

Space Shooters Game

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2D Shooter Game

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Research

Classic:



Figure 1 Duck hunt

A Classic example of a 2d shooter game would be Duck hunt. The game was released by Nintendo in 1984. The game is played in first person. The aim of the game is to shoot all the ducks in the level to win. The player gets 3 tries and if the player fails, a dog appears on the screen and laughs, and the game is over. Another example of a classic 2d shooter might be Doom.

Vertical:



Figure 2 Space Invaders

Space Invaders is an arcade game which was created by Tomohiro Nishikado. Space Invaders is an example of a Top-Down shooter game. It was one of the first ever fixed shooter game. The aim of the game is to defeat waves of aliens that are descending and shooting at you. The game was also well known due to the music they used.

Horizontal:



Figure 3 R-Type

R-Type is a 2D horizontal shooter game developed by Irem in 1987. The aim of the game is to destroy a powerful alien race known as the Bydo. The main player is a ship known as R-9.

Top-Down:



Figure 4 Enter The Gungeon

Enter the Gungeon is an example of a top-down shooter game. It was created by Dodge Roll and published by Devolver Digital. The aim of the game is to fight your way through the enemies to reach the ultimate treasure, a gun that can kill the past.

Game Overview

I chose horizontal for my game. This game is going to be a mixture of both Space Invaders and Asteroids. The game is a shooter game using Unity's 2D physics. The main concept of the game is to move a spaceship or character in space while fighting other ships or enemies while also avoiding and shooting falling asteroids. There will be power ups throughout the game e.g. invincibility, speed and double bullets.

Objectives

The title of the game is Space Shooters and the genre of the game is 2D Shooter. The player will be able to control the game with the up, down, right and left keys on the keyboard. The player will have to move the Spaceship and destroy the enemies as they proceed through the game. The main idea is that there will be Enemies that the player will face, and he must kill them in order to advance to the next level.

The Game will be created using Unity and is for people who enjoy simple games that are enjoyable to play and not based on progress or levels.

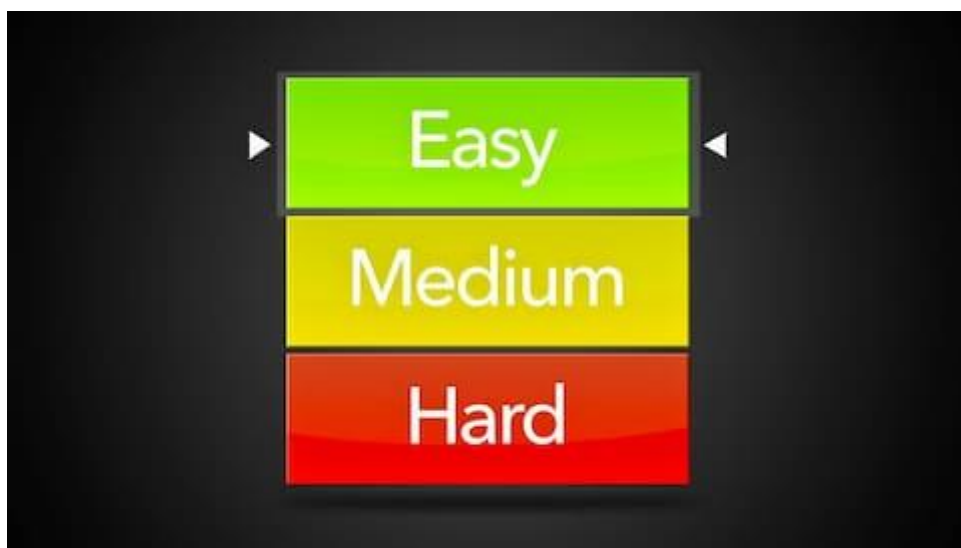
The Battleships objective is to defeat the enemy ships and pass as many levels as possible in order to beat the game.

- **Difficulty**
There are 3 difficulties, Easy, Medium and Hard.
- **Enemies**
Enemy ships, who can attack by shooting lasers or bullets at the Battleship or player.
- **Power Ups**
Power-ups, which award both health and other power-ups like speed and invincibility.
- **Background**
For my Background I decided to go with a dark space background filled with stars. This is to represent space in real life.

