

CSE3002: INTERNET AND WEB PROGRAMMING

Digital Assessment - 1

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Slot: B2

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Space Blasterz</title>
    <link rel="stylesheet" href="styles.css">
  </head>
  <body>
    <div class="flip-card">
      <div class="flip-card-inner">
        <div class="flip-card-front">
          <!-- <div class="card"> -->
          <p class = "title">Space Blasterz</p>
        </div>
        <div class="flip-card-back">
          <p class = "body"> To Play: use the arrow keys to navigate, spacebar to
shoot</p>
          <a href = "play.html"><button><span>Play </span></button></a>
        </div>
      </div>
    </div>
  </div>
</body>
</html>
```

styles.css

```
@font-face{
  font-family: PressStart;
  src: url(fonts/press-start-2p/PressStart2P.ttf);
}
body {
  background-color: black;
  background-repeat: repeat;
  font-family: PressStart;
}

.flip-card {
  width: 60%;
  height: 50%;

  background-color: lavender;
  color: whitesmoke;
  position: absolute;
  top:0;
  bottom: 0;
  left: 0;
  right: 0;

  margin: auto;
  perspective: 900px;
}

.flip-card-inner {
  position: relative;
  width: 100%;
  height: 100%;
  text-align: center;
  transition: transform 0.8s;
  transform-style: preserve-3d;
}
```

```
.flip-card:hover .flip-card-inner {  
  transform: rotateY(180deg);  
}
```

```
.flip-card-front, .flip-card-back {  
  position: absolute;  
  width: 100%;  
  height: 100%;  
  -webkit-backface-visibility: hidden;  
  backface-visibility: hidden;  
}
```

```
.flip-card-front {  
  background-color: lavender;  
  color: black;  
}
```

```
.flip-card-back {  
  background-color: black;  
  color: lavender;  
  transform: rotateY(180deg);  
}
```

```
p.title {  
  font-size: 60px;  
}
```

```
p.body {  
  top: 0;  
  width: 70%;  
}
```

```
p {  
  text-align: center;  
  width: fit-content;  
  height: fit-content;
```

```
line-height: 1.5em;
position: absolute;
top:0;
bottom: 10%;
left: 0;
right: 0;

margin: auto;
}

button {
border: none;
background-color: transparent;
font-family: PressStart;
color: hotpink;
position: absolute;
width: 30%;
height: 12%;
top:200px;
bottom: 0;
left: 0;
right: 0;
font-size: 30px;
margin: auto;
}

button span {
cursor: pointer;
display: inline-block;
position: relative;
transition: 0.5s;
}

button span:after {
content: '\00bb';
```

```
position: absolute;
opacity: 0;
top: 0;
right: -20px;
transition: 0.5s;
}
```

```
button:hover span {
padding-right: 55px;
}
```

```
button:hover span:after {
opacity: 1;
right: 0;
}
```

play.html

```
<!DOCTYPE html>
<html lang="">
  <head>
    <meta charset="utf-8">
    <meta name="viewport"
content="user-scalable=no,initial-scale=1,maximum-scale=1,minimum-scale=1,width=device-width">
    <title>Shooter-Game</title>
    <style> body {
padding: 0;
margin: 0;
height: 100%;
overflow: hidden;
width: 100%;
position: fixed; }
  </style>
  <script src="p5.min.js"></script>
  <script src="sketch.js"></script>
  <script src="drop.js"></script>
```

```
<script src="shooter.js"></script>
<script src="cloud.js"></script>
</head>
<body>
</body>
</html>
```

sketch.js

