oven, the fridge freezer, the broken sink, and the broken glass. These traps were based on props and items that you would typically find around different locations within a regular restaurant.

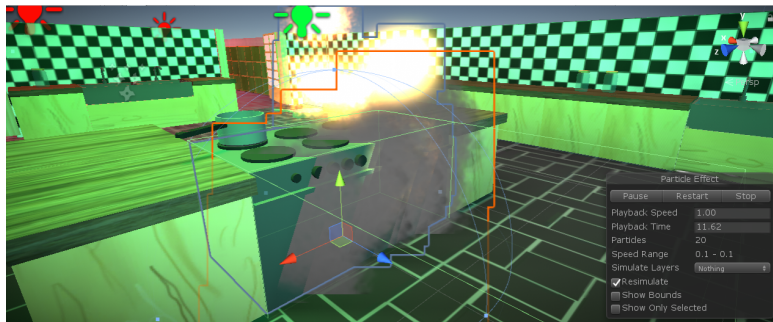


However only two of these traps, the fire extinguisher and the exploding oven, actually made it to the final development, due to limited space within the maps, and balancing between the two teams, as it would be unfair to put the chefs at an advantage over the sushi horde with more traps than necessary.

The fire extinguisher is the main trap for the chefs as it is located within different rooms of the restaurant. The design of this trap is to act as a barrier between the chefs and the horde when activated. When the trap is activated, a cloud of CO2 is emitted from the trap, blocking the particular pathway. If a player, either one of the chefs or the horde, walks into the trap, they are simply bounced back in the other direction, causing a slight amount of damage. The trap can be activated by one of the chefs, by pressing X, when close enough to the trap. Once the trap is finished, it goes into cooldown mode, and cannot be activated for another 30 seconds.



The exploding oven can only be located within the kitchen areas. The main idea of this trap is for it to be a single use, AOE damage trap. If the trap becomes activated by one of the players, there is a countdown of 2 seconds, indicated by the red flashing circle underneath the oven. Once the countdown reaches 0, the oven explodes over an area, causing massive damage to the sushi, and pushing all players and sushi away in relation to the centre point of the oven. The trap can be activated in the same manner as the extinguisher, by a player approaching the trap and pressing X within range. After the oven trap has exploded, it goes into cooldown, similar to that of the extinguisher.



5. Menu and UI

5.1 Main Menu

Not Animated: The 3 chefs are seen with their weapons in action pointing at a beautiful Japanese landscape. 3 buttons, "Encounter" "Extreme Mode" and "Exit" are displayed in various fruity colours.

Style: 1920 x 1080 detailed.

NOTE: Space for UI buttons to be placed needed. The buttons are all clickable and will have the desired effects.

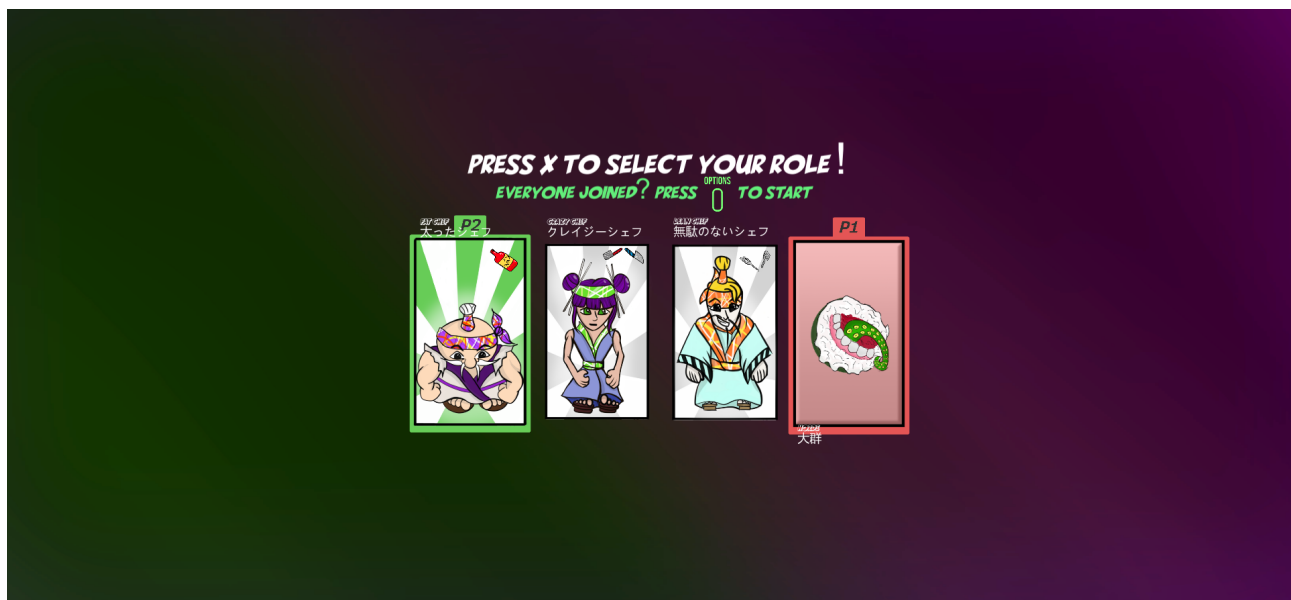




5.2 Character Selection Screen

Functionalities:

