A RDBMS Mini Project

On

"Online Games"



Submitted By:

Class & Sec.:

Straw Hats MCA-B

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Submitted To:

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ACKNOWLEDGEMENT

This is a mini-project submitted to Maharashtra Institute of Technology, World Peace University (MIT-WPU) by the students of FYMCA, Achint Tyagi, Ajay Dhondge, Amit Sanap, Ishansingh Rana, Omkar Kende and Amit Sanap, for the academic year 2022-2023.

A project is a bridge between theoretical and practical learning and helps in the complete development of the students.

While we were working on this project, it helped us in practically understanding various front-end and back-end languages. The preparation of this computer science project was an immense learning experience and we inculcated many personal qualities during this process like responsibility, punctuality, confidence, teamwork, problem solving and leadership. Completing a project gave us confidence about our practical skills and helped us in knowing our capabilities.

INTRODUCTION

It is a platform which allows users to play games online. The users can choose their favourite game from a list of games. One can play individual games like snake, doodle, sudoku, drums & colour game as well as 2-player games like dots and boxes

This website has been developed using technologies like PHP, JavaScript, HTML, CSS, Sql, Ajax etc.

REQUIREMENT SPECIFICATIONS

Hardware Requirements:

Device: PC/Laptop

Processor: Intel® Core(TM) i3-3210
 CPU@ 3.20GHz 3.20GHz

• System Type: 64-bit OS, x64-based processor

OS: Windows 7 and above

Software Requirements:

- 1. Front-end Technologies:
 - > HTML
 - > CSS
 - > JavaScript
- 2. Back-end Technologies:
 - > MySQL
 - > PHP

Different Screens

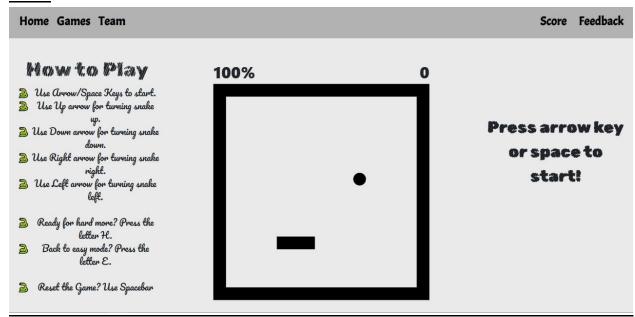
• Landing Page:

Home Games Team Score Feedback

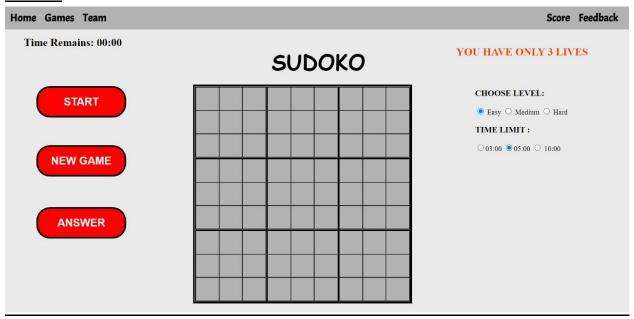


Playing Simple & Small Games can help Sometime... 69

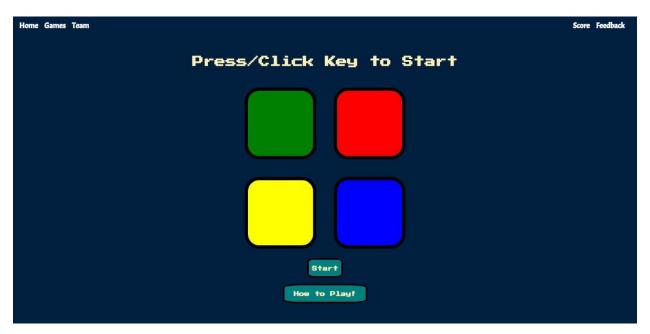
Snake



• Sudoku:



• Colour Game:



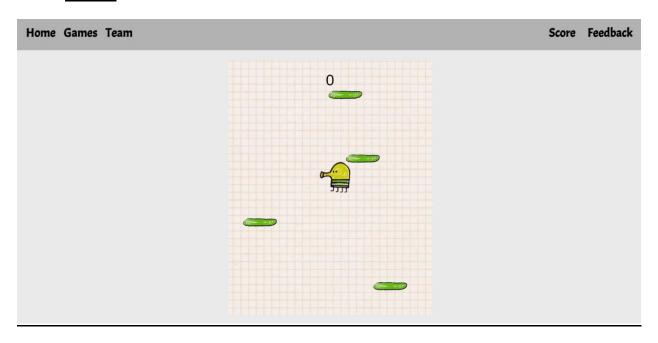
Dots and Boxes:

ome Games Team										
	- 1	Player	1					Player:	2	
		0			_			0		
		•			•	٠				
	•	•	•	•	•	•	•	•	•	•
		٠		•	•	•	•	•	•	
	•	٠	•	•	•	•	•	•	•	•
	•	•	•	٠	•	•	٠	•	٠	•
	•	•	•	•	•	•	•	•	•	•

• Drums:



• <u>Doodle:</u>



• <u>Leaderboard:</u>

Home Games Team

Leaderboard...

	Snake							
S No.	Player's Name	Date	Score	SN				
1	Name (1.000		1				
2	-	: -11		2				
3			₩1	3				
4	1 	· 	-	4				
5		***		5				

S No.	Player's Name	Date	Score
1		-	55 0
2	S 111		-
3		-	
4	(517		
5			

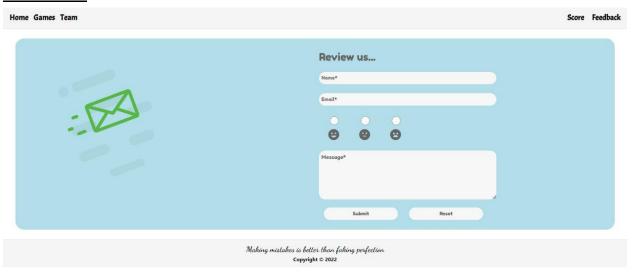
Doodle

Colour Memory

S No.	Player's Name	Date	Score
1			-
2	\ 	1000	55 0
3	19		**
4			-
5	N ews	[1000	

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• Feedback



• <u>Team</u>



LIMITATIONS

- A user profile is not maintained.
- There is no login option.
- A user's previously played matches and his recent scores cannot be see.
- Only a maximum of 2 players can play a game.
- Friends cannot be added.
- There is no option to play with a friend online.

FUTURE ENHANCEMENTS

- A user profile will be maintained.
- A login option will be provided.
- A provision to access a user's previously played matches and his recent scores will be made.
- Option to add friends will be added.
- Users can play with a friend who is online at the same time.
- More exciting games will be added.
- More multiplayer games will be introduced.

SOURCE CODES:

Index Page

```
<!DOCTYPE html>
<html Lang="en">
  <head>
    <script src="https://code.jquery.com/jquery-1.10.2.js"></script>
    <!--head bar-->
    <div id="head-placeholder"></div>
    <script>
      $(function () {
        $("#head-placeholder").load("head.html");
      });
    </script>
    <title>Home</title>
  </head>
  <body>
    <!--Error Tab-->
<div id="error_page"></div>
<script>
 $(function () {
   $("#error_page").load("error.html");
 });
</script>
<!--end of Error Tab-->
<div id="normalbody">
   <!--Navigation bar-->
    <div id="nav-placeholder"></div>
    <script>
      $(function () {
        $("#nav-placeholder").load("nav.html");
      });
    </script>
    <!--end of Navigation bar-->
    <div id="scrooling_content">
```

```
<h1>Bored!!!</h1>
     <h5>Playing Simple & Small Games can help Sometime... ⊕</h5>
   </div>
   <div id="home games">
     <div class="container-fluid">
       <div class="row">
         <div class="col-12 col-md-2"></div>
         <div class="col-12 col-md-4">
           <a href="Colour game/index.html">
                src="colour_game.jpg"
                alt="Colour_Game"
                height="90%"
                width="60%"
            /><h4>Colour Game</h4></a>
         </div>
         <div class="col-12 col-md-4">
           <a href="Snake/index.html"</pre>
              ><img
                src="snake.jpg"
                alt="Snake_Game"
                height="90%"
                width="60%"
            /> <h4>Snake</h4> </a>
         </div>
         <div class="col-12 col-md-2"></div>
       </div>
     </div>
   </div>
   <div id="more-games">
     <div class="row">
       <div class="col-12 col-md-10"></div>
       <div class="col-12 col-md-2">
     <a href="games.html"><b><h5>More Games <i class="fas fa-arrow-</pre>
right"></i></h5></b>
     </a>
   </div>
 </div>
 </div>
   <!--Footer bar-->
   <div id="footer-placeholder"></div>
```

Navbar Section

```
<nav class="navbar navbar-expand-lg ">
  <div class="container-fluid">
   <a href="index.html" class="nav-link">
      Home
     </a>
     <a href="games.html" class="nav-link">
      Games
     </a>
     <a href="team.html" class="nav-link">
      Team
     </a>
   <a href="score.html" class="nav-link">
      Score
     </a>
     <a href="feedback.html" class="nav-link">
      Feedback
     </a>
   </div>
 </nav>
```

Footer Section

<footer>

```
<div class="container-fluid">

        Making mistakes is better than faking perfection

    Copyright @ 2022
    </div>
</footer>
```

Head Seaction

```
<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" type="image/x-icon" href="favicon.ico"><!-- favicon -->
  k
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet"
    integrity="sha384-
Zenh87qX5JnK2J10vWa8Ck2rdkQ2Bzep5IDxbcnCeu0xjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous" />
  <link href="https://fonts.googleapis.com/css2?family=Fasthand&display=swap"</pre>
rel="stylesheet" />
  <link rel="stylesheet" href="style.css" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
    <link rel="stylesheet" id="font-awesome-official-css"</pre>
href="https://use.fontawesome.com/releases/v5.15.4/css/all.css" media="all"
integrity="sha384-
DyZ88mC6Up2uqS4h/KRgHuoeGwBcD4Ng9SiP4dIRy0EXTlnuz47vAwmeGwVChigm"
crossorigin="anonymous">
    klink
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css"
    />
    <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
    <link href="https://fonts.googleapis.com/css2?family=Carter+One&display=swap"</pre>
rel="stylesheet">
    k
href="https://fonts.googleapis.com/css2?family=Fredoka+One&display=swap"
rel="stylesheet">
```

```
klink
href="https://fonts.googleapis.com/css2?family=Edu+NSW+ACT+Foundation:wght@700&di
splay=swap" rel="stylesheet">
      k
href="https://fonts.googleapis.com/css2?family=Arima:wght@500&display=swap"
rel="stylesheet">
      klink
href="https://fonts.googleapis.com/css2?family=Dancing+Script:wght@700&display=sw
ap" rel="stylesheet">
      <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
      k
href="https://fonts.googleapis.com/css2?family=Acme&family=Fredoka+One&display=sw
ap" rel="stylesheet">
      klink
href="https://fonts.googleapis.com/css2?family=Permanent+Marker&display=swap"
rel="stylesheet">
      k
href="https://fonts.googleapis.com/css2?family=Fira+Mono:wght@500&display=swap"
rel="stylesheet">
      <link rel="stylesheet"</pre>
href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wgh">href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wgh">href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wgh">href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wgh">href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wgh">href="https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wgh">https://fonts.googleapis.com/css2?family=Material+Symbols+Outlined:opsz,wgh
t,FILL,GRAD@48,700,1,0" />
```

