



ZaxxonJ - 2019

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[Project Title] ZaxxonJ – 2019

[Developed For]

COP – 701 (Assignment – 2)

[Developed By]

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Introduction

ZaxxonJ - 2019 is a 3D game developed in “Unity” with backend coding in “C-sharp.” Unity is a cross-platform game engine developed by **Unity Technologies**, while C# (pronounced see sharp) is a general-purpose multi-paradigm programming language developed by **Microsoft** as part of its .Net initiative.

ZaxxonJ is a multilevel 3d shooting game, and it is a single-player shooting game which has multiple levels, layouts, asteroids, multiple enemy ships, fuel collector, pick up coins, hurdles, power rays, creatures, VFX effects, sound, etc.

The following is project URL <http://localhost:55945/> to run the game on the local mahine.

Player

There are two fighter planes used in this game at different levels.

1.



2.

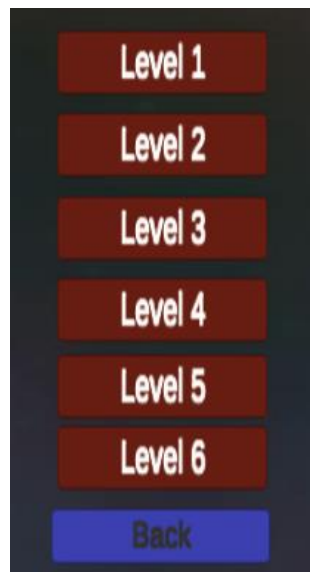


Menu

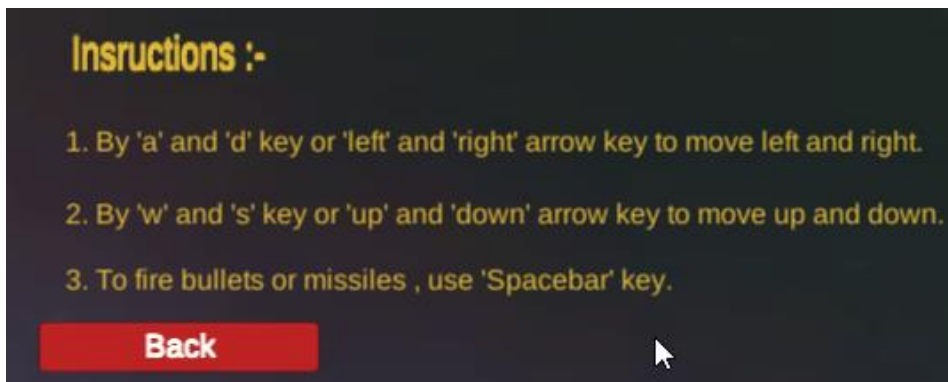
The main menu contains four options, as shown below:



1. **Play:** The game can start directly by pressing the Play button.
2. **Option:** Any of the levels can directly be started by clicking this button.



3. **Instructions:** It displays the basic instructions on how to play the game.



4. **Quit:** to quit the game without playing it.

Levels:

This game contains **five** compulsory levels and **one extra level** for the bonus. The following are given detailed information about each level.

Level 1:

It is the first level of the game, which starts just after the menu options.



This level contains a space shooting player, which shoots on pressing the Space key to shoot multiple bullets press the Space key continuously.

There are multiple hurdles on the way, and the player needs to avoid collision with them else the player will be destroyed and lose one life.

There are auto-spawning asteroids that spawn in random locations and can destroy the player if it collides with them.

There are power rays on the way. There are fuel pickups also on the way, and a player needs to pick up them to refuel the engine on the way.

There are coins pick up also in the way which can be collected to score more points.

Level 2:

It is the second level of the game. A player reaches this level if it passes the second level or any of



The levels can directly be chosen from the options from main menu. Hurdles are more difficult at this level. Enemy ships spawn in this level, which fires bullets to kill the main player. It can be noted that the background is different from the previous one. Hurdles at this level are double in size, which increase difficulty for the player.

Level 3:

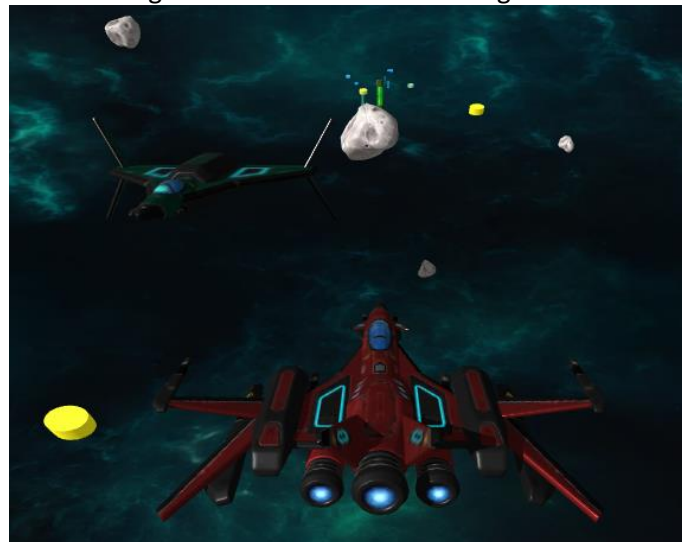
Below is the third level of the game.



Special tanks are added at this level, which fire rockets on the player. The rockets follow the player until they hit the player. Rockets fired by the tanks aim the player and target it. It can be noted that coin pickups and fuel collectors are present in all the levels.

Level 4:

This is the fourth level of the game. This is made in space with different layout with different and advanced space shooter. We have used advanced enemy ships in this level, and asteroids are also spawned at this level as well. A high level of VFX is used in this game.



Level 5:

This is the fifth level of the game. This is made in space with different layout with different and advanced space shooter. Along with other objects, special creatures are used at this level, which has more resistant power and needs more hits to get destroyed. A high level of graphics is used in this level.



Bonus Level:

This is the sixth and bonus level of the game. This is built-in space, with multiple asteroids and different enemies are spawned along with other game assets.



Special Assets:

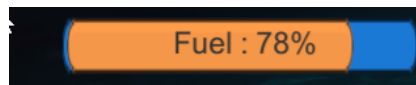
1. **Coin pick-ups:** A player can earn five extra points by catching up the golden coin



2. **Fuel pick-ups:** A player can gain 10% fuel by catching up with the fuel batteries.



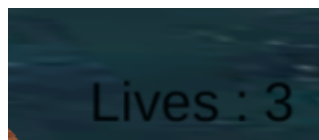
3. **Fuel Indicator:** It indicates the fuel in percentage.



4. **Score:** It is to show the live score.



5. **Lives indicator:** It is to show the number of lives a player has.



6. **Height indicator:** It is to show the current height of the player.



Extra things done for bonus points:

1. Fuel pickups
2. Low fuel indicator
3. Coin pickups
4. Background music, music, and special effects
5. Power rays
6. Multiple (2) different space shooters
7. Wild creatures, high-quality VFX
8. Tanks missile trace the location of shooter and fire.
9. A complete new level
10. Particle system for explosion
11. Main Menu

Bibliography:

1. <https://assetstore.unity.com/packages/3d/environments/roadways/grass-road-race-46974>
2. <https://assetstore.unity.com/packages/3d/vehicles/space/star-sparrow-modular-spaceship-73167>