Game Design Document

Pizza Delivery – Alien Space Time Adventure

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1.0 Story and Overview

1.1 General Overview

This 2D platformer interactive simulation game places the player in the body of a Pizza Paul throughout his journey delivering pizzas to UFOs in space. As the level evolves, Pizza Paul has more resources (ingredients and toppings) to collect, more obstacles (asteroids and enemies) that prevent him from delivery, and so his tasks become more difficult.

In order to progress in the game, the player must ensure his immediate well-being, collect all necessary toppings, avoid lethal obstacles, and successfully reach his customer.

The player experiences the world as a spaceship shaped like a pizza. The game's interface follows the simple point-and-click model, in which the player can use the mouse to create particles that are able to navigate the spaceship's movement.

The game takes place in a wide open starry background loaded with stars that simulates the space. The space is populated by asteroids, pizza toppings, and UFOs.

1.2 Storyline

Paul, a young pizza enthusiast, leaves his home planet of Earth to embark on a brand new entrepreneurial blue ocean strategy adventure: Selling pizza to aliens. Everyone thought he was crazy, but he saw the potential of this untapped market, and he will earn all of the alien moneys. Throughout his adventure, he encounters many issues that he had not foreseen. His exciting journey takes him through the wonders of the universe as he faces challenges such as gravitational forces, angry aliens, and, of course, doing it all in 30 minutes or less.

1.3 Environment

The physical space is represented by a simple background tile which follows the player as he moves throughout space. The black background makes it easy for the player to spot the ingredients, but difficult for him to notice the asteroids.

Particles are used to navigate Pizza Paul throughout space. Particles have different colors and properties. There are 4 kinds of particles differentiated by 4 colors: blue, red, green, yellow. Blue articles attract the player and allow him to move into certain direction. Red articles repulse the

player and make him turn 180 degree to the opposite direction. Green articles reduce friction and speed the player up. Yellow articles increase friction and slow the player down.

1.4 Non-interactive Sequences

Intro – Opening Scene

The scene starts out with a big yellow "Start" button in the middle of the screen. Then a voiceover comes to give a brief introduction about the game and instruct the player to press the "Start" button. There is Pizza Paul slowly moving past the screen from left to right.

Paul's Backstory

The scene starts out with a close-up of Pizza Paul, and slowly zooms out of his image. The voiceover gives the backstory of Paul as a pizza enthusiast, who destined to sell pizza in space to aliens. After the voiceover ends, the game automatically loads to level 1.

UFO Dialogue

The scene starts out with a close-up of the UFO that Pizza Paul successfully delivers pizza to in level 1, and slowly zooms out of its image. The voiceover is the voice of the UFO, which instructs Pizza Paul to continue his pizza delivery mission to other places in space. After the voiceover ends, the game automatically loads to level 2.

Bloated UF Dialogue

The scene starts out with a close-up of multiple UFOs (the same UFO from the previous dialogue), which are very happy with the pizzas that Pizza Paul successfully delivers to in level 2, and slowly zooms out of their images. The voiceover is the voice of the UFOs, which instructs Pizza Paul to sell pizza to the neighboring planet. After the voiceover ends, the game automatically loads to level 3, phase I.

Angry AnchovyUFO Dialogue

The scene starts out with a close-up of the Anchovy UFO, and slowly zooms out of its image. The voiceover voices the disappointment of the UFO, as the pizza lacks a very important ingredient (the player can guess that is anchovy based on the portrait of the Anchovy UFO. After the voiceover ends, the game automatically loads to level 3, phase II.

Happy AnchovyUFO Dialogue

The scene starts out with a close-up of multiple Anchovy UFOs, and slowly zooms out of their images. They are super happy with the delivery of the pizzas with anchovy. After the voiceover, the scene loads to the next dialogue.

Special Order Dialogue

The scene starts out with a close-up of a new UFO, and slowly zooms out of its image. He requests a special order with all kinds of toppings, including Anchovy, Pepperoni, Mozzarella, and Mushroom. After the voiceover, the game automatically loads to level 4.