Front End



This is an example of how the home screen will look like. There will be three option, Play, Options and Quit. The play, when pressed, will allow the user to pick a difficulty level and play the game.

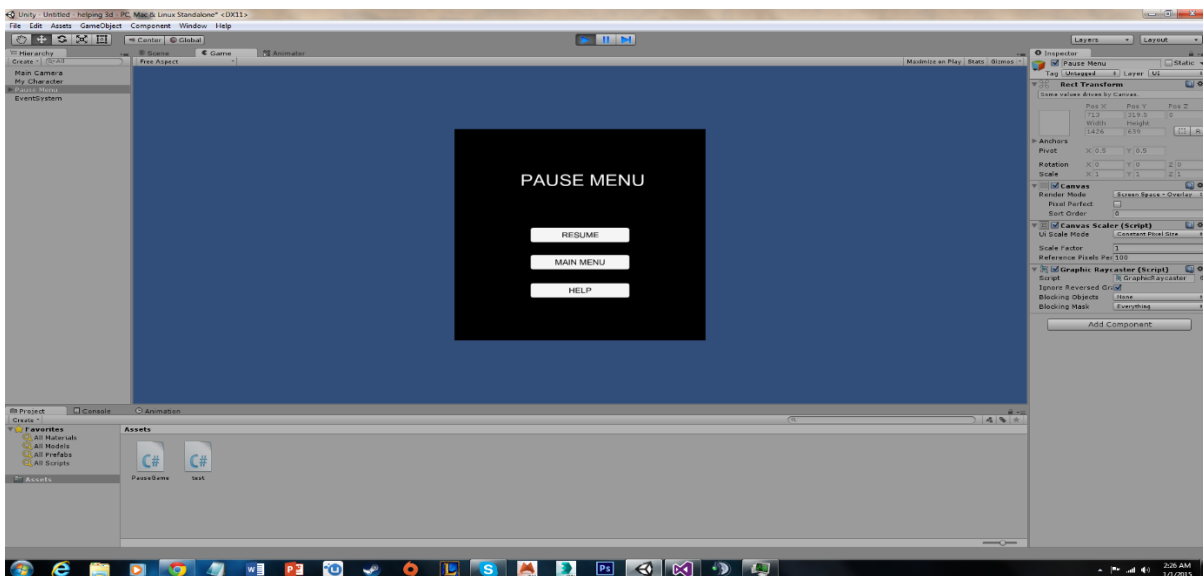


The Options button will allow the player to change the increase and decrease volume of the game. There will also be an option to turn the volume off fully. The picture is just an example of how the screen will look like when options is clicked.



The Quit option will allow the player to quit the game and exit the menu.

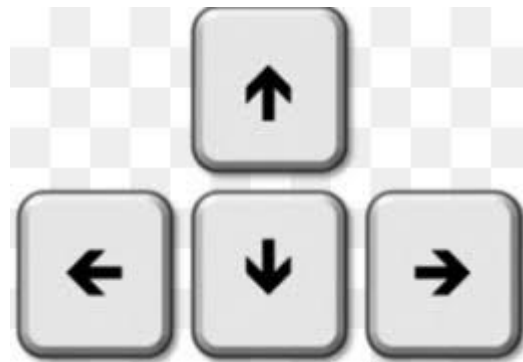
In-Game Menus



The in-game menu will be very similar to the one in the picture above and will include a resume button, quit button and a help button. So, when the in-game menu is pressed three options are given to the player he can either decide to resume the game or quit the game or get help. It would look very similar to the main menu. The help button will allow the player to read the instructions explaining how the game is played and how you can defeat the enemies.

Control Mechanisms

The game will be played using the Up, Down, Right and Left keys on the keyboard. The player will shoot the bullets with the space bar.




I chose to go with these controls because they are some of the easiest controls to remember and are very common so new players will be familiar with these controls.


The Game

The game will start with the battleship standing and the user will move it with the arrow keys. The user will get a couple of seconds to get used to the controls and then the enemy ships will come out and start shooting at the player. The Battleship must then protect itself by moving and avoiding the lasers and shoot back to kill the enemies. There also falling asteroids that the player must avoid and shoot. The Asteroids can also protect the player from enemy fire. If the player is hit 3 times it will be destroyed, and the game is over. The game can also be paused. When the game is paused the user can resume the game, quit the game or get help (Instructions).

