PANTS ATTACK

Game Design Document

Can you be a hero
when pants attack?

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Table of Contents

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Game Overview

Title: Pants Attack
Platform: PC, Mac, Linux Standalone
Genre: 3D Arcade Shooter
Rating: (10+) ESRB
Target: Casual gamer (aging from 6 - 25)
Release date: December 9, 2019
Publisher: Unity

Pants Attack is a first-person 3D game that is set in a town where the player is in a hovercraft with a friend and must navigate around to destroy all the pants/jeans that have come to life! The player must destroy the pants by shooting at them with the space bar. The top right corner displays your countdown timer while the top left corner displays the number of pants you must shoot before the timer runs out! Shooting all the pants and keeping the town safe will bring you to the next level, in which the difficulty increases as the pant-to-time ratio shrinks. If you can't get all the pants before the timer runs out and you fail to keep the town safe, it's game over. Good luck keeping the town safe while the pants attack!

High Concept

Pants Attack sets the player in a town filled with roads, gas stations, buildings, trees, parks and more. You are in a hovercraft with your friend, trying to save the town from pants that came alive! Use the arrow keys to move around the town and use the spacebar to shoot bullets out of the cannon attached to your hovercraft. You must shoot all the pants before the timer runs out. If you succeed, you will advance to the next level. If you fail to keep your town safe, it's game over!

Unique Selling Points

- Bright, colorful artwork
- Fun particle and sound effects
- Easy to play
- Enticing for kids or teens
- Captivating, adventurous, vigorous

Platform Minimum Requirements

PC, MAC AND LINUX STANDALONE
  Most computers with enough storage and a high functioning operating
  system would be compatible to play the game.

Competitors / Similar Titles

War Machines, CrossFire, Halo, TitanFall, Density, Shell Shockers

Synopsis

You are driving around your town with a friend in a hovercraft when all of a
sudden, there are evil pants attacking your town! You must defeat the pants
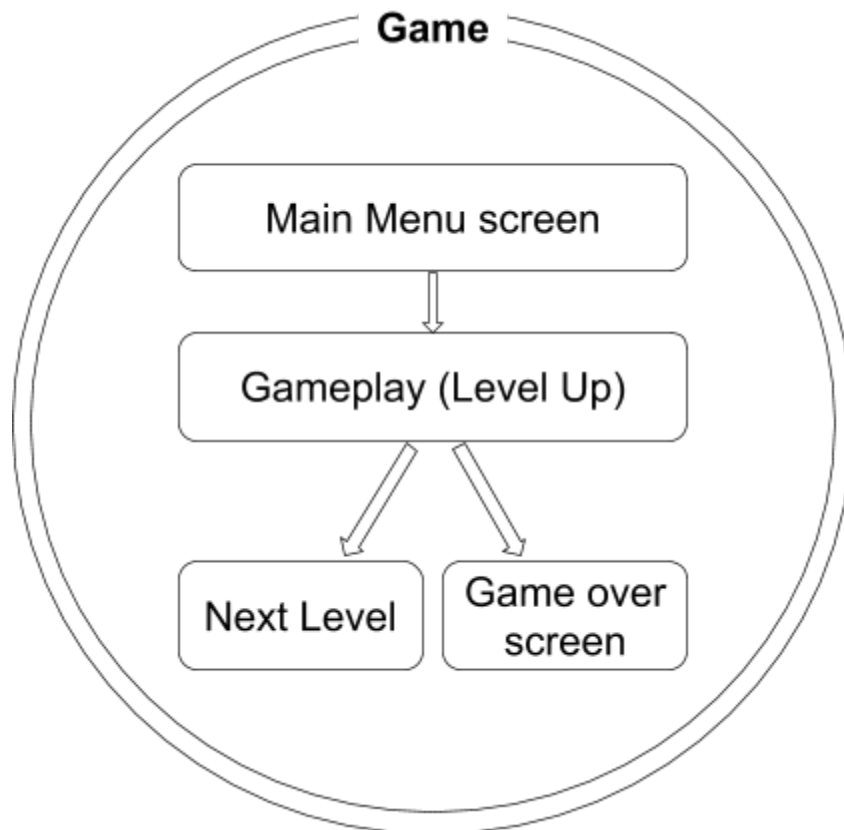and keep your town safe!