Finished Order Dialogue

The scene starts out with a close-up of the UFO that Pizza Paul successfully delivers pizza to in level 4, and slowly zooms out of his image. The UFO absolutely loves the pizza, and recommends Pizza Paul to his friend Calzone. After the voiceover, the scene loads to the next dialogue.

Evil Calzone Dialogue

The scene starts out with a close-up of multiple Evil Calzones, and slowly zooms out of their images. They are angry that Pizza Paul rivals their calzone business, so they decided to go after him. After the voiceover, the game automatically loads to level 5.
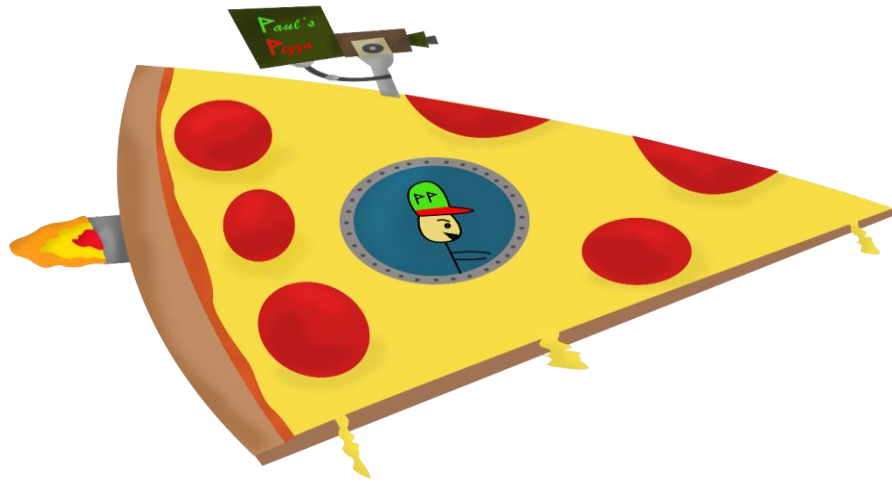
2.0 Characters

2.1 Playable Characters

2.1.1 Base Description

As explained in the overview section, Pizza Paul is a pizza enthusiast. In the game, he drives pizza-shaped spaceship to navigate throughout space. The ship is a pizza with pepperoni, and Paul is a happy stick figure.

2.1.2 Visual Depiction

2.1.3 Development

Pizza Paul is guided by a green arrow which points him toward the right direction towards the goal. Besides from that, the development of Pizza Paul is very simple with the velocity and movement scripts.
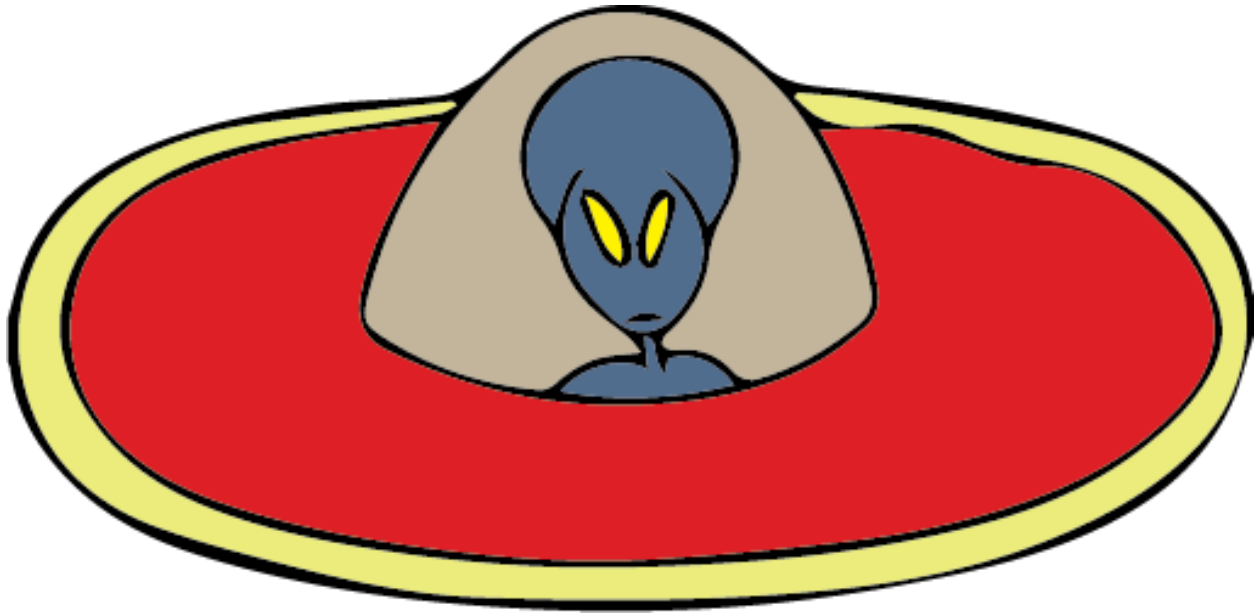
2.1.4 Abilities