Team Page

```
</head>
  <body>
    <!--Error Tab-->
<div id="error_page"></div>
<script>
  $(function () {
    $("#error_page").load("error.html");
 });
</script>
<!--end of Error Tab-->
<div id="normalbody">
    <!--Navigation bar-->
  <div id="nav-placeholder"></div>
  <script>
    $(function () {
      $("#nav-placeholder").load("nav.html");
    });
  </script>
  <!--end of Navigation bar-->
    <div id="team">
      <h1>Meet the Developers...</h1>
      <div class="container-fluid">
        <div class="row">
          <div class="col-12 col-md-4">
            <div class="card">
              <img
                src="achint.jpg"
                alt="Avatar"
              />
              <div class="container">
                <h4><b>Achint Tyagi</b></h4>
                <h5>Frontend Designer </h5>
                <a href="https://www.linkedin.com/in/achint-tyagi"</pre>
target="_blank"
                  ><i class="fa fa-linkedin-square" aria-hidden="true"></i></i>
                </a>
              </div>
            </div>
          </div>
          <div class="col-12 col-md-4">
```

```
<div class="card">
              <img
                src="ajay.jpg"
                alt="Avatar"
              <div class="container">
                <h4><b>Ajay Dhondge</b></h4>
                <h5>Game Developer</h5>
                <a href="https://www.linkedin.com/in/ajay-dhondge-617568214"</pre>
target="_blank"
                  ><i class="fa fa-linkedin-square" aria-hidden="true"></i>
                </a>
              </div>
            </div>
          </div>
          <div class="col-12 col-md-4">
            <div class="card">
              <img
                src="amit.jpg"
                alt="Avatar"
              />
              <div class="container">
                <h4><b>Amit Sanap</b></h4>
                <h5>Game Developer</h5>
                <a href=""
                  ><i class="fa fa-linkedin-square" aria-hidden="true"></i></i>
                </a>
              </div>
            </div>
          </div>
        </div>
      </div>
      <div class="container-fluid">
        <div class="row">
          <div class="col-12 col-md-2"></div>
          <div class="col-12 col-md-4">
            <div class="card">
              <img
                src="omkar.jpg"
                alt="Avatar"
              />
              <div class="container">
                <h4><b>Omkar Kende</b></h4>
                <h5>Database Designer</h5>
                <a href="""
```

```
><i class="fa fa-linkedin-square" aria-hidden="true"></i>
                </a>
              </div>
            </div>
          </div>
          <div class="col-12 col-md-4">
            <div class="card">
              <img
                src="ishan.jpg"
                alt="Avatar"
              <div class="container">
                <h4><b>Ishansingh Rana</b></h4>
                <h5>Database Designer</h5>
                <a href="https://www.linkedin.com/in/ishan-rana-57488a249"</pre>
target=" blank"
                  ><i class="fa fa-linkedin-square" aria-hidden="true"></i>
                </a>
              </div>
            </div>
          </div>
          <div class="col-12 col-md-2"></div>
        </div>
      </div>
    </div>
    <!--Footer bar-->
  <div id="footer-placeholder"></div>
  <script>
    $(function () {
      $("#footer-placeholder").load("footer.html");
    });
  </script>
  <!--end of Footer bar-->
  </div>
  </body>
</html>
```

Score Page

```
<!DOCTYPE html>
<html Lang="en">
  <head>
    <script src="https://code.jquery.com/jquery-1.10.2.js"></script>
    <!--head bar-->
    <div id="head-placeholder"></div>
    <script>
      $(function () {
        $("#head-placeholder").load("head.html");
      });
    </script>
    <title>Highscore</title>
  </head>
  <body>
    <!--Error Tab-->
<div id="error_page"></div>
<script>
 $(function () {
   $("#error_page").load("error.html");
 });
</script>
<!--end of Error Tab-->
<div id="normalbody">
    <!--Navigation bar-->
    <div id="nav-placeholder"></div>
    <script>
      $(function () {
        $("#nav-placeholder").load("nav.html");
      });
    </script>
    <!--end of Navigation bar-->
    <h1 id="score_h1">Leaderboard...</h1>
    <div class="container-fluid">
      <div class="row">
      <div class="col-12 col-md-6">
        <h2 class="game_heading">Snake</h2>
```

```
S No.
Player's Name
Date
Score
>
1
---
---
--
2
---
---
--
3
---
---
--
4
---
---
--
5
---
---
--
</div>
<div class="col-12 col-md-6">
<h2 class="game_heading">Doodle</h2>
S No.
 Player's Name
 Date
```

```
Score
 1
 ---
 ---
 --
 2
 ---
 ---
 --
 3
 ---
 ---
 --
 4
 ---
 ---
 --
 5
 ---
 ---
 --
 </div>
</div>
<div class="row">
<div class="col-12 col-md-3"></div>
<div class="col-12 col-md-6">
 <h2 class="game_heading">Colour Memory</h2>
S No.
 Player's Name
 Date
 Score
```

```
1
 ---
 ---
 --
2
 ---
 ---
 --
3
 ---
 ---
 --
4
 ---
 ---
 --
5
 ---
 ---
 --
</div>
<div class="col-12 col-md-3"></div>
</div>
<!--Footer bar-->
<div id="footer-placeholder"></div>
<script>
$(function () {
 $("#footer-placeholder").load("footer.html");
});
</script>
```

```
<!--end of Footer bar-->
</div>
</body>
</html>
```

Games Page

```
<!DOCTYPE html>
<html Lang="en">
<head>
  <script src="https://code.jquery.com/jquery-1.10.2.js"></script>
    <!--head bar-->
    <div id="head-placeholder"></div>
    <script>
      $(function () {
        $("#head-placeholder").load("head.html");
      });
    </script>
    <title>Games</title>
</head>
<body>
  <!--Error Tab-->
<div id="error_page"></div>
<script>
 $(function () {
   $("#error_page").load("error.html");
 });
</script>
<!--end of Error Tab-->
<div id="normalbody">
    <!--Navigation bar-->
  <div id="nav-placeholder"></div>
  <script>
    $(function () {
      $("#nav-placeholder").load("nav.html");
    });
```

```
</script>
    <div id="games">
        <div class="container-fluid">
          <div class="row">
            <div class="col-12 col-md-2"></div>
            <div class="col-12 col-md-4">
                    <a href="Sudoku/index.html" ><img src="Sudoku.png"</pre>
alt="Sudoku Game" />
                         <h4>Sudoku</h4></a>
            </div>
            <div class="col-12 col-md-4">
              <a href="Dots&Boxes/index.html"><img src="Dots&Boxes.jpg"</pre>
alt="Dots&Boxes Game" />
                  <h4>Dots & Boxes</h4></a>
            </div>
            <div class="col-12 col-md-2">
            </div>
          </div>
          <div class="row">
            <div class="col-12 col-md-2"></div>
            <div class="col-12 col-md-4">
                  <a href="Doodle/index.html"><img src="Doodle.jpg"</pre>
alt="Doodle Game" />
                    <h4>Doodle</h4></a>
            </div>
            <div class="col-12 col-md-4">
                <a href="Snake/index.html" ><img src="snake.jpg" alt="Snake_Game"</pre>
 />
                <h4>Snake</h4></a>
            </div>
            <div class="col-12 col-md-2">
            </div>
          </div>
          <div class="row">
            <div class="col-12 col-md-2"></div>
            <div class="col-12 col-md-4">
```

```
<a href="Drum_sound/index.html"><img src="drum_sound.jpg"</pre>
alt="drum_sound.jpg" />
                  <h4>Drum Kit</h4></a>
            </div>
            <div class="col-12 col-md-4">
                <a href="Colour_game/index.html" ><img src="colour_game.jpg"</pre>
alt="Colour_Game" />
                    <h4>Colour Game</h4></a>
            </div>
            <div class="col-12 col-md-2">
            </div>
          </div>
        </div>
      </div>
      <!--Footer bar-->
  <div id="footer-placeholder"></div>
  <script>
    $(function () {
      $("#footer-placeholder").load("footer.html");
    });
  </script>
  </div>
</body>
</html>
```

Feedback Page

```
<!DOCTYPE html>
<html Lang="en">
  <head>
    <script src="https://code.jquery.com/jquery-1.10.2.js"></script>
    <!--head bar-->
    <div id="head-placeholder"></div>
    <script>
      $(function () {
        $("#head-placeholder").load("head.html");
      });
    </script>
    <title>Feedback</title>
  </head>
<body>
<div id="error_page"></div>
<script>
  $(function () {
    $("#error_page").load("error.html");
 });
</script>
<!--end of Error Tab-->
<div id="normalbody">
  <!--Navigation bar-->
  <div id="nav-placeholder"></div>
  <script>
    $(function () {
      $("#nav-placeholder").load("nav.html");
    });
  </script>
  <!--end of Navigation bar-->
  <div id="feedback">
    <div class="row">
      <div class="col-md-6">
        <img src="img-01.webp" alt="Message" />
      </div>
```

```
<div class="col-md-6">
  <h2>Review us...</h2>
  <form action="https://formspree.io/f/xvoynzkk" method="POST">
    <input</pre>
      type="text"
      id="name"
      name="name"
      placeholder="Name*"
      required
    /><br />
    <input</pre>
      type="email"
      id="email"
      name="email"
      placeholder="Email*"
      required
    /><br />
    <div id="rating">
      <input</pre>
        type="radio"
        class="radio"
        id="Happy"
        name="group"
        required
      />
      <input type="radio" class="radio" id="Normal" name="group" />
      <input type="radio" class="radio" id="Angry" name="group" />
      <br />
      <label for="radio-1"</pre>
        ><span id="happy" class="material-symbols-outlined">
          sentiment very satisfied
        </span></label
      <label for="radio-2"</pre>
        ><span id="normal" class="material-symbols-outlined">
          sentiment_neutral
        </span></label
      <label for="radio-3"</pre>
        ><span id="angry" class="material-symbols-outlined">
          sentiment_extremely_dissatisfied
```

```
</span></label
          </div>
          <br />
          <textarea
            id="subject"
            name="subject"
            placeholder="Message*"
            required
          ></textarea>
          <br />
          <input id="submit" type="submit" value="Submit" required />
          <input id="reset" type="reset" value="Reset" required />
        </form>
      </div>
   </div>
  </div>
  <!--Footer bar-->
  <div id="footer-placeholder"></div>
  <script>
   $(function () {
     $("#footer-placeholder").load("footer.html");
    });
  </script>
</div>
 </body>
</html>
```