Game Objectives

The objective of the game is to shoot the desired number of pants before the
timer runs out. If you succeed, you advance to the next level. You want to get to
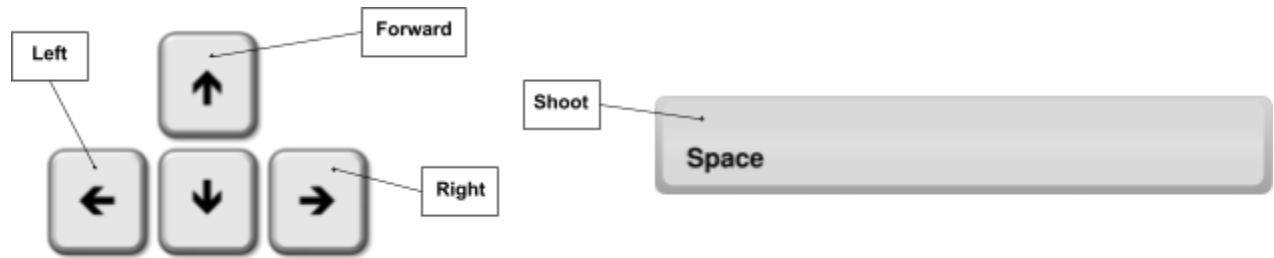the highest level that you possibly can before running out of time!

Game Rules

The player must shoot pants in the allotted amount of time. When their time reaches 0, the game is over. The amount of jeans left to shoot is displayed in the upper left corner, while the countdown timer is displayed in the upper right corner. If you shoot enough pants in time, you move to the next level. The difficulty increases after each level you pass.

Game Structure

```
                        Game
        ┌───────────────────────────────┐
        │      Main Menu screen         │
        └───────────────┬───────────────┘
                        ↓
        ┌───────────────────────────────┐
        │     Gameplay (Level Up)       │
        └──────┬─────────────────┬──────┘
               ↓                 ↓
        ┌──────────────┐  ┌──────────────┐
        │  Next Level  │  │  Game over   │
        │              │  │   screen     │
        └──────────────┘  └──────────────┘
```

Game Play

Game Controls

Game Camera

The camera follows the player, showing the back of the hovercraft. Wherever the player moves or turns, the camera follows.

HUD

Jeans Left - indicates how many pants the player still needs to shoot.
Time Left - indicates how long the player has to shoot the pants.
Level - the player's current level.

Players

Characters
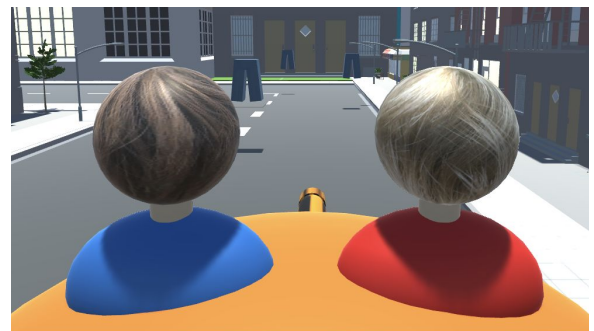Carl and Shawn are best friends riding around in a hovercraft together.

Metrics
Speed: 20

States
Move: The player only has one state which is "moving forward" on the screen.
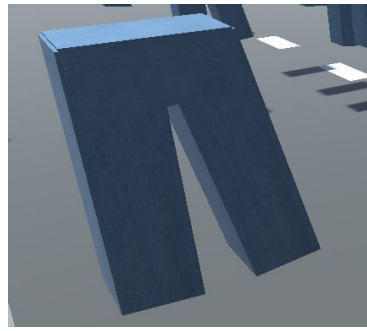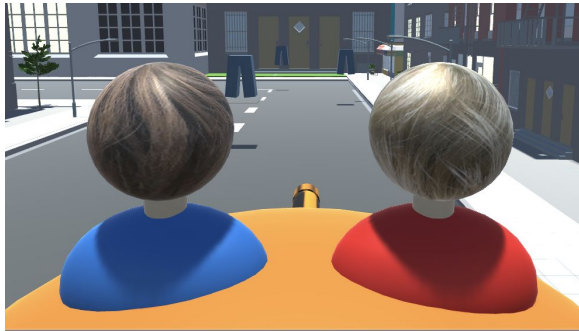**Shooting**: The player shoots bullets out of the hovercraft.

Weapons

Bullet - The bullet can be shot from the canon attached to the hovercraft. 1 shot to the jean destroys it.

Character Line-up

NPC Enemies

Enemies

The jeans are alive, attacking and evil!
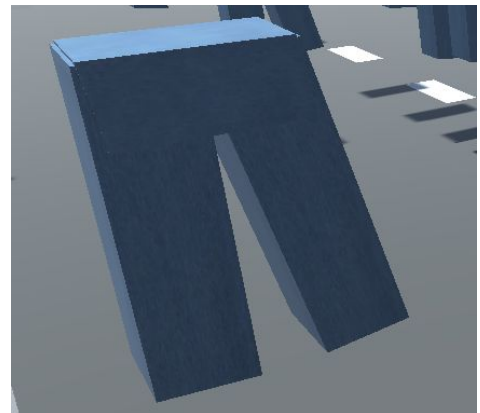
Metrics

Spawner: Spawned in various locations.