Pizza Paul can only move in a straightforward direction with certain velocity based on the particles being created in front of him.
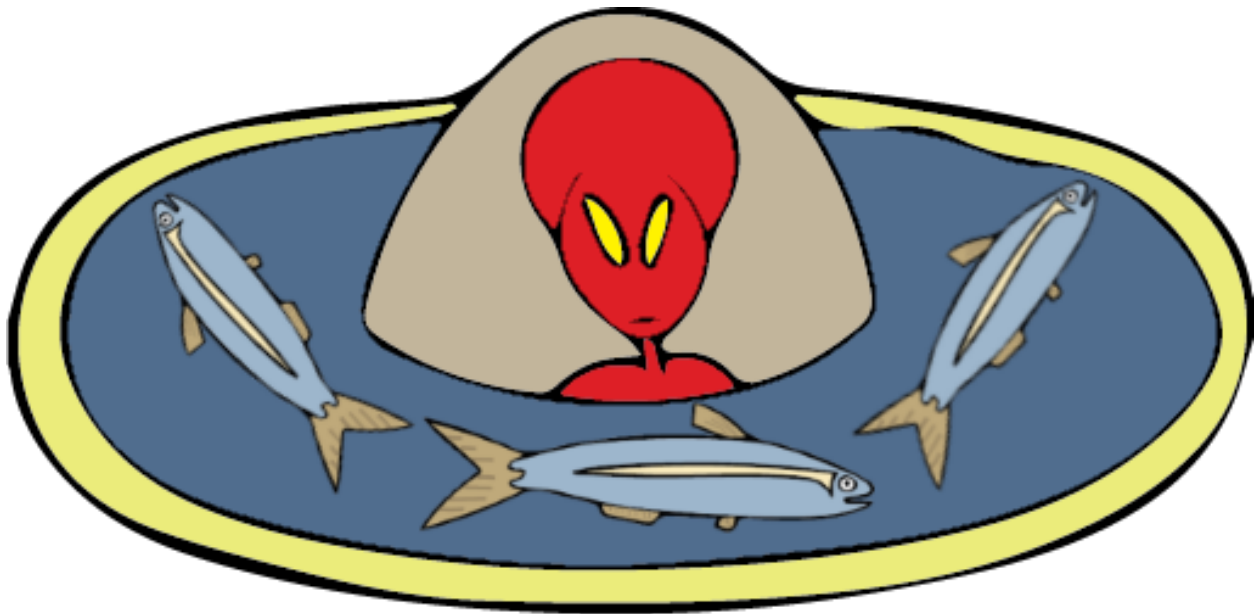
2.2 UFOs

