

Laporan Pratikum Pemograman WEB Pratikum 5 HTML, CSS, JS Game

Disusun untuk memenuhi tugas mata kuliah Pemrograman Web yang diampu Bapak Dr. Eng.
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PROGRAM STUDI SISTEM INFOMRASI

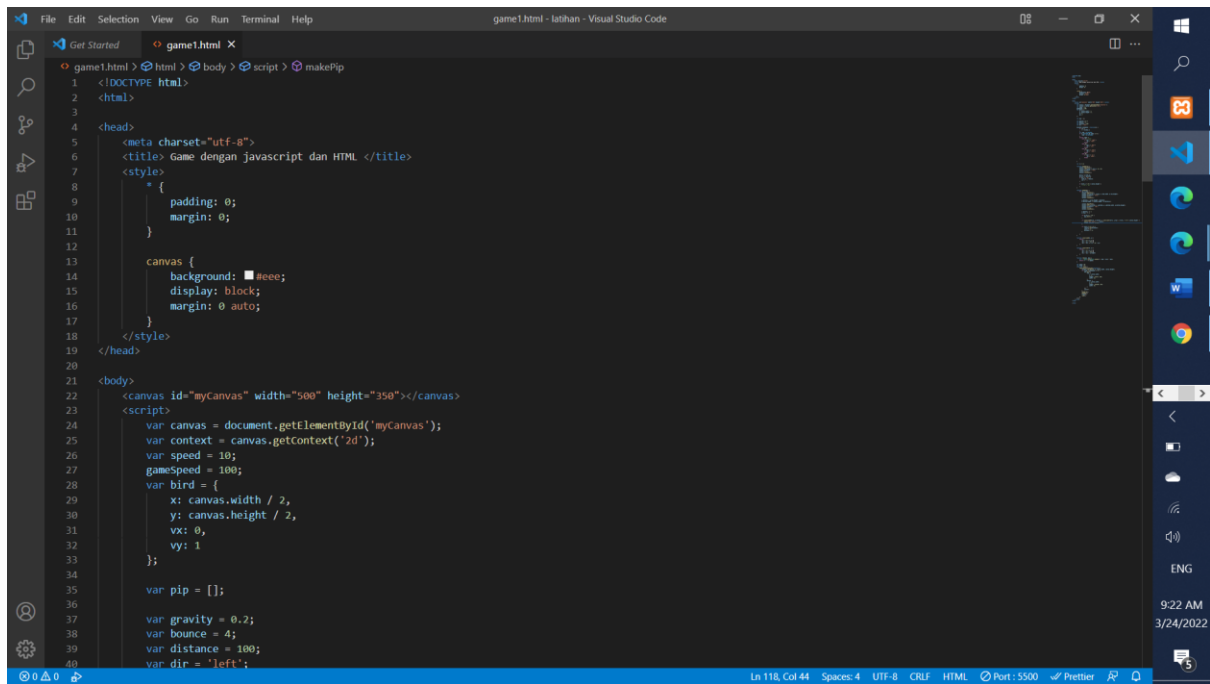
FAKULTAS ILMU KOMPUTER

UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN"

