**HTML**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<link rel="icon" href="https://github.com/kaizhelam/Flappy-Bird-Game/blob/main/images/Bird.png?raw=true" type="image/png">

<title>Flappy Bird Game</title>

<link rel="stylesheet" href="style.css">

<script src="script.js" defer></script>

</head>

<body>

<div class="background"></div>

<img src="https://github.com/kaizhelam/Flappy-Bird-Game/blob/main/images/Bird.png?raw=true" alt="bird-img" class="bird" id="bird-1">

<div class="message">

Enter To Start Game <p><span style="color: red;">&uarr;</span> ArrowUp to Control</p>

</div>

<div class="score">

<span class="score\_title"></span>

<span class="score\_val"></span>

</div>

</body>

</html>

**CSS**

\* {

margin: 0;

padding: 0;

box-sizing: border-box;

font-family: Arial, Helvetica, sans-serif;

}

.background {

height: 100vh;

width: 100vw;

background: url('https://github.com/kaizhelam/Flappy-Bird-Game/blob/main/images/background-img.png?raw=true') no-repeat center center fixed;

-webkit-background-size: cover;

-moz-background-size: cover;

-o-background-size: cover;

background-size: cover;

}

.bird {

height: 100px;

width: 130px;

position: fixed;

top: 40vh;

left: 30vw;

z-index: 100;

}

.pipe\_sprite {

position: fixed;

top: 40vh;

left: 100vw;

height: 70vh;

width: 6vw;

background:radial-gradient(lightgreen 50%, green);

border: 5px solid black;

}

.message {

position: absolute;

z-index: 10;

color: black;

top: 30%;

left: 50%;

font-size: 4em;

transform: translate(-50%, -50%);

text-align: center;

}

.messageStyle{

background: white;

padding: 30px;

box-shadow: rgba(0, 0, 0, 0.24) 0px 3px 8px;

border-radius: 5%;

}

.score {

position: fixed;

z-index: 10;

height: 10vh;

font-size: 10vh;

font-weight: 100;

color: white;

-webkit-text-stroke-width: 2px;

-webkit-text-stroke-color: black;

top: 0;

left: 0;

margin: 10px;

font-family: Arial, Helvetica, sans-serif;

}

.score\_val {

color: gold;

font-weight: bold;

}

@media only screen and (max-width: 1080px) {

.message{

font-size: 50px;

top: 50%;

white-space: nowrap;

}

.score{

font-size: 8vh;

}

.bird{

width: 120px;

height: 90px;

}

.pipe\_sprite{

width: 14vw;

}

}

**JSS**

let move\_speed = 3, grativy = 0.5;

let bird = document.querySelector('.bird');

let img = document.getElementById('bird-1');

let sound\_point = new Audio('sounds effect/point.mp3');

let sound\_die = new Audio('sounds effect/die.mp3');

// getting bird element properties

let bird\_props = bird.getBoundingClientRect();

// This method returns DOMReact -> top, right, bottom, left, x, y, width and height

let background = document.querySelector('.background').getBoundingClientRect();

let score\_val = document.querySelector('.score\_val');

let message = document.querySelector('.message');

let score\_title = document.querySelector('.score\_title');

let game\_state = 'Start';

img.style.display = 'none';

message.classList.add('messageStyle');

document.addEventListener('keydown', (e) => {

if(e.key == 'Enter' && game\_state != 'Play'){

document.querySelectorAll('.pipe\_sprite').forEach((e) => {

e.remove();

});

img.style.display = 'block';

bird.style.top = '40vh';

game\_state = 'Play';

message.innerHTML = '';

score\_title.innerHTML = 'Score : ';

score\_val.innerHTML = '0';

message.classList.remove('messageStyle');

play();

}

});

function play(){

function move(){

if(game\_state != 'Play') return;

let pipe\_sprite = document.querySelectorAll('.pipe\_sprite');

pipe\_sprite.forEach((element) => {

let pipe\_sprite\_props = element.getBoundingClientRect();

bird\_props = bird.getBoundingClientRect();

if(pipe\_sprite\_props.right <= 0){

element.remove();

}else{

if(bird\_props.left < pipe\_sprite\_props.left + pipe\_sprite\_props.width && bird\_props.left + bird\_props.width > pipe\_sprite\_props.left && bird\_props.top < pipe\_sprite\_props.top + pipe\_sprite\_props.height && bird\_props.top + bird\_props.height > pipe\_sprite\_props.top){

game\_state = 'End';

message.innerHTML = 'Game Over'.fontcolor('red') + '<br>Press Enter To Restart';

message.classList.add('messageStyle');

img.style.display = 'none';

sound\_die.play();

return;

}else{

if(pipe\_sprite\_props.right < bird\_props.left && pipe\_sprite\_props.right + move\_speed >= bird\_props.left && element.increase\_score == '1'){

score\_val.innerHTML =+ score\_val.innerHTML + 1;

sound\_point.play();

}

element.style.left = pipe\_sprite\_props.left - move\_speed + 'px';

}

}

});

requestAnimationFrame(move);

}

requestAnimationFrame(move);

let bird\_dy = 0;

function apply\_gravity(){

if(game\_state != 'Play') return;

bird\_dy = bird\_dy + grativy;

document.addEventListener('keydown', (e) => {

if(e.key == 'ArrowUp' || e.key == ' '){

img.src = 'https://github.com/kaizhelam/Flappy-Bird-Game/blob/main/images/Bird.png?raw=true';

bird\_dy = -7.6;

}

});

document.addEventListener('keyup', (e) => {

if(e.key == 'ArrowUp' || e.key == ' '){

img.src = 'https://github.com/kaizhelam/Flappy-Bird-Game/blob/main/images/Bird-2.png?raw=true';

}

});

if(bird\_props.top <= 0 || bird\_props.bottom >= background.bottom){

game\_state = 'End';

message.style.left = '28vw';

window.location.reload();

message.classList.remove('messageStyle');

return;

}

bird.style.top = bird\_props.top + bird\_dy + 'px';

bird\_props = bird.getBoundingClientRect();

requestAnimationFrame(apply\_gravity);

}

requestAnimationFrame(apply\_gravity);

let pipe\_seperation = 0;

let pipe\_gap = 35;

function create\_pipe(){

if(game\_state != 'Play') return;

if(pipe\_seperation > 115){

pipe\_seperation = 0;

let pipe\_posi = Math.floor(Math.random() \* 43) + 8;

let pipe\_sprite\_inv = document.createElement('div');

pipe\_sprite\_inv.className = 'pipe\_sprite';

pipe\_sprite\_inv.style.top = pipe\_posi - 70 + 'vh';

pipe\_sprite\_inv.style.left = '100vw';

document.body.appendChild(pipe\_sprite\_inv);

let pipe\_sprite = document.createElement('div');

pipe\_sprite.className = 'pipe\_sprite';

pipe\_sprite.style.top = pipe\_posi + pipe\_gap + 'vh';

pipe\_sprite.style.left = '100vw';

pipe\_sprite.increase\_score = '1';

document.body.appendChild(pipe\_sprite);

}

pipe\_seperation++;

requestAnimationFrame(create\_pipe);

}

requestAnimationFrame(create\_pipe);

}

[Build a Flappy Bird Game using HTML CSS & JavaScript](https://www.youtube.com/watch?v=Ltg1fl4Obgg)