

# Project 2

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- The game works on both Google Chrome and FireFox

## Game Logic:

The purpose of the game is to make the ship survive as possible it has only 100 health points. The game is over once the health points are equal to 0 or below.

Level 1:

Enemies are moving towards the direction of the main ship and if the enemies collide with the ship 10 points are removed from the health points.

The ship has bullets to fire when the bullets hit the Enemies they explode.

There is a score that is kept every time an enemy is hit you gain 20 points.

Level 2:

When the score exceeds 150 points you then go to Level 2 where u have 2 Types of enemies first is the same one as the enemies in level 1 and then there is a bigger different enemy that explodes with 2 bullets and that is how level 2 is harder than level 1 more enemies and the enemies are harder to destroy.

Features:

There are 2 different moving textures that act as background in the game.

There is an explode texture every time you hit an enemy with a bullet or with the ship.

Explode sound also is played on every hit.

There is also background music that is played by default when you start the game.

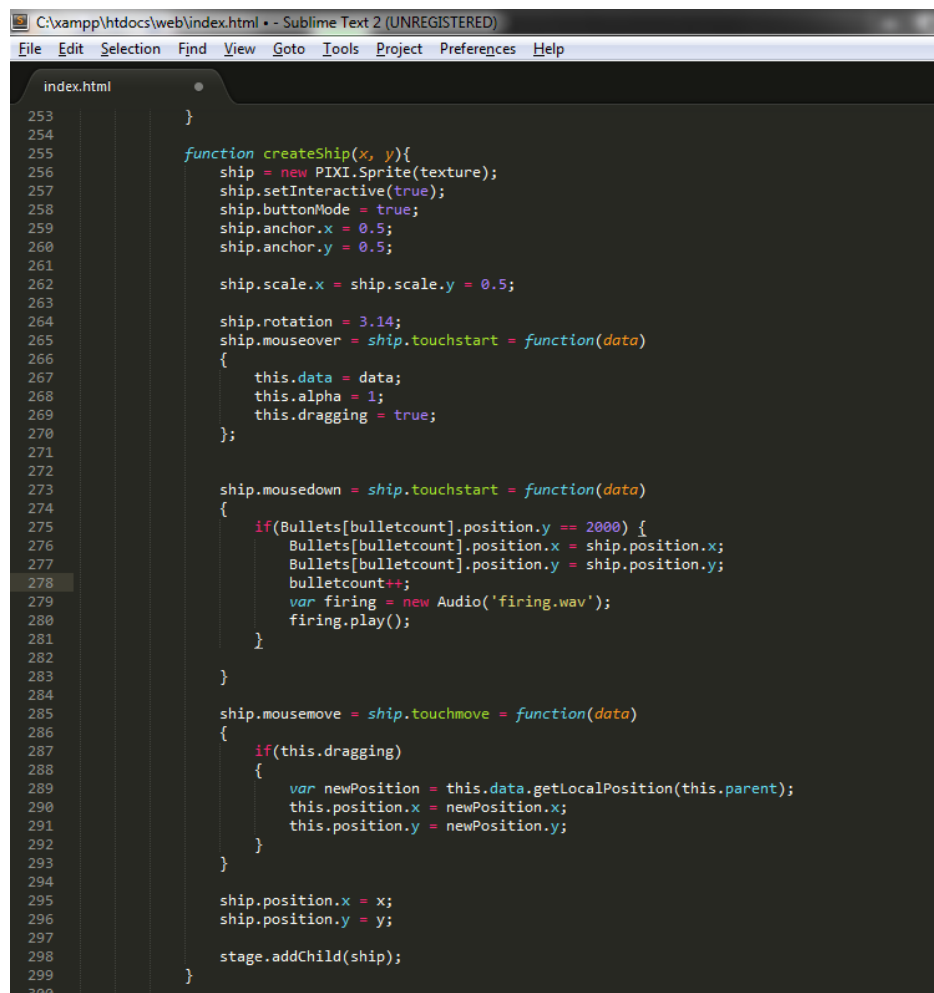
There is a mute button that you can mute the game with if clicked on.

There is also a newgame button on the top right corner to start a new game

## The CODE:

Basically there are many functions that do all the work and that are called and then there is the gameloop/function (animate) that is created by pixi that is used to do everything within the game since this loop is called many times per second.