Error Page

```
<div id="error">
    <div id="stars">
        <span class="stars material-symbols-outlined" style="top: 100px; right:</pre>
100px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 120px; right:</pre>
200px">star
        </span>
        <span class="stars material-symbols-outlined" style="top: 150px; right:</pre>
90px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 110px; right:</pre>
500px">star
        </span>
        <span class="stars material-symbols-outlined" style="top: 180px; right:</pre>
300px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 200px; right:</pre>
400px">star
        </span>
        <span class="stars material-symbols-outlined" style="top: 220px; right:</pre>
70px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 230px; right:</pre>
550px">star
        </span>
        <span class="stars material-symbols-outlined" style="top: 250px; right:</pre>
340px">
            star
        <span class="stars material-symbols-outlined" style="top: 300px; right:</pre>
560px">star
        <span class="stars material-symbols-outlined" style="top: 320px; right:</pre>
70px">
            star
        </span>
        <span class="stars material-symbols-outlined" style="top: 340px; right:</pre>
200px">star
```

```
</span>
        <span class="stars material-symbols-outlined" style="top: 500px; right:</pre>
560px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 420px; right:</pre>
70px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 540px; right:</pre>
200px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 100px; left:</pre>
100px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 120px; left:</pre>
200px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 150px; left:</pre>
90px">
             star</span>
        <span class="stars material-symbols-outlined" style="top: 110px; left:</pre>
500px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 180px; left:</pre>
300px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 200px; left:</pre>
400px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 220px; left:</pre>
70px">
             star</span>
        <span class="stars material-symbols-outlined" style="top: 230px; left:</pre>
550px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 250px; left:</pre>
340px">
```

```
star
        </span>
        <span class="stars material-symbols-outlined" style="top: 300px; left:</pre>
560px">
            star
        </span>
        <span class="stars material-symbols-outlined" style="top: 320px; left:</pre>
70px">
            star</span>
        <span class="stars material-symbols-outlined" style="top: 340px; left:</pre>
200px">
             star
        </span>
        <span class="stars material-symbols-outlined" style="top: 500px; left:</pre>
560px">
            star
        </span>
        <span class="stars material-symbols-outlined" style="top: 420px; left:</pre>
70px">
            star</span>
        <span class="stars material-symbols-outlined" style="top: 540px; left:</pre>
200px">
            star
        </span>
    </div>
    <div>
        <img id="rocket" src="rocket.png" alt="Rocket" width="35%" />
        <h1>Error</h1>
        <h2>Couldn't launch :(</h2>
        <h3>Page Can't Load in Small Screen</h3>
    </div>
</div>
```

Style Sheet

```
@media screen and (min-width:1180px) {
    #error_page{
        display: none;
    }
    body {
        margin: 0;
        background-color: #fff;
    }
}
```

```
nav {
 /* background-color: #A9A9A9; */
 /* background-color: #D7CEC7 ; */
 background-color: #f5f5f5;
 padding: 1mm 2mm 1mm 3mm;
 border-bottom: #d7d7d7 0.1mm solid;
a li.nav-item {
 font-weight: bolder;
 font-size: 1.5rem;
 color: black;
 font-family: "Acme", sans-serif;
a li.nav-item:hover {
 text-shadow: 1px 3px rgba(0, 0, 0, 0.2);
.navbar-ul2 li {
 padding-left: 0.2cm;
/* *********Footer******************************
footer {
 background-color: #f5f5f5;
 text-align: center;
 color: black;
 font-weight: bolder;
 border-top: #d7d7d7 0.1mm solid;
footer div {
 padding: 3mm 0;
footer p {
 margin-bottom: 0.1mm;
                -----page-----
#scrooling_content {
 text-align: center;
 padding: 4cm 0;
#scrooling_content h1 {
```

```
font-size: 5cm;
 #home_games .col-md-4 {
  text-align: center;
#home_games .col-md-4 a img {
  height: 242px;
  width: 236px;
  box-shadow: 0 0 10px 1px rgba(0, 0, 0, 0.2);
#home_games a{
  text-decoration: none;
  color: #000000;
#home_games a h4 {
  text-align: center;
  padding: 3mm 0;
  font-family: "Carter One", cursive;
#home games .col-md-4 a img:hover {
  box-shadow: 0 0 20px 5px rgba(0, 0, 0, 0.2);
 #more-games {
  text-align: right;
  padding: 0 3mm 1cm 0;
#more-games a {
  text-decoration: none;
  color: black;
  font-family: "Acme", sans-serif;
#more-games a h5:hover {
  text-shadow: 1px 3px rgba(0, 0, 0, 0.2);
                     -----game-page-----
#games .col-md-4 a img {
  height: 242px;
  width: 236px;
  box-shadow: 0 0 10px 1px rgba(0, 0, 0, 0.2);
#games .col-md-4 a img:hover {
 box-shadow: 0 0 20px 5px rgba(0, 0, 0, 0.2);
```

```
#games {
 margin-top: 5mm;
#games a {
 text-decoration: none;
 color: black;
#games a h4 {
 text-align: center;
 padding: 3mm 0;
 font-family: "Carter One", cursive;
#games a h4:hover {
 text-shadow: 1px 3px rgba(0, 0, 0, 0.2);
#games .col-md-4 {
 margin: 1cm 0;
 text-align: center;
/* -----TEAM-page-----
#team .card {
 box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);
 transition: 0.5s;
 width: 67%;
 margin: auto;
 padding: 4mm 0;
#team div.row {
 margin: 7mm 0;
#team .card:hover {
 box-shadow: 1px 1px 10px 6px rgba(0, 0, 0, 0.2);
#team .container {
 padding: 2px 16px;
 text-align: center;
#team img {
height: 7cm;
```

```
width: 6cm;
 margin: auto;
#team a {
 text-decoration: none;
 color: black;
 font-size: 7mm;
#team h5 {
 font-family: "Carter One", cursive;
#team h1 {
 font-family: "Fredoka One", cursive;
 margin: 1cm 5mm;
#team h4 {
 font-family: "Acme", sans-serif;
 padding: 3mm 0 0 0;
/* -----Score-page------
 border-bottom: 0.1mm solid black;
th {
 background-color: #bfa797;
 font-size: x-large;
 font-family: "Edu NSW ACT Foundation", cursive;
 color: black;
#Sudoku th{
 background-color: #A0E4CB;
#ColourMemory th{
 background-color: #D58BDD;
.game_heading{
 text-align: center;
 font-weight: bolder;
 border: solid;
 margin: 0 2mm;
 background-color: #BCCEF8;
```

```
table {
  margin: 7mm auto;
 min-width: 90%;
 font-family: "Arima", cursive;
  font-size: larger;
 font-weight: bold;
#score h1 {
 margin: 5mm 0 5mm 3mm;
 font-family: "Fredoka One", cursive;
 font-size: 4rem;
tr:nth-of-type(odd) {
 background-color: #f7f7f7;
 color: #562b08;
#s_no {
 text-align: left;
 padding-left: 3mm;
td:nth-of-type(1) {
 text-align: left;
 padding-left: 3mm;
td {
padding: 2mm 5mm 0 5mm;
/* -----Feedback-page-----
#feedback {
 background-color: rgb(177, 222, 232);
 margin: 8mm 1cm;
 border: noen;
 border-radius: 7mm;
#feedback .col-md-6 img {
```

```
margin: 2.5cm 2cm 0 3.5cm;
#feedback input {
  margin: 0 0 1mm 0;
 display: block;
 width: 60%;
  background: #f7f7f7;
  font-family: "Fredoka One", cursive;
  font-size: 15px;
  line-height: 1.5;
  color: #666;
 border-radius: 5mm;
  padding: 2mm;
  border: none;
 outline: none;
#feedback textarea#subject {
  font-family: "Fredoka One", cursive;
 height: 150px;
  width: 60%;
  background: #f7f7f7;
 color: #666;
  border-radius: 5mm;
 padding: 2mm;
 border: none;
 outline: none;
#feedback #submit,
#feedback #reset {
 width: 25%;
 display: inline;
 margin: 5mm 4mm 8mm 4mm;
#feedback #submit:hover,
#feedback #reset:hover {
 background-color: #666;
 color: #f7f7f7;
 box-shadow: 1px 1px 10px 6px rgba(0, 0, 0, 0.2);
#feedback h2 {
```

```
font-family: "Fredoka One", cursive;
  margin: 1cm 0 7mm;
  color: #666;
#rating label span {
 margin: 0 7mm 0 7mm;
 color: #666;
 font-size: 1cm;
#rating input {
 display: inline;
 width: auto;
 margin: 0 8mm 0 9mm;
#rating input.radio {
 height: 1cm;
 width: 0.7cm;
#rating input.radio#Angry,
#rating input.radio#Normal,
#rating input.radio#Happy {
 accent-color: lightslategrey;
 cursor: pointer;
#rating input.radio#Angry:checked ~ label span#angry,
label span#angry:hover {
 color: red;
#rating input.radio#Happy:checked ~ label span#happy,
label span#happy:hover {
 color: #54b435;
#rating input.radio#Normal:checked ~ label span#normal,
label span#normal:hover {
 color: #fdff00;
#feedback .col-md-6 img:hover {
```

```
will-change: transform;
   transform: perspective(300px) rotateX(1.38deg) rotateY(-4.01deg)
     scale3d(1.1, 1.1, 1.1);
@media screen and (max-width:1180px) {
 #normalbody{
   display: none;
              ------page-----
body{
 height: 95vh;
 background: #000000;
 text-align: center;
 color: #e0e0e0;
 font-family: "Fira Mono", monospace;
#error h1 {
 font-size: 2.5rem;
 font-family: "Permanent Marker", cursive;
 margin: 0;
#error h1,
#error h2,
#error h3 {
 margin: 0;
#error div#stars {
 position: relative;
#error #stars .stars {
 opacity: 0.6;
 position: absolute;
 font-size: xx-small;
```