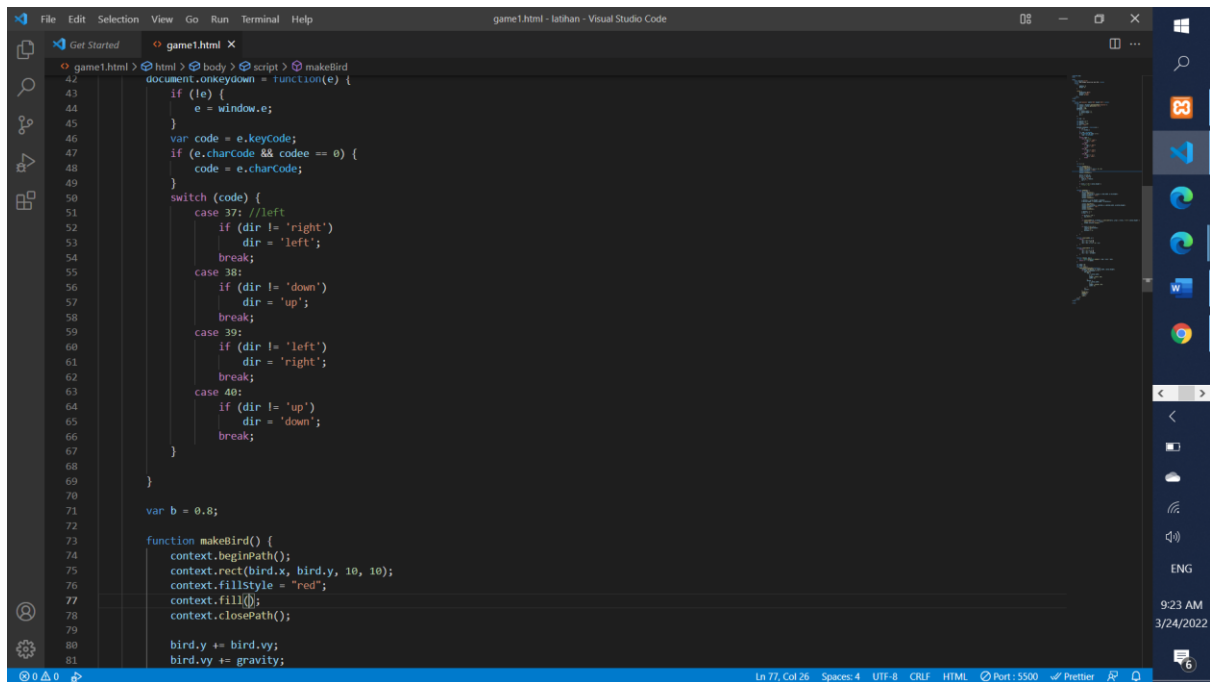
JAWA TIMUR

2022

Source Code :



```
1 <!DOCTYPE html>
2 <html>
3
4 <head>
5   <meta charset="utf-8">
6   <title> Game dengan Javascript dan HTML </title>
7   <style>
8     * {
9       padding: 0;
10      margin: 0;
11    }
12
13    canvas {
14      background: #eeee;
15      display: block;
16      margin: 0 auto;
17    }
18  </style>
19 </head>
20
21 <body>
22   <canvas id="myCanvas" width="500" height="350"></canvas>
23   <script>
24     var canvas = document.getElementById('myCanvas');
25     var context = canvas.getContext('2d');
26     var speed = 10;
27     gameSpeed = 100;
28     var bird = {
29       x: canvas.width / 2,
30       y: canvas.height / 2,
31       vx: 0,
32       vy: 1
33     };
34
35     var pip = [];
36
37     var gravity = 0.2;
38     var bounce = 4;
39     var distance = 100;
40     var dir = 'left';
```



```
42 document.onkeydown = function(e) {
43   if (!e) {
44     e = window.e;
45   }
46   var code = e.keyCode;
47   if (e.charCode && codee == 0) {
48     code = e.charCode;
49   }
50   switch (code) {
51     case 37: //left
52       if (dir != 'right')
53         dir = 'left';
54       break;
55     case 38:
56       if (dir != 'down')
57         dir = 'up';
58       break;
59     case 39:
60       if (dir != 'left')
61         dir = 'right';
62       break;
63     case 40:
64       if (dir != 'up')
65         dir = 'down';
66       break;
67   }
68
69   }
70
71   var b = 0.8;
72
73   function makeBird() {
74     context.beginPath();
75     context.rect(bird.x, bird.y, 10, 10);
76     context.fillStyle = "red";
77     context.fill();
78     context.closePath();
79
80     bird.y += bird.vy;
81     bird.vy += gravity;
```

```
File Edit Selection View Go Run Terminal Help game1.html - lathian - Visual Studio Code
game1.html X
game1.html > html > body > script > makeBird
82     if (dir == 'up') {
83         bird.vy = -bounce;
84         dir = '';
85     }
86
87     if (bird.y + 10 >= canvas.height) {
88         // dir = 'up'
89     }
90 }
91
92 function makePip() {
93     for (p of pip) {
94         context.beginPath();
95         context.rect(p.top.x, p.top.y, p.top.width, p.top.height);
96         context.fillStyle = 'blue';
97         context.fill();
98         context.closePath();
99
100         p.bottom.y = p.top.height + distance;
101         p.bottom.height = (canvas.height - p.bottom.y);
102
103         context.beginPath();
104         context.rect(p.bottom.x, p.bottom.y, p.bottom.width, p.bottom.height);
105         context.fillStyle = 'red';
106         context.fill();
107         context.closePath();
108
109         p.bottom.x -= 1;
110         p.top.x -= 1;
111
112         if (p.top.x < -10) {
113             pip.shift();
114         }
115