```
var shooter;
var clouds = [];
var drops = [];
var score = 0;
let state;
const STATE_GAME_OVER_PLAY_AGAIN = 1;
let animationFrame;
// var tally=0;

function preload(){
  font = loadFont('fonts/press-start-2p/PressStart2P.ttf');
  rocket = loadImage('rocket2.png');
}

function setup(){
  createCanvas(windowWidth,windowHeight);
  textFont(font);
  shooter = new Shooter();
  for(var i=0;i<4;i++){
    clouds[i] = new Cloud(i*40,80,0,true);
  }
}

function draw(){
  background(15,15,15);
  shooter.show();
  shooter.move();
```

```

    textSize(10);
    fill(255);
    text('Score: '+ score , 40,40);

    for(var i=0;i<drops.length;i++){
        drops[i].show();
        drops[i].move();

        for(var j=0;j<clouds.length;j++){
            if(drops[i].hits(clouds[j])){
                score +=2;
                clouds[j].grow();
                drops[i].evaporate();
            }
        }
    }
    var edge = false;
    for(var i=0;i<clouds.length;i++){
        clouds[i].show();
        clouds[i].move();
        if(clouds[i].y > height-70){
            state = STATE_GAME_OVER_PLAY_AGAIN;
            animationFrame = 0;
        }
        if(clouds[i].x>width || clouds[i].x<0){
            edge = true;
        }
        if(edge){
            for(var i=0;i<clouds.length;i++){
                clouds[i].shiftDown();
            }
        }
    }

    // for(var i = 0; i<clouds.length;i++){
    //   if(clouds[i].burst == false){

```

```
// tally++;  
// console.log(tally);  
// }  
// }
```

```
for(var i=drops.length-1; i>= 0;i--){  
  if(drops[i].toDelete) {  
    drops.splice(i,1);  
  }  
}
```

```
if (state === STATE_GAME_OVER_PLAY_AGAIN){  
  background(0);  
  fill(255);  
  textSize(15);  
  text('GAME OVER', windowWidth/2 - 60,windowHeight/2 - 200);  
  text('SCORE: ' + score, windowWidth/2 - 60,windowHeight/2 - 170);  
  // if(tally == clouds.length){  
  //   text('YOU GOT EM ALL!!!', windowWidth/2 - 160,windowHeight/2 - 120);  
  // }
```

```
}  
if (animationFrame == 0) {  
  text('PLAY AGAIN', windowWidth/2 - 70,windowHeight/2 - 130);  
}  
}
```

```
function keyReleased(){  
  if(key != ' ')  
    shooter.setDir(0);  
}  
function keyPressed(){  
  if(key === ' '){  
    var drop = new Drop(shooter.x,height-122);  
    drops.push(drop);
```



```

}
if(keyCode === RIGHT_ARROW){
  shooter.setDir(1);
}else if (keyCode === LEFT_ARROW){
  shooter.setDir(-1);
}
}

```

cloud.js

```

function Cloud(x,y,count,burst){
  this.x = x*2;
  this.y = y;
  this.r = 20;
  this.xdir = 1;
  this.count = count;
  this.burst = burst;

  this.shiftDown = function(){
    this.xdir *= -1;
    this.y += this.r;
  }
  this.move = function(){
    this.x = this.x + this.xdir*2;
  }
  this.grow = function(){
    this.r +=2;
  }
  this.show = function(){
    if(this.burst){
      noStroke();
      fill(255,255,255,255);
      ellipse(this.x, this.y,this.r*2, this.r*2);
      ellipse(this.x + 15, this.y + 10, this.r, this.r);
      ellipse(this.x + 15, this.y + 10, this.r*1.2, this.r*1.2);
      ellipse(this.x - 15, this.y - 10, this.r, this.r);
    }
  }
}

```

```

        ellipse(this.x + 10, this.y - 15, this.r/2, this.r/2);
        ellipse(this.x - 15, this.y + 8, this.r*1.2, this.r*1.2);
    }
}
}

```

shooter.js

```

function Shooter(){
    this.x = width/2;
    this.xdir = 0;

    this.show = function(){
        fill(255);
        rectMode(CENTER);
        rect(this.x, height-20,20,20);
        image(rocket, this.x - 37,height-68,80,80);
    }
    this.move = function(dir){
        this.x += this.xdir*5;

        if(this.x>width){
            this.x = 0;
        }
        if(this.x<0){
            this.x = width;
        }
    }
    this.setDir = function(dir){
        this.xdir = dir;
    }
}

```

Screenshots