Games

Colour Game Index File

```
<!DOCTYPE html>
<html Lang="en" dir="ltr">
<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="stylesheet" href="styles.css">
  <title>Colour Game</title>
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
 <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
  <link href="https://fonts.googleapis.com/css?family=Press+Start+2P"</pre>
rel="stylesheet">
 <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
</head>
<body>
  <nav class="navbar navbar-expand-lg ">
   <div class="container-fluid">
     <a href="https://tyagi-achint.github.io/StrawHats/index.html" class="nav-</pre>
link">
         Home
       </a>
       <a href="https://tyagi-achint.github.io/StrawHats/games.html" class="nav-</pre>
link">
         Games
       </a>
       <a href="https://tyagi-achint.github.io/StrawHats/team.html" class="nav-</pre>
link">
         Team
```

```
</a>
       <a href="https://tyagi-achint.github.io/StrawHats/feedback.html"</pre>
class="nav-link navbar-ul2">
         Feedback
       <a href="https://tyagi-achint.github.io/StrawHats/score.html" class="nav-</pre>
link navbar-ul2">
         Score
       </a>
     </div>
  <h1 id="level-title">Press/Click Key to Start</h1>
  <div class="container">
   <div class="row">
     <div type="button" id="green" class="btn green">
     </div>
     <div type="button" id="red" class="btn red">
     </div>
   </div>
   <div class="row">
     <div type="button" id="yellow" class="btn yellow">
     </div>
     <div type="button" id="blue" class="btn blue">
     </div>
   </div>
  </div>
  <div type="button" class="btnStart ">
   <h4>Start</h4>
  </div>
  <br>
  <a href="howToPlay.html">
   <div type="button" class="btnHowto">
     <h4>How to Play!</h4>
   </div>
  </a>
</body>
```

```
<script src="game.js"></script>
</html>
<!DOCTYPE html>
<html <pre>lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=\, initial-scale=1.0">
    <link href="https://fonts.googleapis.com/css?family=Press+Start+2P"</pre>
rel="stylesheet">
   <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
    <link rel="stylesheet" href="styles.css">
    <title>How to Play!</title>
</head>
<body>
    <h1> How to play Simon!</h1>
   <div>
       <h3>
            <l
               <1i>>
                   The Game is of Skill Level 2.
               <
                   Press the START button. Simon will give the first signal.
Repeat the signal by pressing the same
                   colour box.
               <
                   Simon will again add one signal. Repeat these two signals by
pressing the same colour boxes, in
                   order.
               <
                   Simon will again add one signal.
               <
                   Continue playing as long as you can repeat each sequence of
signals correctly.
               <
```

```
If you fail to repeat a sequence exactly, Simon responds with
а
                    "RAZZ" sound. This means you've lost, and the sequence of
signals ends.
               </h3>
        <h1>Enjoy :-) </h1>
        <br>
        <a href="index.html">
           <div type="button" class="btnHome">
               <h4 class="homebtn">Home</h4>
            </div>
       </a>
    </div>
</body>
</html>
```

```
var pname = prompt("Enter Your name");
var gamePattern = [];
var userClickedPattern = [];
var buttonColours = ["red", "blue", "green", "yellow"];
var level = 0;
var started = false;
var numberOfButtons = $(".btn").length;
for (var i = 0; i < numberOfButtons; i++) {</pre>
 $(".btn")[i].addEventListener("click", function () {
   var userChosenColour = this.id;
    userClickedPattern.push(userChosenColour);
    playSound(userChosenColour);
    animatePress(userChosenColour);
    checkAnswer(userClickedPattern.length - 1);
  });
$(".btnStart").click(function () {
 if (!started) {
```

```
$("#level-title").text("Level " + level);
    nextSequence();
    started = true;
});
function nextSequence() {
 userClickedPattern = [];
  level++;
 $("#level-title").text("Level " + level);
  var randomNumber = Math.floor(Math.random() * 4);
  var randomChosenColour = buttonColours[randomNumber];
  gamePattern.push(randomChosenColour);
  playSound(randomChosenColour);
  animatePress(randomChosenColour);
function playSound(name) {
  var audio = new Audio(name + ".mp3");
  audio.play();
function animatePress(currentColour) {
  $("#" + currentColour).addClass("pressed");
  setTimeout(function () {
   $("#" + currentColour).removeClass("pressed");
  }, 100);
function startOver() {
  gamePattern = [];
 userClickedPattern = [];
 level = 0;
  started = false;
function checkAnswer(currentLevel) {
  console.log(userClickedPattern);
  console.log(gamePattern);
 if (gamePattern[currentLevel] === userClickedPattern[currentLevel]) {
    console.log("Sucess");
    if (userClickedPattern.length === gamePattern.length) {
      setTimeout(function () {
       nextSequence();
```

```
}, 1000);
}
} else {
  console.log("Wrong");
  var audio = new Audio("wrong.mp3");
  audio.play();
  $("body").addClass("game-over");
  setTimeout(function () {
        $("body").removeClass("game-over");
    }, 200);
  $("#level-title").text("Game Over,Restart again");
  startOver();
}
```

Style Sheet

```
body {
  text-align: center;
  background-color: #011f3f;
nav {
  padding: 2mm 3mm 1mm 3mm;
nav a li.nav-item {
  font-weight: bolder;
  font-size: 1.5rem;
  color: white;
  font-family: "Acme", sans-serif;
  padding-right: 5mm;
nav a li.nav-item:hover {
  text-shadow: 1px 3px rgba(255, 254, 254, 0.471);
nav ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
nav li {
  float: left;
nav li {
```

```
float: left;
nav .navbar-ul2{
float: right;
nav a{
 text-decoration: none;
 display: block;
#level-title {
 font-family: "Press Start 2P", cursive;
 font-size: 9mm;
 margin: 2cm 0 1cm 0;
  color: #fef2bf;
.container {
 display: block;
 width: 50%;
 margin: auto;
.btn {
 margin: 25px;
 display: inline-block;
 height: 200px;
 width: 200px;
 border: 10px solid black;
 border-radius: 20%;
.btnStart {
 height: 50px;
 width: 100px;
 display: inline-block;
 border: 5px solid black;
 border-radius: 20%;
 background-color: teal;
h4 {
 margin: 5mm 0 0 0;
 font-family: "Press Start 2P", cursive;
 color: #fef2bf;
.game-over {
```

```
background-color: red;
  opacity: 0.8;
.red {
  background-color: red;
.green {
  background-color: green;
.blue {
  background-color: blue;
.yellow {
  background-color: yellow;
.pressed {
  box-shadow: 0 0 20px white;
  background-color: grey;
How to play */
h1 {
  font-family: cursive;
  font-size: 3rem;
  margin-bottom: 0;
  color: #fef2bf;
h3 {
  font-family: Arial, Helvetica, sans-serif;
  font-size: 2rem;
  text-align: left;
  color: #f0d9ff;
.btnHowto {
  margin-top: 5mm;
  height: 50px;
  width: 250px;
  display: inline-block;
```

```
border: 5px solid black;
border-radius: 20%;
background-color: teal;
}

.btnHome {
  height: 50px;
  width: 150px;
  display: inline-block;
  border: 5px solid black;
  border-radius: 15%;
  background-color: teal;
}

.homebtn {
  font-size: 7mm;
}
```

Doodle GameIndex File

```
<!DOCTYPE html>
<html <pre>lang="en">
  <head>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/p5.js/1.2.0/p5.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/p5.js/1.2.0/addons/p5.sound.min.js">
/script>
    <link rel="stylesheet" type="text/css" href="style.css">
    <meta charset="utf-8" />
    klink
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet"
  integrity="sha384-
Zenh87qX5JnK2J10vWa8Ck2rdkQ2Bzep5IDxbcnCeu0xjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous" />
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
```

```
<link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
 k
href="https://fonts.googleapis.com/css2?family=Rubik+Marker+Hatch&display=swap"
rel="stylesheet">
 <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
 </head>
 <body>
   <nav class="navbar navbar-expand-lg ">
     <div class="container-fluid">
       <a href="https://tyagi-achint.github.io/StrawHats/index.html"</pre>
class="nav-link">
          Home
        <a href="https://tyagi-achint.github.io/StrawHats/games.html"</pre>
class="nav-link">
          Games
        </a>
        <a href="https://tyagi-achint.github.io/StrawHats/team.html"</pre>
class="nav-link">
          Team
        </a>
       <a href="https://tyagi-achint.github.io/StrawHats/score.html"</pre>
class="nav-link">
          Score
        <a href="https://tyagi-achint.github.io/StrawHats/feedback.html"</pre>
class="nav-link">
          Feedback
        </a>
       </div>
   </nav>
   <script src="sketch.js"></script>
   <script src="Doodler.js"></script>
   <script src="Platform.js"></script>
```

```
</body>
</html>
```

```
class Doodler {
  constructor(left, right) {
    this.x = width / 2-20;
    this.y = height / 2;
    this.height = 60;
    this.width = 60;
    this.velocity = 0;
    this.gravity = 0.1;
    this.jumpForce = 9;
    this.left = left;
    this.right = right;
    this.goingLeft = true;
  draw() {
    if (this.goingLeft) {
      image(this.left,this.x,this.y,this.width, this.height);
    } else {
      image(this.right,this.x,this.y, this.width, this.height);
  update(platforms) {
    if (this.x + this.width < 0) this.x = width; // add this screen wrapping</pre>
    if (this.x > width) this.x = -this.width;
    if (this.velocity < -9) this.velocity = -9;</pre>
    this.velocity += this.gravity;
    this.y += this.velocity;
    if (keyIsDown(LEFT_ARROW)) {
```

```
this.goingLeft = true;
    if (keyIsDown(RIGHT_ARROW)) {
      this.x += 4;
      this.goingLeft = false;
     for (let platform of platforms) {
      if (this.y + this.height >= platform.y && this.y + this.height <=</pre>
platform.y + platform.height) {
        let minX = platform.x - this.width;
        let maxX = platform.x + platform.width;
        if (this.x >= minX && this.x <= maxX) {</pre>
          this.jump();
  // add the new jump function!
 jump() {
    this.velocity -= this.jumpForce;
class Platform {
  constructor(x, y, img) {
    this.y = y;
    this.height = 20;
    this.width = 70;
    this.img = img;
  draw() {
    image(this.img, this.x, this.y, this.width, this.height);
```

```
// Find my blog at https://codeheir.com/
// I do a lot of p5.js stuff that might interest you!
// var pname = prompt("Enter your name");
let doodler;
let gap;
let platforms = [];
let score;
let bg;
let doodlerLeft;
let doodlerRight;
let platformImg;
function setup() {
  createCanvas(400, 500);
 platforms = [];
  score = 0;
  bg = loadImage('bg.png'); // add this to load the background
  doodlerLeft = loadImage('doodler-left.png');
  doodlerRight = loadImage('doodler-right.png');
  doodler = new Doodler(doodlerLeft, doodlerRight);
  platformImg = loadImage('platform.png');
 let platformCount = 4;
 gap = height / platformCount;
  for (let i = 1; i < 10; i++) {
    platforms.push(new Platform(random(width), (height * 1.5) - i * gap,
platformImg))
function draw() {
 image(bg, 0, 0);
 if (doodler.velocity > 10) {
   noLoop();
   gameOver();
 } else {
    translate(0, width / 2 - doodler.y);
    push();
    fill(0)
    textSize(30);
```

```
textAlign(CENTER);
    text(score, width / 2, doodler.y - 150);
    pop();
    doodler.draw();
    doodler.update(platforms);
    for (let platform of platforms) {
      platform.draw();
   // create more platforms as the doodler moves up the screen
    if (doodler.y < platforms[platforms.length - 1].y + 200) {</pre>
      platforms.push(new Platform(random(width), platforms[platforms.length -
1].y - gap, platformImg));
    if (platforms[0].y > doodler.y + 400) {
      platforms.splice(0, 1);
      score++;
function gameOver() {
 textSize(40);
  image(bg, 0, 0);
 textAlign(CENTER);
  text(`You scored ${score}`, width / 2, 50 );
  textSize(25);
 text(`How to Play!`, width / 2,100);
 text(`-To play,
 Jump simply move left to right
  to reach the platforms`, width / 2,150);
 text(`-The gameplay is endless,
  so jump for as long as possible
  to achieve your greatest score.`, width / 2,250);
```

```
text(`-For higher jump u need to jump
  on the below platform from
  current platform to get to
  above plateforms`, width / 2,350);

  textSize(30);
  text(`Press Spacebar to play`, width / 2, height / 2 + 240);
}

function keyPressed() {
  if (key == ' ') {
    setup();
    loop();
  }
}
```