The main objective of the game is to kill the enemy ships and progress through the levels and difficulties.

Characters

Character	Description	Powers
Battleship 	The battleship's goal is to protect the galaxy from all evil.	The battleship is controlled by the mother box and can shoot deadly lasers to destroy its enemies.

Character	Description	Powers
Enemy Ship 	The enemy ship wants to destroy all life and take over the galaxies.	The enemy ship can duplicate and is powerful enough to kill the battleship.

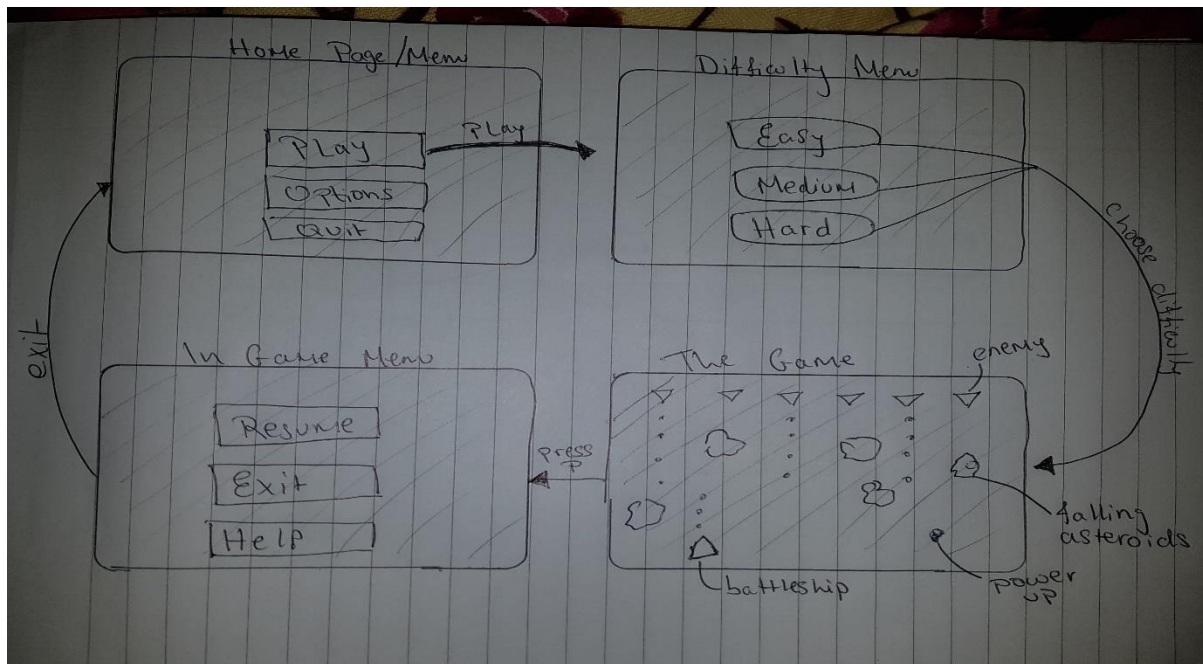
Gameplay Guidelines

The guidelines for this game are very simple that the player try to kill as many enemy's as possible and complete the game. The player will receive a power up after killing a specified number of enemies. As the game continues the enemy get faster and fire quicker. And the power-ups also get better and better.