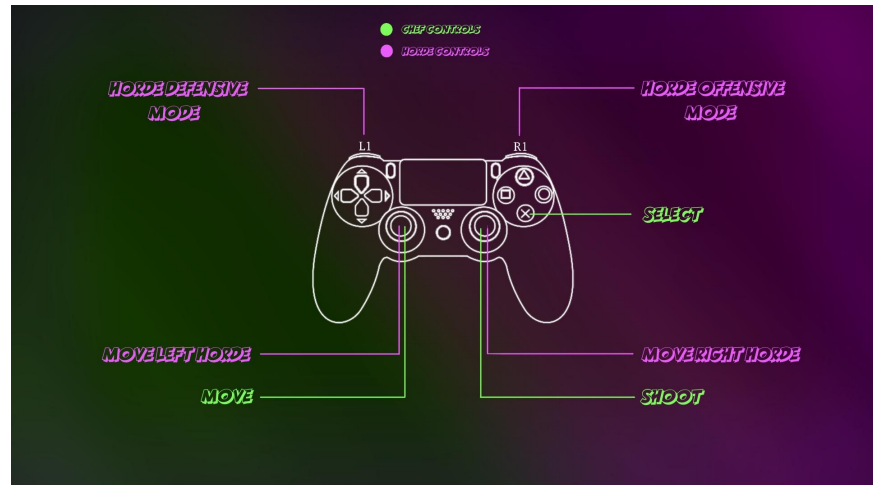
1. The players can choose their character or horde by pressing X, where there glowing cursor is hovering over currently, to log in.



2. If nobody chooses the horde, the game will display a warning message and ask a player to assign their role to horde.

5.3 Control Screen

This screen was implemented to display the control scheme to the players in a clear manner. Extra care was taken to match the colour scheme with the ingame lighting of the levels.



5.4 In-Game

5.4.1 Encounter Mode

Design Specifications.

A beautiful Japanese Forest art piece. A positive and bright mode is conveyed. Pink and red cherry blossom trees fill the grass landscape, as well as bridges and rivers.

This will be the background for the encounter level.

It will be shown around the encounter (normal) level.

Players will not be able to interact with it.

1920 x 1080 HD detailed.

5.4.2 Extreme Mode

Design Specifications.

A Japanese war zone. Art: Sushis are on sticks with blood and there are extreme objects such as fire.

This will be the background for the extreme level.

It will be shown around extreme level.

Players will not be able to interact with it.

1920 x 1080 HD detailed.

5.5 End Scenes

5.5.1 Player Win Scenario

The Player Wins:

Non Animated: The Sushi is cut into pieces and the 3 players are dancing victoriously around it.

Style: HD 1920 x 1080 and detailed as it will be fullscreen.



//HORDE DEATH: When the SUSHI PLAYER = DEFEATED: At the end of Wave 5:

The score is displayed. The Sushi Player automatically changes here. A player is selected at random to be the new SUSHI PLAYER. The character selection screen pops up. A new round starts at wave 1.

5.5.2 Sushi Win Scenario

Non Animated: The 3 players are crushed on the kitchen floor getting eaten by the Sushi.

Style: HD 1920 x 1080 and detailed as it will be fullscreen.



//PLAYER DEATH: When the SUSHI PLAYER = victorious:
All the SURVIVORS must die: Before end of wave 5:

A gravestone appears in the place of a player. The score is displayed. A popup asking the SURVIVORS "New Sushi Player?" Appears: The SURVIVORS can choose between "YES" or "NO". Depending on what they choose a new "Sushi Player" is selected at random. Regardless of what they choose: The character selection screen pops up. A new round starts with wave 1.

Player Death:

//A gravestone appears where the player fainted.

At the end of the each wave the K.O player, should there be one, is resurrected at full health.



6. References

Royalty Free Music:

<https://www.looperman.com/loops/detail/75149/noble-samurai-by-hairlinecrime-free-154bpm-ambient-synth-loop>

<https://www.looperman.com/loops/detail/130924/last-hope-of-the-samurai-80bpm-trap-piano-loop>

<https://www.looperman.com/loops/detail/132364/samurai-125bpm-trap-strings-loop>