Style Sheet

```
canvas {
   display: block;
   margin-left:11cm;
 html,
body {
 height: 100%;
 margin: 0;
body {
 --size: 15px;
  --color: black;
 font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
 color: var(--color);
 background-color: #EAEAEA !important;
nav {
    padding: 1mm 2mm 1mm 3mm;
margin-bottom: 5mm;
    background-color: #B2B2B2;
```

```
a li.nav-item {
   font-weight: bolder;
   font-size: 1.5rem;
   color: black;
   font-family: "Acme", sans-serif;
 a li.nav-item:hover {
   text-shadow: 1px 3px rgba(0, 0, 0, 0.2);
 .navbar-ul2 li {
   padding-left: 0.2cm;
.col-md-3 ul{
   list-style-type: thumbs;
   font-family: 'Pacifico', cursive;
   font-size: 17px;
.col-md-3{
   text-align: center;
.col-md-3 h1{
   font-family: 'Rubik Marker Hatch', cursive;
.col-md-3 footer{
   margin-top: 3cm;
   font-size: xx-large;
   font-weight: bolder;
   font-family: 'Rubik Marker Hatch', cursive;
```

<u>Dots&Boxes Game</u> <u>Index File</u>

```
<!DOCTYPE html>
<html>
```

```
<head>
   <meta charset="UTF-8">
   <title>Dots and Boxes</title>
   <link rel="stylesheet" href="./style.css">
 klink
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet"
 integrity="sha384-
Zenh87qX5JnK2J10vWa8Ck2rdkQ2Bzep5IDxbcnCeu0xjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous" />
 <link rel="preconnect" href="https://fonts.googleapis.com">
 <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
 <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
 <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
 klink
href="https://fonts.googleapis.com/css2?family=Rubik+Marker+Hatch&display=swap"
rel="stylesheet">
 <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
</head>
<body>
   <nav class="navbar navbar-expand-lg ">
       <div class="container-fluid">
         <a href="https://tyagi-achint.github.io/StrawHats/index.html"</pre>
class="nav-link">
             Home
           <a href="https://tyagi-achint.github.io/StrawHats/games.html"</pre>
class="nav-link">
             Games
           </a>
           <a href="https://tyagi-achint.github.io/StrawHats/team.html"</pre>
class="nav-link">
             Team
           </a>
         <a href="https://tyagi-achint.github.io/StrawHats/score.html"</pre>
class="nav-link">
```

```
var pname1 = prompt("Enter Player 1 name");
var pname2 = prompt("Enter Player 2 name");
               // game parameters
                const DELAY_END = 2; // seconds until a new game starts
                const FPS = 30; // frames per second
                const GRID_SIZE = 10; // number of rows (and columns)
                const HEIGHT = 500; // pixels
               // derived dimensions
                 const WIDTH = HEIGHT * 0.9;
                const CELL = WIDTH / (GRID_SIZE + 2); // size of cells (as well
as left and right margin)
                const STROKE = CELL / 12; // stroke width
                const DOT = STROKE; // dot radius
                const MARGIN = HEIGHT - (GRID_SIZE + 1) * CELL; // top margin for
score, names, etc.
                // colours
                const COLOR_BOARD = "#EFF5F5";
                const COLOR BORDER = "#594545";
                const COLOR_COMP = "#557153";
                const COLOR COMP LIT = "#6D9886";
```

```
const COLOR_DOT = "#594545";
const COLOR_PLAY = "#FF731D";
const COLOR_PLAY_LIT = "#FF884B";
const COLOR_TIE = "black";
const TEXT COMP = pname1;
 const TEXT_COMP_SML = "";
const TEXT_PLAY = pname2;
const TEXT_PLAY_SML = "";
const TEXT_SIZE_CELL = CELL / 3;
const TEXT_SIZE_TOP = MARGIN / 6;
const TEXT_TIE = "DRAW!";
const TEXT_WIN = "WINS!";
// definitions
const Side = {
   BOT: 0,
   LEFT: 1,
   RIGHT: 2,
   TOP: 3
// set up the game canvas
var canv = document.createElement("canvas");
canv.height = HEIGHT;
canv.width = WIDTH;
document.body.appendChild(canv);
var canvRect = canv.getBoundingClientRect();
// set up the context
var ctx = canv.getContext("2d");
ctx.lineWidth = STROKE;
ctx.textAlign = "center";
ctx.textBaseline = "middle";
var currentCells, playersTurn, squares;
var scoreComp, scorePlay;
var timeEnd;
newGame();
// event handlers
```

```
canv.addEventListener("mousemove", highlightGrid);
              canv.addEventListener("click", click);
              // set up the game loop
              setInterval(loop, 1000 / FPS);
              function loop() {
                  drawBoard();
                  drawSquares();
                  drawGrid();
                  drawScores();
              function click(/** @type {MouseEvent} */ ev) {
                  if (/*TODO !playersTurn ||*/ timeEnd > 0) {
                      return;
                  selectSide();
              function drawBoard() {
                  ctx.fillStyle = COLOR_BOARD;
                  ctx.strokeStyle = COLOR_BORDER;
                  ctx.fillRect(0, 0, WIDTH, HEIGHT);
                  ctx.strokeRect(STROKE / 2, STROKE / 2, WIDTH - STROKE, HEIGHT
STROKE);
              function drawDot(x, y) {
                  ctx.fillStyle = COLOR_DOT;
                  ctx.beginPath();
                  ctx.arc(x, y, DOT, 0, Math.PI * 2);
                  ctx.fill();
              function drawGrid() {
                  for (let i = 0; i < GRID_SIZE + 1; i++) {</pre>
                       for (let j = 0; j < GRID_SIZE + 1; j++) {
                          drawDot(getGridX(j), getGridY(i));
              function drawLine(x0, y0, x1, y1, color) {
                  ctx.strokeStyle = color;
```

```
ctx.beginPath();
                    ctx.moveTo(x0, y0);
                    ctx.lineTo(x1, y1);
                    ctx.stroke();
                function drawScores() {
                    let colComp = playersTurn ? COLOR_COMP_LIT : COLOR_COMP;
                    let colPlay = playersTurn ? COLOR PLAY : COLOR PLAY LIT;
                    drawText(TEXT_PLAY, WIDTH * 0.25, MARGIN * 0.25, colPlay,
TEXT_SIZE_TOP);
                    drawText(scorePlay, WIDTH * 0.25, MARGIN * 0.6, colPlay,
TEXT_SIZE_TOP * 2);
                    drawText(TEXT COMP, WIDTH * 0.75, MARGIN * 0.25, colComp,
TEXT_SIZE_TOP);
                    drawText(scoreComp, WIDTH * 0.75, MARGIN * 0.6, colComp,
TEXT_SIZE_TOP * 2);
                    // game over text
                    if (timeEnd > 0) {
                        timeEnd--;
                        // handle a tie
                        if (scoreComp == scorePlay) {
                            drawText(TEXT_TIE, WIDTH * 0.5, MARGIN * 0.6,
COLOR TIE, TEXT_SIZE_TOP);
                        } else {
                            let playerWins = scorePlay > scoreComp;
                            let color = playerWins ? COLOR PLAY : COLOR COMP;
                            let text = playerWins ? TEXT_PLAY : TEXT_COMP;
                            drawText(text, WIDTH * 0.5, MARGIN * 0.5, color,
TEXT_SIZE_TOP);
                            drawText(TEXT_WIN, WIDTH * 0.5, MARGIN * 0.7, color,
TEXT SIZE TOP);
                        if (timeEnd == 0) {
                            newGame();
                function drawSquares() {
                    for (let row of squares) {
```

```
for (let square of row) {
            square.drawSides();
            square.drawFill();
function drawText(text, x, y, color, size) {
    ctx.fillStyle = color;
    ctx.font = size + "px dejavu sans mono";
    ctx.fillText(text, x, y);
function getColor(player, light) {
    if (player) {
        return light ? COLOR_PLAY_LIT : COLOR_PLAY;
        return light ? COLOR_COMP_LIT : COLOR_COMP;
function getText(player, small) {
    if (player) {
        return small ? TEXT PLAY SML : TEXT PLAY;
    } else {
        return small ? TEXT_COMP_SML : TEXT_COMP;
function getGridX(col) {
    return CELL * (col + 1);
function getGridY(row) {
    return MARGIN + CELL * row;
function highlightGrid(/** @type {MouseEvent} */ ev) {
    if (/*TODO !playersTurn ||*/ timeEnd > 0) {
        return;
   // get mouse position relative to the canvas
    let x = ev.clientX - canvRect.left;
    let y = ev.clientY - canvRect.top;
```

```
// highlight the square's side
                    highlightSide(x, y);
                function highlightSide(x, y) {
                    // clear previous highlighting
                    for (let row of squares) {
                        for (let square of row) {
                            square.highlight = null;
                    // check each cell
                    let rows = squares.length;
                    let cols = squares[0].length;
                    currentCells = [];
                    OUTER: for (let i = 0; i < rows; i++) {
                        for (let j = 0; j < cols; j++) {
                            if (squares[i][j].contains(x, y)) {
                                // highlight current
                                let side = squares[i][j].highlightSide(x, y);
                                if (side != null) {
                                     currentCells.push({row: i, col: j});
                                // determine neighbour
                                let row = i, col = j, highlight, neighbour =
true;
                                if (side == Side.LEFT && j > 0) {
                                     col = j - 1;
                                     highlight = Side.RIGHT;
                                } else if (side == Side.RIGHT && j < cols - 1) {</pre>
                                     col = j + 1;
                                     highlight = Side.LEFT;
                                } else if (side == Side.TOP && i > 0) {
                                     row = i - 1;
                                     highlight = Side.BOT;
                                } else if (side == Side.BOT && i < rows - 1) {</pre>
                                     row = i + 1;
                                     highlight = Side.TOP;
                                } else {
                                    neighbour = false;
```

```
// highlight neighbour
                                 if (neighbour) {
                                     squares[row][col].highlight = highlight;
                                     currentCells.push({row: row, col: col});
                                 // no need to continue
                                 break OUTER;
                function newGame() {
                    currentCells = [];
                    playersTurn = Math.random() >= 0.5;
                    scoreComp = 0;
                    scorePlay = 0;
                    timeEnd = 0;
                    // set up the squares
                    squares = [];
                    for (let i = 0; i < GRID_SIZE; i++) {</pre>
                        squares[i] = [];
                        for (let j = 0; j < GRID_SIZE; j++) {</pre>
                             squares[i][j] = new Square(getGridX(j), getGridY(i),
CELL, CELL);
                function selectSide() {
                    if (currentCells == null || currentCells.length == 0) {
                        return;
                    // select the side(s)
                    let filledSquare = false;
                    for (let cell of currentCells) {
                        if (squares[cell.row][cell.col].selectSide()) {
                            filledSquare = true;
```

```
currentCells = [];
                    // check for winner
                    if (filledSquare) {
                        if (scorePlay + scoreComp == GRID_SIZE * GRID_SIZE) {
                            // game over
                            timeEnd = Math.ceil(DELAY END * FPS);
                    } else {
                        // next player's turn
                        playersTurn = !playersTurn;
                // create the Square object constructor
                function Square(x, y, w, h) {
                    this.w = w;
                    this.h = h;
                    this.bot = y + h;
                    this.left = x;
                    this.right = x + w;
                    this.top = y;
                    this.highlight = null;
                    this.numSelected = 0;
                    this.owner = null;
                    this.sideBot = {owner: null, selected: false};
                    this.sideLeft = {owner: null, selected: false};
                    this.sideRight = {owner: null, selected: false};
                    this.sideTop = {owner: null, selected: false};
                    this.contains = function(x, y) {
                        return x >= this.left && x < this.right && y >= this.top
&& y < this.bot;
                    this.drawFill = function() {
                        if (this.owner == null) {
                            return;
                        // light background
                        ctx.fillStyle = getColor(this.owner, true);
                        ctx.fillRect(
                            this.left + STROKE, this.top + STROKE,
                            this.w - STROKE * 2, this.h - STROKE * 2
```

```
);
                        drawText(
                            getText(this.owner, true),
                            this.left + this.w / 2,
                            this.top + this.h / 2,
                            getColor(this.owner, false),
                            TEXT_SIZE_CELL
                        );
                    this.drawSide = function(side, color) {
                        switch(side) {
                            case Side.BOT:
                                 drawLine(this.left, this.bot, this.right,
this.bot, color);
                                 break;
                            case Side.LEFT:
                                 drawLine(this.left, this.top, this.left,
this.bot, color);
                                 break;
                            case Side.RIGHT:
                                 drawLine(this.right, this.top, this.right,
this.bot, color);
                                 break;
                            case Side.TOP:
                                 drawLine(this.left, this.top, this.right,
this.top, color);
                                break;
                    this.drawSides = function() {
                        // highlighting
                        if (this.highlight != null) {
                            this.drawSide(this.highlight, getColor(playersTurn,
true));
                        // selected sides
                        if (this.sideBot.selected) {
                            this.drawSide(Side.BOT, getColor(this.sideBot.owner,
false));
```

```
if (this.sideLeft.selected) {
                            this.drawSide(Side.LEFT,
getColor(this.sideLeft.owner, false));
                        if (this.sideRight.selected) {
                            this.drawSide(Side.RIGHT,
getColor(this.sideRight.owner, false));
                        if (this.sideTop.selected) {
                            this.drawSide(Side.TOP, getColor(this.sideTop.owner,
false));
                    this.highlightSide = function(x, y) {
                        // calculate the distances to each side
                        let dBot = this.bot - y;
                        let dLeft = x - this.left;
                        let dRight = this.right - x;
                        let dTop = y - this.top;
                        // determine closest value
                        let dClosest = Math.min(dBot, dLeft, dRight, dTop);
                        // highlight the closest if not already selected
                        if (dClosest == dBot && !this.sideBot.selected) {
                            this.highlight = Side.BOT;
                        } else if (dClosest == dLeft && !this.sideLeft.selected)
                            this.highlight = Side.LEFT;
                        } else if (dClosest == dRight &&
!this.sideRight.selected) {
                            this.highlight = Side.RIGHT;
                        } else if (dClosest == dTop && !this.sideTop.selected) {
                            this.highlight = Side.TOP;
                        // return the highlighted side
                        return this.highlight;
                    this.selectSide = function() {
                        if (this.highlight == null) {
```

```
return;
// select the highlighted side
switch (this.highlight) {
    case Side.BOT:
        this.sideBot.owner = playersTurn;
        this.sideBot.selected = true;
        break:
    case Side.LEFT:
        this.sideLeft.owner = playersTurn;
        this.sideLeft.selected = true;
        break;
    case Side.RIGHT:
        this.sideRight.owner = playersTurn;
        this.sideRight.selected = true;
        break;
    case Side.TOP:
        this.sideTop.owner = playersTurn;
        this.sideTop.selected = true;
        break;
this.highlight = null;
this.numSelected++;
if (this.numSelected == 4) {
    this.owner = playersTurn;
    // increment score
    if (playersTurn) {
        scorePlay++;
    } else {
        scoreComp++;
    // filled
    return true;
// not filled
return false;
```