116         if (isCollideB(bird, p.bottom) || isCollider(bird, p.top) || bird.y + 10 >= canvas.height) {
117             alert('Your score : ' + score);
118             window.location.reload();
119         }
120
121         if (score % 10 == 0) {
122             console.log(distance);
123             score += 1;
124             distance -= 5;
125         }
126     }
127 }
128
129 function isCollideB(b, p) {
130     return (
131         (b.x + 10 > p.x) &&
132         (b.x < p.x + 10) &&
133         (b.y > p.y || b.y + 10 > p.y)
134     );
135 }
136
137 function isCollider(b, p) {
138     return (
139         (b.x + 10 > p.x) &&
140         (b.x < p.x + 10) &&
141         (b.y < p.y + p.height)
142     );
143 }
144
145 function rnd(min, max) {
146     var r = Math.round(Math.random() * (max - min) + min);
147     return (r - r % speed);
148 }
149
150 var score = 0;
151 var frame = 0;
152 (function loop() {
153     requestAnimationFrame(function() {
154         context.clearRect(0, 0, canvas.width, canvas.height);
155         if (frame % gameSpeed == 0) {
156             pip.push({
157                 top: {
158                     x: canvas.width,
```

```
File Edit Selection View Go Run Terminal Help game1.html - lathian - Visual Studio Code
game1.html X
game1.html > html > body > script > makePip
120
121     if (score % 10 == 0) {
122         console.log(distance);
123         score += 1;
124         distance -= 5;
125     }
126 }
127
128
129 function isCollideB(b, p) {
130     return (
131         (b.x + 10 > p.x) &&
132         (b.x < p.x + 10) &&
133         (b.y > p.y || b.y + 10 > p.y)
134     );
135 }
136
137 function isCollider(b, p) {
138     return (
139         (b.x + 10 > p.x) &&
140         (b.x < p.x + 10) &&
141         (b.y < p.y + p.height)
142     );
143 }
144
145 function rnd(min, max) {
146     var r = Math.round(Math.random() * (max - min) + min);
147     return (r - r % speed);
148 }
149
150 var score = 0;
151 var frame = 0;
152 (function loop() {
153     requestAnimationFrame(function() {
154         context.clearRect(0, 0, canvas.width, canvas.height);
155         if (frame % gameSpeed == 0) {
156             pip.push({
157                 top: {
158                     x: canvas.width,
```

```
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game1.html - Iatihan - Visual Studio Code
game1.html X
<script>
  // ...
  if (frame % gameSpeed == 0) {
    pip.push({
      top: {
        x: canvas.width,
        y: 0,
        height: rnd(70, 140),
        width: 10,
      },
      bottom: {
        x: canvas.width,
        y: 0,
        height: rnd(100, 160),
        width: 10,
      }
    });
    score++;
  }
  makeBird();
  makePip();
  frame++;
  loop();
})();
</script>
</body>
</html>
```

Hasil :