Enemy States

Move: The jeans are animated animated, so the pant legs move back and forth. The jeans ultimately stay in their spawned locations, but the legs move.

Enemy Spawn Points

Spawn points are scattered around the map but more focused around the perimeter of the park.

NPC Help

Help

The bullets help you destroy the jeans. Destroying all the jeans helps you level up and keep your town safe!

Metrics

Bullet Speed: 100

Ally States

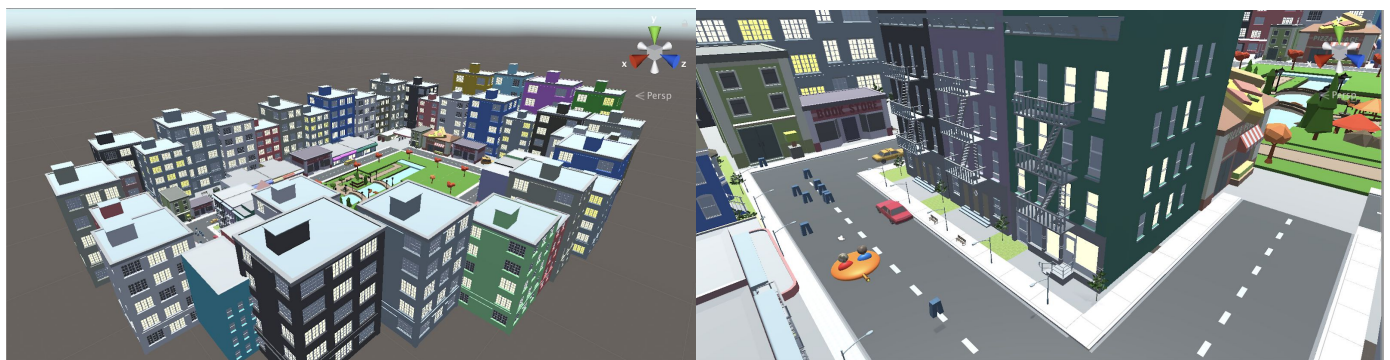**Move**: The bullet moves towards the jeans and hits the jeans when aimed properly.

Ally Spawn Points

The bullet is shot from the cannon on the front of the hovercraft.

Art

Setting

The game takes place in a town.

Level Design

The game levels up every time the player succeeds at shooting the desired number of jeans before the countdown timer reaches zero. With each level, the time-to-jeans ratio shrinks, thus increasing difficulty. The player wants to see what the highest level they can reach is!

Audio

NAME	CATEGORY	DESCRIPTION
backgroundMusic	Background Music	Plays during the game
fail	FX	When player loses, game over screen
levelUp	FX	When player passes the current level
shootSound	FX	When player shoots

Procedurally Generated Content
Minimum Viable Product (MPV)

- Built for PC, Mac and Linux Standalone
- Player and hovercraft are uncustomizable, you can only use the default player as your character.

Wish List

If we had more time, we would've liked to add the following things:

- An option for the player to design the characters inside the hovercraft. Allow player to choose hair color, clothing colors and more.
- An option for the player to customize the hovercraft. The player could choose hovercraft color, patterns and shape.
- A more complex inventory system. Each level comes with points, and the player can use the points to buy more time, more intense bullers and cool custom features for the hovercraft.

Genre

Pants attack is a shooter game.
- The player must navigate around town in a hovercraft and shoot at the pants that have come to life to attack.
- To advance to the next level, the player must shoot the specified number of jeans before the countdown timer runs out.
- The more you level up, the smaller the pants-to-time ratio gets. Therefore, the further you level up, the harder gameplay becomes.
- You are the protagonist in this shooter game and it is set up so that the player is in first person perspective.
- The cannon at the front of the hovercraft shoots out bullets, triggered by the space bar on your keyboard. You can aim your cannon to shoot appropriately. You have an infinite number of bullets.

Bibliography

Original Images:

- We created original images with 3D objects and imported colors and patterns on unity.
- Our original art is what follows: the hovercraft, the people in the hovercraft, the bullet, the cannon on the front of the hovercraft, the menu page, the title, the credits page, the next level page, and the game over screen.

Image Credits:

"Simple Cars Pack." *Asset Store*, Unity,
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"Simple City Pack Plain." *Asset Store*, Unity,
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Buttons:

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Fonts:

Fonts: https://www.dafont.com/theme.php?cat=101

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(Instrumental). Youtube*, 17 Feb 2016,
https://www.youtube.com/watch?v=J9nlHv3AFd0&t=11s.

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