Style Sheet

```
html,
body {
 height: 100%;
 margin: 0;
body {
 --size: 15px;
 --color: black;
 font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
 color: var(--color);
 background-color: #EAEAEA !important;
.row{
margin: 0 !important;
nav {
   padding: 1mm 2mm 1mm 3mm;
   margin-bottom: 5mm;
   background-color: #B2B2B2;
 nav a li.nav-item {
   font-weight: bolder;
   font-size: 1.5rem;
   color: black;
   font-family: "Acme", sans-serif;
 nav a li.nav-item:hover {
   text-shadow: 1px 3px rgba(0, 0, 0, 0.2);
  .navbar-ul2 li {
   padding-left: 0.2cm;
  canvas{
  margin-left: 10cm;
```

}

<u>Drum Sound</u> Index File

```
<!DOCTYPE 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">
  <title>Drum Kit</title>
  <link rel="stylesheet" href="styles.css">
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
  <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
  <link rel="stylesheet"</pre>
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body>
  <nav class="navbar navbar-expand-lg ">
   <div class="container-fluid">
     <a href="https://tyagi-achint.github.io/StrawHats/index.html" class="nav-</pre>
link">
         Home
       </a>
       <a href="https://tyagi-achint.github.io/StrawHats/games.html" class="nav-</pre>
link">
         Games
       </a>
       <a href="https://tyagi-achint.github.io/StrawHats/team.html" class="nav-</pre>
link">
         Team
```

```
<a href="https://tyagi-achint.github.io/StrawHats/score.html" class="nav-</pre>
link">
         Score
       </a>
       <a href="https://tyagi-achint.github.io/StrawHats/feedback.html"</pre>
class="nav-link">
         Feedback
       </a>
     </div>
  </nav>
  <div class="container-fluid heading">
   Drum 🗑 Kit
  </div>
  <div class="container-fluid middle">
   <div class="row">
     <button class="w drum col">w</button>
     <button class="a drum col">a</button>
     <button class="s drum col">s</button>
     <button class="d drum col">d</button>
     <button class="j drum col">j</button>
     <button class="k drum col">k</button>
     <button class="1 drum col">1</button>
   </div>
  </div>
  <footer class="page-footer">
   <h3>Click/Press on above Alphabet.
     Turn on sound.
   </h3>
  </footer>
  <script src="index.js" charset="utf-8"></script>
</body>
</html>
```

```
var numberOfDrumButtons = document.querySelectorAll(".drum").length;
for (var i = 0; i < numberOfDrumButtons; i++) {</pre>
  document.querySelectorAll(".drum")[i].addEventListener("click", function () {
    var buttonInnerHTML = this.innerHTML;
    makeSound(buttonInnerHTML);
    buttonAnimation(buttonInnerHTML);
  });
document.addEventListener("keypress", function (event) {
  makeSound(event.key);
  buttonAnimation(event.key);
});
function makeSound(key) {
  switch (key) {
    case "w":
      var tom1 = new Audio("tom-1.mp3");
      tom1.play();
      break;
    case "a":
      var tom2 = new Audio("tom-2.mp3");
      tom2.play();
      break;
    case "s":
      var tom3 = new Audio("tom-3.mp3");
      tom3.play();
      break;
    case "d":
      var tom4 = new Audio("tom-4.mp3");
      tom4.play();
      break;
    case "j":
```

```
var snare = new Audio("snare.mp3");
      snare.play();
      break;
   case "k":
      var crash = new Audio("crash.mp3");
      crash.play();
      break;
   case "1":
      var kick = new Audio("kick-bass.mp3");
     kick.play();
      break;
   default:
      console.log(key);
function buttonAnimation(currentKey) {
 var activeButton = document.querySelector("." + currentKey);
 activeButton.classList.add("pressed");
 setTimeout(function () {
   activeButton.classList.remove("pressed");
 }, 100);
```

Style Sheet

```
body {
  margin: 0%;
  background: -webkit-linear-gradient(#98ddca, #d5ecc2);
}
nav {
  padding: 1mm 2mm 1mm 3mm;
}

a li.nav-item {
  font-weight: bolder;
  font-size: 1.5rem;
  color: black;
  font-family: "Acme", sans-serif;
}
```

```
a li.nav-item:hover {
  text-shadow: 1px 3px rgba(0, 0, 0, 0.2);
.navbar-ul2 li {
  padding-left: 0.2cm;
.heading {
 text-align: center;
 font-family: "Pacifico", cursive;
 color: #053742;
  text-shadow: 3px 0 #f54748;
 font-size: 2cm;
  padding: 7mm 0 5mm 0;
footer {
 font-family: "Acme", sans-serif;
 text-align: center;
  color: #231e23;
 background-image: url("tom1.png");
.a {
 background-image: url("tom2.png");
 background-image: url("tom3.png");
.d {
 background-image: url("tom4.png");
.j {
 background-image: url("snare.png");
 background-image: url("crash.png");
```

```
.1 {
 background-image: url("kick.png");
.row {
 margin: 1cm 8mm;
 padding: 8mm;
.pressed {
 box-shadow: 0 3px 4px 0 #dbedf3;
 opacity: 0.5;
.red {
 color: red;
.drum {
 outline: none;
 border: 10px solid #888888;
 font-size: 5rem;
 font-family: "Arvo", cursive;
 line-height: 2;
 font-weight: 900;
 color: #161d6f;
 text-shadow: 4px 0 #a3ddcb;
 border-radius: 15px;
 display: inline-block;
 width: 150px;
 height: 150px;
 text-align: center;
 margin: 10px;
 background-color: #fff5eb;
```