To create the ship



```
C:\xampp\htdocs\web\index.html - Sublime Text 2 (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help

index.html
253 }
254
255 function createShip(x, y){
256     ship = new PIXI.Sprite(texture);
257     ship.setInteractive(true);
258     ship.buttonMode = true;
259     ship.anchor.x = 0.5;
260     ship.anchor.y = 0.5;
261
262     ship.scale.x = ship.scale.y = 0.5;
263
264     ship.rotation = 3.14;
265     ship.mouseover = ship.touchstart = function(data)
266     {
267         this.data = data;
268         this.alpha = 1;
269         this.dragging = true;
270     };
271
272
273     ship.mousedown = ship.touchstart = function(data)
274     {
275         if(Bullets[bulletcount].position.y == 2000) {
276             Bullets[bulletcount].position.x = ship.position.x;
277             Bullets[bulletcount].position.y = ship.position.y;
278             bulletcount++;
279             var firing = new Audio('firing.wav');
280             firing.play();
281         }
282     }
283
284
285     ship.mousemove = ship.touchmove = function(data)
286     {
287         if(this.dragging)
288         {
289             var newPosition = this.data.getLocalPosition(this.parent);
290             this.position.x = newPosition.x;
291             this.position.y = newPosition.y;
292         }
293     }
294
295     ship.position.x = x;
296     ship.position.y = y;
297
298     stage.addChild(ship);
299 }
300
```

This function creates a ship with a specific location relative to the browser window and also it has to functions if you press on the ship you fire a bullet and once you are over the ship it is dragged with the mouse wherever it is as long as it is on the browser.

To create Enemy:

```
function createEnemy(){
    for(i = 0 ; i<20;i++){

        Enemys[i] = new PIXI.Sprite(texture4);
        Enemys[i].setInteractive(true);
        Enemys[i].anchor.x = 0.5;
        Enemys[i].anchor.y = 0.5;
        Enemys[i].rotation = 3.1415926;

        Enemys[i].scale.x = Enemys[i].scale.y = 0.3;

        Enemys[i].position.x = 5 ; //
        Enemys[i].position.y = 2000; //
        stage.addChild(Enemys[i]);

    }
}
```

This function creates Enemies of level 1 it creates an array of enemies 20 enemies and sets their position out of the screen and there is another function insert enemy that puts the enemy at the beginning of the screen and another function move enemy that is called in animate that moves the enemy.

```
function insertEnemy(index){
    if (Enemys[index].position.y==2000) {
        Enemys[index].position.y = -45;
        Enemys[index].position.x = Math.floor(Math.random() * (window.innerWidth-50) ) +10;
    }
}

function moveEnemy(e){
    e.position.y = e.position.y + 1.5;
}
```

And there are the same functions for enemy2

That creates its array and keeps it out of the screen until insert enemy2 is called from the animate function.

```
function createEnemy2(){
    for(i=0;i<20;i++){
        Enemys2[i] = new PIXI.Sprite(texture7);
        Enemys2[i].setInteractive(true);
        Enemys2[i].anchor.x = 0.5;
        Enemys2[i].anchor.y = 0.5;
        Enemys2[i].rotation = 3*(3.1415926)/2;

        Enemys2[i].scale.x = Enemys2[i].scale.y = 0.3;

        Enemys2[i].position.x = 100 ; //
        Enemys2[i].position.y = 2000; //
        stage.addChild(Enemys2[i]);
    }
}
```

```
function insertEnemy2(index2){
    if (Enemys2[index2].position.y == 2000) {
        Enemys2[index2].position.x = Math.floor(Math.random() * (window.innerWidth-50) ) +10;
        Enemys2[index2].position.y = -80;
        Enemys2[index2].alpha =1;
        enemycount++;
    }
}
```

The mute button is also created by a function that has a function that detects if it is pressed or not. If its pressed u pause the background music if its pressed again it plays it and when the music is played its in a loop.

```
function mutebutton(){  
  
    var muteb = new PIXI.Sprite(texture5);  
    muteb.setInteractive(true);  
    muteb.buttonMode = true;  
  
    muteb.anchor.x = 0.5;  
    muteb.anchor.y = 0.5;  
  
    muteb.position.x = window.innerWidth /20;  
    muteb.position.y = window.innerHeight /15;  
  
    muteb.scale.x = muteb.scale.y = 0.075;  
  
    var count = 0;  
  
    backmusic.addEventListener('ended', function() {  
        this.currentTime = 0;  
        this.play();  
    }, false);  
  
    backmusic.play();  
  
    muteb.mousedown = muteb.touchstart = function (data){  
  
        count = count +1;  
        var rem = count%2;  
        this.data = rem;  
  
        if (this.data == 1) {  
            backmusic.pause();  
        }  
  
        if (this.data == 0 ){  
            backmusic.play();  
        }  
    }  
    stage.addChild(muteb);  
}
```

Here are some PrintScreens from the gameplay.