2.2.1 Friendly Alien

The friendly alien is Pizza Paul's customer in level I and level II. Below is a depiction of him:
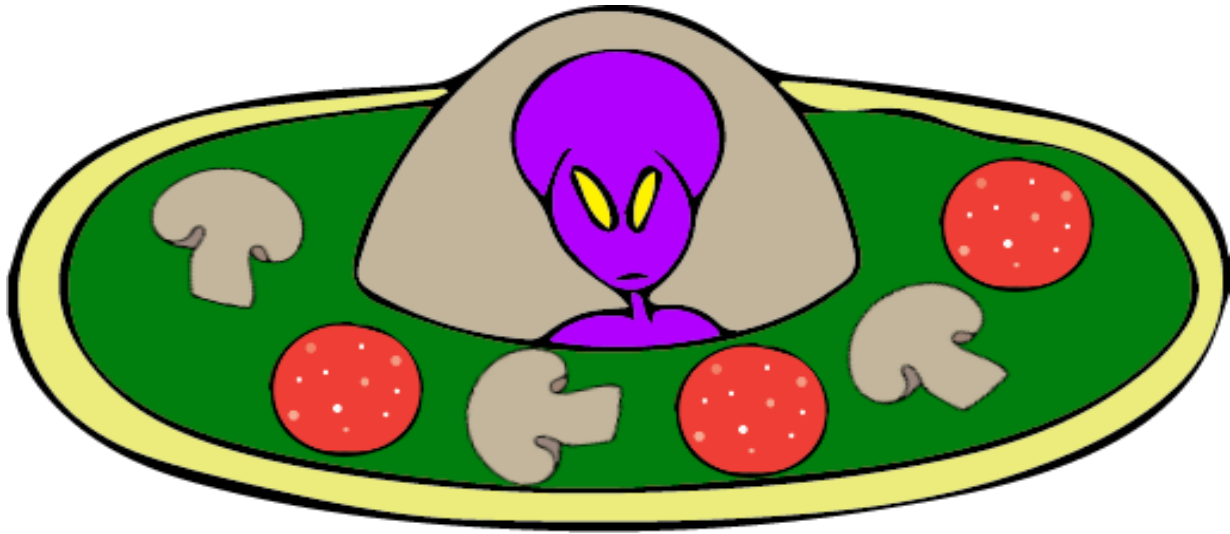
2.2.2 Anchovy Alien

The anchovy alien is Pizza Paul's customer in level III. Below is a depiction of him:
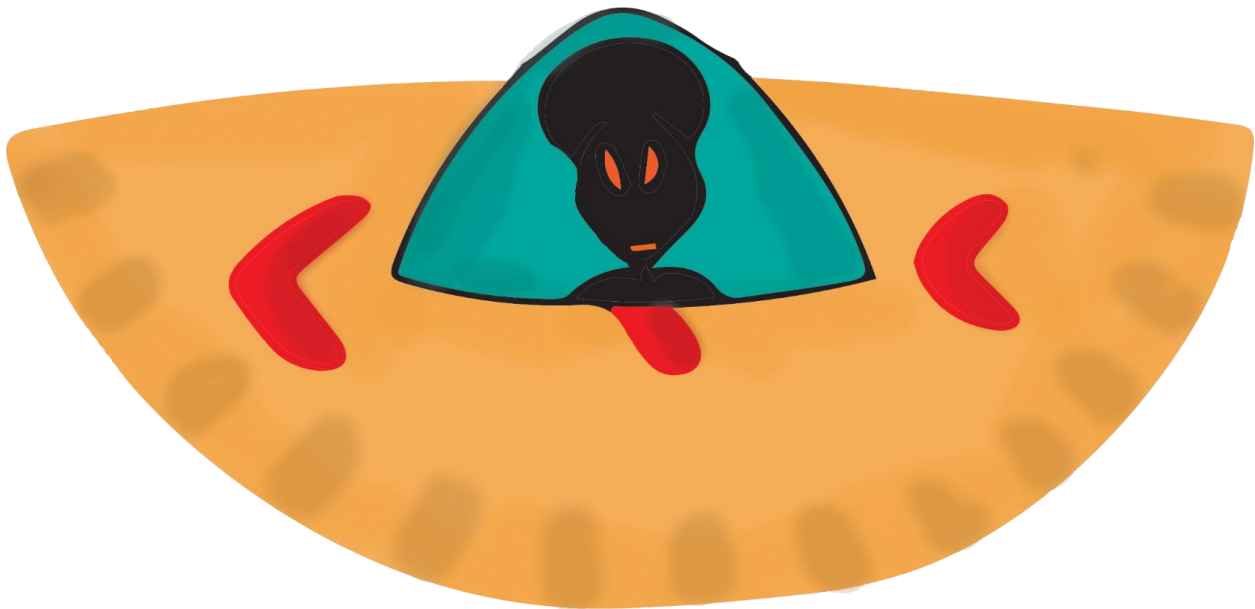