Snake Game Index File

```
<!DOCTYPE html>
<html lang="en" >
```

```
<head>
  <meta charset="UTF-8">
  <title>Snake</title>
  <link rel="stylesheet" href="./style.css">
  k
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet"
 integrity="sha384-
Zenh87qX5JnK2J10vWa8Ck2rdkQ2Bzep5IDxbcnCeu0xjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous" />
  <link rel="preconnect" href="https://fonts.googleapis.com">
  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
 <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
  <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
  k
href="https://fonts.googleapis.com/css2?family=Rubik+Marker+Hatch&display=swap"
rel="stylesheet">
  <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
</head>
<body><nav class="navbar navbar-expand-lg ">
   <div class="container-fluid">
     <a href="https://tyagi-achint.github.io/StrawHats/index.html" class="nav-</pre>
link">
         Home
       </a>
       <a href="https://tyagi-achint.github.io/StrawHats/games.html" class="nav-</pre>
link">
         Games
       </a>
       <a href="https://tyagi-achint.github.io/StrawHats/team.html" class="nav-</pre>
link">
         Team
       </a>
     <a href="https://tyagi-achint.github.io/StrawHats/score.html" class="nav-</pre>
link">
         Score
       </a>
```

```
<a href="https://tyagi-achint.github.io/StrawHats/feedback.html"</pre>
class="nav-link">
         Feedback
       </a>
     </div>
 </nav>
       <div class="row">
         <div class="col-12 col-md-3">
          <h1>How to Play</h1>
          <l
              <
                 Use Arrow/Space Keys to start.
              Use Up arrow for turning snake up.
              Use Down arrow for turning snake down. 
              Use Right arrow for turning snake right. 
              Use Left arrow for turning snake left. 
              <br>
              Ready for hard more? Press the letter H.
              Back to easy mode? Press the letter E.
              Reset the Game? Use Spacebar
          </div>
         <div class="col-12 col-md-6"><div class="container">
          <header>
            <div class="contrast">100%</div>
            <div class="score">0</div>
          </header>
           <div class="grid"></div>
         </div></div>
         <div class="col-12 col-md-3"> <footer>Press arrow key or space to
start!</footer></div>
         </div>
<script src="./script.js"></script>
</body>
</html>
```

JavaScript

```
var pname = prompt("Enter Your name");
window.addEventListener("DOMContentLoaded", function (event) {
 window.focus();
 // Game data
 let snakePositions; // An array of snake positions, starting head first
 let applePosition; // The position of the apple
 let startTimestamp; // The starting timestamp of the animation
 let lastTimestamp; // The previous timestamp of the animation
 let stepsTaken; // How many steps did the snake take
  let score;
  let contrast;
 let inputs; // A list of directions the snake still has to take in order
  let gameStarted = false;
  let hardMode = false;
 // Configuration
  const width = 15; // Grid width
  const height = 15; // Grid height
  const speed = 200; // Milliseconds it takes for the snake to take a step in the
grid
  let fadeSpeed = 5000; // milliseconds it takes the grid to disappear
(initially)
 let fadeExponential = 1.024; // after each score it will gradually take more
time for the grid to fade
  const contrastIncrease = 0.5; // contrast you gain after each score
  const color = "black"; // Primary color
  const grid = document.querySelector(".grid");
  for (let i = 0; i < width * height; i++) {</pre>
   const content = document.createElement("div");
    content.setAttribute("class", "content");
   content.setAttribute("id", i); // Just for debugging, not used
```

```
const tile = document.createElement("div");
    tile.setAttribute("class", "tile");
    tile.appendChild(content);
    grid.appendChild(tile);
  const tiles = document.querySelectorAll(".grid .tile .content");
  const containerElement = document.querySelector(".container");
  const noteElement = document.querySelector("footer");
  const contrastElement = document.querySelector(".contrast");
  const scoreElement = document.querySelector(".score");
 // Initialize layout
  resetGame();
 // Resets game variables and layouts but does not start the game (game starts
on keypress)
 function resetGame() {
   // Reset positions
    snakePositions = [168, 169, 170, 171];
    applePosition = 100; // Initially the apple is always at the same position to
   // Reset game progress
    startTimestamp = undefined;
    lastTimestamp = undefined;
    stepsTaken = -1; // It's -1 because then the snake will start with a step
    score = 0;
    contrast = 1;
   // Reset inputs
    inputs = [];
   // Reset header
    contrastElement.innerText = `${Math.floor(contrast * 100)}%`;
    scoreElement.innerText = hardMode ? `H ${score}` : score;
   // Reset tiles
    for (const tile of tiles) setTile(tile);
   // Render apple
   setTile(tiles[applePosition], {
```

```
"background-color": color,
    "border-radius": "50%"
  });
  // Ignore the last part (the snake just moved out from it)
  for (const i of snakePositions.slice(1)) {
    const snakePart = tiles[i];
    snakePart.style.backgroundColor = color;
   // Set up transition directions for head and tail
    if (i == snakePositions[snakePositions.length - 1])
      snakePart.style.left = 0;
    if (i == snakePositions[0]) snakePart.style.right = 0;
// Handle user inputs (e.g. start the game)
window.addEventListener("keydown", function (event) {
 // If not an arrow key or space or H was pressed then return
  if (
      "ArrowLeft",
      "ArrowUp",
      "ArrowRight",
      "ArrowDown",
      "h",
    ].includes(event.key)
    return;
 // If an arrow key was pressed then first prevent default
  event.preventDefault();
 // If space was pressed restart the game
  if (event.key == " ") {
    resetGame();
    startGame();
    return;
```

```
// Set Hard mode
if (event.key == "H" || event.key == "h") {
  hardMode = true;
  fadeSpeed = 4000;
  fadeExponential = 1.025;
  noteElement.innerHTML = `Hard mode. Press space to start!`;
  noteElement.style.opacity = 1;
  resetGame();
  return;
// Set Easy mode
if (event.key == "E" || event.key == "e") {
  hardMode = false;
  fadeSpeed = 5000;
  fadeExponential = 1.024;
  noteElement.innerHTML = `Easy mode. Press space to start!`;
  noteElement.style.opacity = 1;
  resetGame();
  return;
if (
  event.key == "ArrowLeft" &&
  inputs[inputs.length - 1] != "left" &&
  headDirection() != "right"
  inputs.push("left");
  if (!gameStarted) startGame();
  return;
if (
  event.key == "ArrowUp" &&
  inputs[inputs.length - 1] != "up" &&
  headDirection() != "down"
  inputs.push("up");
  if (!gameStarted) startGame();
  return;
if (
  event.key == "ArrowRight" &&
  inputs[inputs.length - 1] != "right" &&
  headDirection() != "left"
```

```
inputs.push("right");
      if (!gameStarted) startGame();
      return;
   if (
      event.key == "ArrowDown" &&
      inputs[inputs.length - 1] != "down" &&
      headDirection() != "up"
      inputs.push("down");
      if (!gameStarted) startGame();
      return;
 });
 // Start the game
 function startGame() {
   gameStarted = true;
   noteElement.style.opacity = 0;
   window.requestAnimationFrame(main);
 // The main game loop
 // This function gets invoked approximately 60 times per second to render the
 // It keeps track of the total elapsed time and time elapsed since last call
 // Based on that animates the snake either by transitioning it in between tiles
or stepping it to the next tile
 function main(timestamp) {
   try {
      if (startTimestamp === undefined) startTimestamp = timestamp;
      const totalElapsedTime = timestamp - startTimestamp;
      const timeElapsedSinceLastCall = timestamp - lastTimestamp;
      const stepsShouldHaveTaken = Math.floor(totalElapsedTime / speed);
      const percentageOfStep = (totalElapsedTime % speed) / speed;
     // If the snake took a step from a tile to another one
      if (stepsTaken != stepsShouldHaveTaken) {
        stepAndTransition(percentageOfStep);
       // If it's time to take a step
        const headPosition = snakePositions[snakePositions.length - 1];
        if (headPosition == applePosition) {
         // Increase score
```

```
score++;
      scoreElement.innerText = hardMode ? `H ${score}` : score;
     // Generate another apple
      addNewApple();
     // Increase the contrast after each score
     // Don't let the contrast go above 1
     contrast = Math.min(1, contrast + contrastIncrease);
     // Debugging
     console.log(`Contrast increased by ${contrastIncrease * 100}%`);
      console.log(
        "New fade speed (from 100% to 0% in milliseconds)",
        Math.pow(fadeExponential, score) * fadeSpeed
     );
   stepsTaken++;
 } else {
   transition(percentageOfStep);
 if (lastTimestamp) {
   // Decrease the contrast based on the time passed an the current score
   // With a higher score the contrast decreases slower
   const contrastDecrease =
     timeElapsedSinceLastCall /
      (Math.pow(fadeExponential, score) * fadeSpeed);
   // Don't let the contrast drop below zero
   contrast = Math.max(0, contrast - contrastDecrease);
 contrastElement.innerText = `${Math.floor(contrast * 100)}%`;
 containerElement.style.opacity = contrast;
 window.requestAnimationFrame(main);
} catch (error) {
 // Write a note about restarting game and setting difficulty
 noteElement.innerHTML = `${error.message}`;
 noteElement.style.opacity = 1;
 containerElement.style.opacity = 1;
```

```
lastTimestamp = timestamp;
 // Moves the snake and sets up tiles for the transition function so the
transition function will be more effective (the transition function gets called
more frequently)
  function stepAndTransition(percentageOfStep) {
   // Calculate the next position and add it to the snake
    const newHeadPosition = getNextPosition();
    console.log(`Snake stepping into tile ${newHeadPosition}`);
    snakePositions.push(newHeadPosition);
   // Start with tail instead of head
   // Because the head might step into the previous position of the tail
   // Clear tile, yet keep it in the array if the snake grows.
   // Whenever the snake steps into a new tile, it will leave the last one.
   // Yet the last tile stays in the array if the snake just grows.
   // As a sideeffect in case the snake just eats an apple,
   // the tail transitioning will happen on a this "hidden" tile
   // (so the tail appears as stationary).
    const previousTail = tiles[snakePositions[0]];
    setTile(previousTail);
    if (newHeadPosition != applePosition) {
     // Drop the previous tail
      snakePositions.shift();
     // Set up and start transition for new tail
     // Make sure it heads to the right direction and set initial size
      const tail = tiles[snakePositions[0]];
      const tailDi = tailDirection();
     // The tail value is inverse because it slides out not in
      const tailValue = `${100 - percentageOfStep * 100}%`;
      if (tailDi == "right")
        setTile(tail, {
         left: 0,
         width: tailValue,
          "background-color": color
        });
     if (tailDi == "left")
```

```
setTile(tail, {
      right: 0,
      width: tailValue,
      "background-color": color
    });
  if (tailDi == "down")
    setTile(tail, {
      top: 0,
      height: tailValue,
      "background-color": color
    });
  if (tailDi == "up")
    setTile(tail, {
      bottom: 0,
      height: tailValue,
      "background-color": color
    });
// Set previous head to full size
const previousHead = tiles[snakePositions[snakePositions.length - 2]];
setTile(previousHead, { "background-color": color });
// Set up and start transitioning for new head
// Make sure it heads to the right direction and set initial size
const head = tiles[newHeadPosition];
const headDi = headDirection();
const headValue = `${percentageOfStep * 100}%`;
if (headDi == "right")
  setTile(head, {
    left: 0, // Slide in from left
    width: headValue,
    "background-color": color,
    "border-radius": 0
  });
if (headDi == "left")
  setTile(head, {
    right: 0, // Slide in from right
    width: headValue,
    "background-color": color,
    "border-radius": 0
```

```
});
  if (headDi == "down")
    setTile(head, {
      top: 0, // Slide in from top
      height: headValue,
      "background-color": color,
      "border-radius": 0
    });
  if (headDi == "up")
    setTile(head, {
      bottom: 0, // Slide in from bottom
      height: headValue,
      "background-color": color,
      "border-radius": 0
    });
// Transition head and tail between two steps
// Called with every animation frame, except when stepping to a new tile
function transition(percentageOfStep) {
 // Transition head
  const head = tiles[snakePositions[snakePositions.length - 1]];
  const headDi = headDirection();
  const headValue = `${percentageOfStep * 100}%`;
  if (headDi == "right" | headDi == "left") head.style.width = headValue;
  if (headDi == "down" || headDi == "up") head.style.height = headValue;
 // Transition tail
  const tail = tiles[snakePositions[0]];
  const tailDi = tailDirection();
  const tailValue = `${100 - percentageOfStep * 100}%`;
  if (tailDi == "right" || tailDi == "left") tail.style.width = tailValue;
  if (tailDi == "down" || tailDi == "up") tail.style.height = tailValue;
// Calculate to which tile will the snake step into
function getNextPosition() {
  const headPosition = snakePositions[snakePositions.length - 1];
  const snakeDirection = inputs.shift() || headDirection();
  switch (snakeDirection) {
    case "right": {
      const nextPosition = headPosition + 1;
```

```
if (nextPosition % width == 0) throw Error("The snake hit the wall");
      // Ignore the last snake part, it'll move out as the head moves in
      if (snakePositions.slice(1).includes(nextPosition))
        throw Error("The snake bit itself");
      return nextPosition;
    case "left": {
      const nextPosition = headPosition - 1;
      if (nextPosition % width == width - 1 || nextPosition < 0)</pre>
        throw Error("The snake hit the wall");
      // Ignore the last snake part, it'll move out as the head moves in
      if (snakePositions.slice(1).includes(nextPosition))
        throw Error("The snake bit itself");
      return nextPosition;
    case "down": {
      const nextPosition = headPosition + width;
      if (nextPosition > width * height - 1)
        throw Error("The snake hit the wall");
      // Ignore the last snake part, it'll move out as the head moves in
      if (snakePositions.slice(1).includes(nextPosition))
        throw Error("The snake bit itself");
      return nextPosition;
    case "up": {
      const nextPosition = headPosition - width;
      if (nextPosition < 0) throw Error("The snake hit the wall");</pre>
      // Ignore the last snake part, it'll move out as the head moves in
      if (snakePositions.slice(1).includes(nextPosition))
        throw Error("The snake bit itself");
      return nextPosition;
// Calculate in which direction the snake's head is moving
function headDirection() {
  const head = snakePositions[snakePositions.length - 1];
  const neck = snakePositions[snakePositions.length - 2];
  return getDirection(head, neck);
// Calculate in which direction of the snake's tail
function tailDirection() {
 const tail1 = snakePositions[0];
```

```
const tail2 = snakePositions[1];
  return getDirection(tail1, tail2);
function getDirection(first, second) {
  if (first - 1 == second) return "right";
  if (first + 1 == second) return "left";
  if (first - width == second) return "down";
  if (first + width == second) return "up";
  throw Error("the two tile are not connected");
// Generates a new apple on the field
function addNewApple() {
 // Find a position for the new apple that is not yet taken by the snake
 let newPosition;
  do {
    newPosition = Math.floor(Math.random() * width * height);
  } while (snakePositions.includes(newPosition));
 // Set new apple
  setTile(tiles[newPosition], {
    "background-color": color,
    "border-radius": "50%"
  });
 // Note that the apple is here
  applePosition = newPosition;
// Resets size and position related CSS properties
function setTile(element, overrides = {}) {
  const defaults = {
    width: "100%",
    height: "100%",
    top: "auto",
    right: "auto",
    bottom: "auto",
    left: "auto",
    "background-color": "transparent"
  };
  const cssProperties = { ...defaults, ...overrides };
  element.style.cssText = Object.entries(cssProperties)
    .map(([key, value]) => `${key}: ${value};`)
    .join(" ");
```

```
});
```

