ZAXXON GAME

SUBMITTED BY

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Report Assignment -2

Zaxxon: It is a 1982 <u>isometric shooter arcade game</u>, developed and released by <u>Sega</u>, in which the player pilots a ship through heavily defended space fortresses.

Problem Statement: We had to Implement the Zaxxon game using Unity 3D

About Game:

Our game is modified version of Zaxxon. The player pilot is going through various places like desert, space, ocean and it has to defend itself from the deadliest present there. Only one person can play the game at a time. The player pilot has a total of 3 lives, when player loses all the lives the game will be over.

Interface:

Our start page contains two buttons Play and Quit. When play button is pressed, a next screen is followed asking for the level user want to play, we have kept an option so that a user can start from any level he/she wants to play and can return to previous screen as well through Back button on 2nd screen. Through Quit, it will exit the application. If player gets killed in between, the game over screen will be displayed that will have a restart button so that player can restart the game. Restart button will load the game from level 1. If player completes all the level then a Congratulation screen will be displayed telling the user that he has won the game.

Key Points:

- The player pilot has a total of 3 lives, when player loses all the lives the game will be over.
- The plane is having limitation of fuel, so it has to collect fuel while going on its way. If fuel becomes 0, game will be over there itself irrespective of how many lives user had at that time.
- The player who completes all the levels would be champion.

UI Elements:

- There is a score indicator representing the score of the player.
- There is a life indicator that represents the lives of the player. It is in the form of heart image.
- There is a height indicator that represents the height at which player pilot is flying in the game.
- There is a fuel indicator that represents the remaining fuel of the plane that player pilot is flying.

Attached Screenshots of UI Elements:





There are a total of 5 levels. The description of all the levels are as follows:

1. Level 1:

This is the very first level of our game. In this level, player pilot is flying the plane around a desert. There are many obstacle like walls in the path of the player that player has to dodge, if it hits or even touches any of those it will lose one of its life. There are many enemy planes there, they are firing bullets, the player has to make sure to not get hit by any of the enemy plane's bullet. There are many obstacles that player can hit through its bullet like water tank. Score will increase by a significant amount when a player kills the enemy. At last there will be two enemy tanks releasing fireballs, the player has to save itself from that and he can destroy that tank as well. After this level 1 will be completed.



2. Level 2:

This is 2nd level of our game. The player will enter the space this time. The space will be like hell of a kind. There will be different types of space elements like asteroids, lava that will come in path of the player and it has to save itself from them. There will be enemy planes that will be firing bullets. The player can kill anything that comes in its path. In the end, there will be 2 deadliest creature of the space present and they are releasing their dangerous weapon and the player can kill that weapon, creature or may dodge it to save itself. The creatures won't be killed in 1 bullet. The player has to shot with many bullets to kill that creature, then level would get completed.



3. **Level 3**:

Level 3 is modification of level 1. In level 3 we will enter into the same arena but this time, this arena would be bigger than level 1 and far more difficult than level 1. In this the bullet of enemy plane is **chasing** player's plane unlike level 1 in which the enemy plane is simply firing the bullet. The enemy plane is coming at less time interval than it used to come in level 1. Here, there is one more obstacle added that is helicopters, the helicopter is moving and its propeller is rotating as well and firing fireballs towards player's plane. Player can dodge that and can shoot that helicopter also. And in last there are two tanks firing towards player's plane.



4. Level 4:

Level 4 is modification of level 2. In level 4 we will enter into the same arena i.e. space but this time, this arena would be bigger than level 2 and far more difficult than level 1. In this the bullet of enemy is **chasing** player's plane unlike level 1 in which the enemy plane is simply firing the bullet. The enemy plane is coming at less time interval than it used to come in level 1. Here, there are two more obstacles added that is planet and helicopters. The planet will be coming towards player with certain speed player can dodge that or kill that. The helicopter is moving randomly and its propeller is rotating as well and firing fireballs towards player's plane. Player can dodge that and can shoot that helicopter also. And in last there are two tanks firing towards player's plane and then level 4 would be completed.



5. Level 5:

This is our last level of the game and most difficult one also. Here, we are entering into completely new arena i.e. ocean. The water in the ocean is not still, there are waves in the water which makes it aesthetic. Player's plane is moving over the ocean. But, there are many hurdles in the path. There is enemy plane whose bullet is following player's plane, there are helicopters firing towards player's plane also. But the most difficult obstacle that player's plane will encounter is the ships present in the ocean and they are moving and firing fireballs towards player's plane. And in the end, there are 3 ships present and there will be one on one combat between player's plane and ship. The player cannot just dodge those ship. If player has to win then the last 3 ships must be destroyed. In the end, either the ship will survive or the player's plane. This thing just makes the ending of the game more interesting.



Highlights:

- At least 2 layout is mentioned, we have added 3 layouts in the game.
- We have added particle effects in the game at occurrence of many events, this is making our game more aesthetic, and it also gives some real time experience. Different particle effect for different events like, when player gets killed, it kills some enemy, when it collects fuels etc.
- We have included background music that runs throughout the game. Some different sounds effects are added for different events like when it kills someone and when it get killed etc. This makes our game more attractive.
- We are rotating the propeller for the helicopter that is used as an obstacle.
- We have added different menu screen like start screen, level screen, game over screen, and congratulation screen. This makes our game more interactive.
- In level 3 onwards, we are making the enemy bullet chase the player's plane.
- There are some big enemies added, that cannot be killed in single shot. They need more than one bullets to get killed like 5 or more than 5.
- We have added animation for certain events like when player is making transition from one level to other.