2.2.3 Pesto Alien

The pesto alien is Pizza Paul's customer in level IV. Below is a depiction of him:

2.2.4 Evil Calzone

The evil calzone attempts to attach Pizza Paul when he enters his territory in level V. When they collide, Pizza Paul will die. Below is a depiction of him:

3.0 Inventory

3.1 Pick-up Ingredients

Throughout the game, Pizza Paul is instructed to pick up toppings for his pizza delivery. The ingredients include:

- Anchovy (Level 3, 4, 5)

- Mushroom (Level 4, 5)

- Pepperoni (Level 4, 5)

- Mozzarella Package (Level 4, 5)

- Sauce Can (Level 4, 5)

There is a text section on the game screen to count how much of each ingredient that Pizza Paul successfully picks up.

3.2 Obstacles

Besides the evil calzone described above, the only other obstacle in the game are asteroids. The game has 4 different types of asteroids with different shapes; and when Pizza Paul collides with any of them, he will die.

4.0 Gameplay

4.1 Gameplay Basics

The Player seeks to deliver pizza to his customer – the aliens in space. The player must navigate the space world (represented with a starry night background) in order to complete his task. The player will have to follow the green arrow button, avoid the asteroids, and collect all the toppings in each level. At the final level, the player will get attacked by the evil calzone, so he needs to make wise movement to avoid getting hit.

4.2 Gameplay Elements

Pizza Paul, asteroids, aliens, and toppings are all represented by 2D models portrayed in third person perspective.

5.0 Miscellaneous Points of Interest

5.1 Tutorial Details

Our first level places the user in a simple starting level with only Pizza Paul and the goal destination without any obstacles or ingredients to be picked up. It is in this level where the user learns how to create particles to move Paul around and reach the goal.

5.2 End Scene

After finishing level 5, the game will load into the end scene, which features an image of Pizza Paul head-to-head with Evil Calzone. This is a teaser for the next sequence of our game.

6.0 Level Design

6.1 Level Descriptions

Level 2

- *Objective: Make your way to the goal planet*
- *Description: There are many asteroids of different shapes and signs scattered throughout the level. Your goal is to avoid them and reach the planet at the end*

Level 3 – Phase I

- *Objective: Make your way to the goal planet*
- *Description: The asteroids are better structured in this level, which makes it harder for the player to navigate because there are only 1 or 2 ways to reach the goal planet.*

Level 3 – Phase II

- *Objective: Make your way to the goal planet*
- *Description: The level is design exactly the same as level 3 – phase I, except there is a single anchovy topping that the player hast to collect before reaching the goal planet.*

Level 4

- *Objective: Make your way to the goal planet*
- *Description: The asteroids in this level are very well organized to prevent the player to reach the goal. At the same time, the toppings are scattered all around the level.*

Level 5

- *Objective: Make your way to the goal planet*
- *Description: There are a few mozzarella packets for the player to collect, but whenever the player attempts to collect one, the evil calzone will attack him.*