

COP 701 ASSIGNMENT 2

ZAXXON Game

REPORT

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1 Introduction

We recreated ZAXXON game using Unity3D. We have created 5 Levels and 3 layouts in the game. The player can move up and down(height) and left and right using arrow keys and he needs to clear the levels by shooting or avoiding the obstacles. The player can shoot the obstacles using the space bar. There are 5 lives given to the player. The player needs to refuel constantly otherwise the plane would explode irrespective of the lives available. Instead of tanks we have used cannons and field guns which suits the theme of our game

Level 1

Gameplay

In level1 user will fly the plane through simple obstacles which will just shoot bullets at random intervals. The idea is to score maximum points by destroying the cannons. Player also need to avoid the missiles from the mortars. Also the player cannot fly above the obstacles since plane will need refueling after regular intervals.

The player has to survive for about a minute in order to clear level1.

Level 2

Gameplay

Here the player is flying through space. There will be asteroids flying in the space coming towards the player and also enemy planes shooting the player. Player has to avoid all these obstacles while refueling constantly.

Also, the player has to survive for about a minute in order to clear level2.

Level 3

Gameplay

Now, the player have to save himself from a lot more obstacles like flaming walls, cannons, field guns, normal walls might also cover the entire path leaving only a portion empty through which player has to get through. Also to make the task a little easier there are different powerups at the player's disposal which will also be coming towards the player.

Level 4

Gameplay

This also takes the player to space but now the enemy planes have unpredictable motion and the best way to avoid them is to destroy them. Also there would be many other things coming towards the player which would make the level a bit tougher. So, here also there would be some powerUps available at the player's disposal.

Level5

Gameplay

This is the Boss Level of the game. This level consists of a robot which spawns enemies as the the player shoots the robot to kill it. The player also has to destroy the enemies since they are somewhat intelligent and will always come towards the player and crashing into them will destroy the plane. The Boss is also desperate and increases the count of enemies spawned when he is near death.

2 Bonus Part

2.1 Power-ups

- **Fuel** - Four different fuel power-ups as depending on the level respective kind of fuel is spawned and increases fuel accordingly
- **Life** - Only limited life is available to the player throughout the game. Once this is taken it give 1 extra life to player
- **Destroyer** - Once taken it automatically destroys all the enemies in front of the player till a Certain Range.
- **Score** - Depending on the level it increases the score.
- **Power Bullet** - This power increases the shooting capabilities of the player. Bullet is modified and shoots in all the directions

2.2 Screens

- Start screen, Level Change Screen, Game over screen added

2.3 Particle Effects

- Many different types of particle effects included for explosions, smoke, flames, sparks

2.4 Animations

- Animations included on the start screen, Screen to Change Levels, Boss movements, Enemies

2.5 Sound Effects

- Many different types of sound effects included such as background music, Bullet shoot sound, explosion sound, sound while touching the ground, fence .Included on every level

2.6 Lights and Tints

- In level 3 we included different colored tints put up which randomly throws different colored lights
- In level 2 and 4 we have put up a green laser on our player which helps us to recognise and aim our target and shoot easily.

2.7 Scores

- High Score is added. Previous high score is always stored and if player breaks the previous high then current high score is shown to the player.

2.8 More Extra Features

- In level 4 Background is randomly rotating and changing
- In level 4 Plane motion is made Random using scripts so as to increase the difficulty of the level
- In level 5 motion of enemies is such that they always follow the player so that player can't avoid them instead player have to fight and shoot them
- Boss health bar is also shown in level 5
- As health of boss goes down the rate by which boss spawns enemies is made faster.
- Walls of 3 different types and walls with fire flames on them is included in level 3

2.9 3 Layouts

We have made 3 different layouts