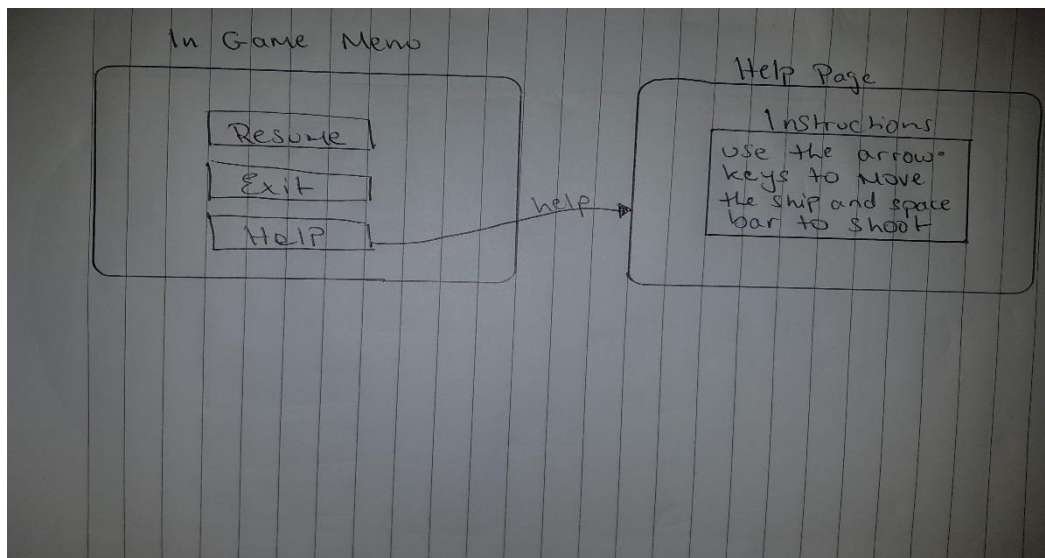
Difficulty

The game will include levels which the player must pass to get to the next level. The levels will be based on the difficulty the player chooses e.g. if the player chooses easy, they must complete 2 levels to win or if the choose medium they must complete 3 levels and so on. Depending on the difficulty the enemies will be faster and more powerful.

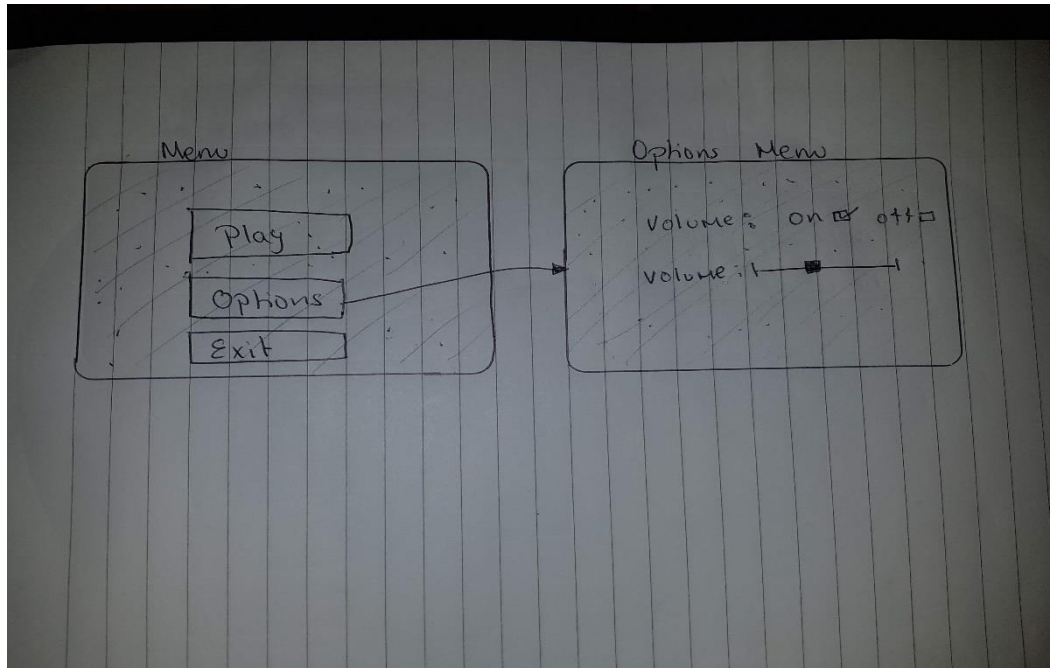
Sketches



This is a sketch of the game when the play button is pressed. As you can see the player will be given 3 difficulties once they hit play. The game will then start, and the battleship must destroy all the enemies and the falling asteroids. The player can pause the game with p. If they press exit, they will be brought back to the original menu. The asteroids protect the player but also does damage the player if hit with them.



If the Player Hits the Help Menu, they will be brought to a separate menu where they can see the instructions on how to play the game.



If the Player presses the Options menu, they will be brought to a different menu where they can adjust the volume or turn the volume on or off.

Extra Features

I would like to give the user the chance to pick the character that they would like to play with. I would also like to try and get this game to run on android.

References

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All the Non-Sketch pictures that I used were taken from google images.