Style Sheet

```
html,
body {
 height: 100%;
 margin: 0;
body {
  --size: 15px;
 font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
  color: var(--color);
  background-color: #EAEAEA !important;
.row{
margin: 0 !important;
nav {
    padding: 1mm 2mm 1mm 3mm;
    margin-bottom: 1cm;
    background-color: #B2B2B2;
  nav a li.nav-item {
   font-weight: bolder;
   font-size: 1.5rem;
   color: black;
   font-family: "Acme", sans-serif;
  nav a li.nav-item:hover {
    text-shadow: 1px 3px rgba(0, 0, 0, 0.2);
  .navbar-ul2 li {
    padding-left: 0.2cm;
@media (min-height: 425px) {
```

```
body {
    --size: 25px;
  footer {
   height: 40px;
   font-size: 1em;
.container {
 display: flex;
 flex-direction: column;
 justify-content: center;
 align-items: center;
 height: 100%;
header {
 display: flex;
 justify-content: space-between;
 width: calc(var(--size) * 17);
 font-size: 2em;
  font-weight: 900;
.grid {
 display: grid;
  grid-template-columns: repeat(15, auto);
 grid-template-rows: repeat(15, auto);
 border: var(--size) solid var(--color);
.tile {
 position: relative;
 width: var(--size);
 height: var(--size);
.content {
  position: absolute;
 width: 100%;
 height: 100%;
footer {
 margin-top: 20px;
```

```
max-width: calc(var(--size) * 17);
  text-align: center;
footer a:visited {
  color: inherit;
@counter-style thumbs {
   system: cyclic;
   symbols: @;
   suffix: " ";
.col-md-3 ul{
    list-style-type: thumbs;
    font-family: 'Pacifico', cursive;
    font-size: 17px;
.col-md-3{
   text-align: center;
.col-md-3 h1{
   font-family: 'Rubik Marker Hatch', cursive;
.col-md-3 footer{
   margin-top: 3cm;
   font-size: xx-large;
    font-weight: bolder;
    font-family: 'Rubik Marker Hatch', cursive;
```

Sudoku Game Index File

```
<link rel="stylesheet" href="style.css">
   <link rel="preconnect" href="https://fonts.googleapis.com">
   <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
   <link href="https://fonts.googleapis.com/css2?family=Acme&display=swap"</pre>
rel="stylesheet">
   <link href="https://fonts.googleapis.com/css2?family=Pacifico&display=swap"</pre>
rel="stylesheet">
   <link href="https://fonts.googleapis.com/css?family=Press+Start+2P"</pre>
rel="stylesheet">
   <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
</head>
<body>
   <nav class="navbar navbar-expand-lg ">
       <div class="container-fluid">
         <a href="https://tyagi-achint.github.io/StrawHats/index.html"</pre>
class="nav-link">
             Home
           </a>
           <a href="https://tyagi-achint.github.io/StrawHats/games.html"</pre>
class="nav-link">
            Games
           </a>
           <a href="https://tyagi-achint.github.io/StrawHats/team.html"</pre>
class="nav-link">
            Team
           </a>
           <a href="https://tyagi-achint.github.io/StrawHats/feedback.html"</pre>
class="nav-link navbar-ul2">
            Feedback
           <a href="https://tyagi-achint.github.io/StrawHats/score.html"</pre>
class="nav-link navbar-ul2">
            Score
           </a>
         </div>
     </nav>
   <h1>SUDOKO</h1>
   <div id="main">
```

```
<div id="row1">
           <div id="box1" class="box"></div>
           <div id="box2" class="box"></div>
           <div id="box3" class="box"></div>
        </div>
        <div id="row2">
            <div id="box4" class="box"></div>
            <div id="box5" class="box"></div>
            <div id="box6" class="box"></div>
        </div>
        <div id="row3">
            <div id="box7" class="box"></div>
            <div id="box8" class="box"></div>
            <div id="box9" class="box"></div>
        </div>
    </div>
    <button type="button" id="start" onclick="start()">START</button>
    <button type="button" id="replay" onclick="replay()">NEW GAME</button>
    <button type="button" id="answer" onclick="answer()">ANSWER</button>
    <div id="game type">
        <h3>CHOOSE LEVEL:</h3>
        <label><input type="radio" id="easy" class="label" name="diff level"</pre>
checked> Easy</label>
        <label><input type="radio" id="medium" class="label" name="diff level" >
Medium</label>
        <label><input type="radio" id="hard" class="label" name="diff_level">
Hard</label>
        <h3>TIME LIMIT :</h3>
        <label><input type="radio" id="time1" class="label" name="time"><<span</pre>
id="time1_min">03</span>:<span id="time1_sec">00</span></label>
        <label><input type="radio" id="time2" class="label" name="time"</pre>
checked><span id="time2 min">05</span>:<span id="time2 sec">00</span></label>
        <label><input type="radio" id="time3" class="label" name="time"> <span</pre>
id="time3 min">10</span>:<span id="time3 sec">00</span></label>
    </div>
    <div id="lives">YOU HAVE ONLY <span id="rem live">3</span> LIVES</div>
    <div id="timer">Time Remains: <span id="time min">00</span>:<span</pre>
id="time_sec">00</span></div>
```

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

</body>
</html>
```

JavaScript

```
count=0
for (var i=0;i<9;i++){
    count=9*i;
    document.getElementsByClassName("box")[i].innerHTML="<div class='cell'><input</pre>
type='text' id='"+(count+1)+"' class='input'></div><div class='cell'><input
type='text' id='"+(count+2)+"' class='input'></div><div class='cell'><input
type='text' id='"+(count+3)+"' class='input'></div><div class='cell'><input</pre>
type='text' id='"+(count+4)+"' class='input'></div><div class='cell'><input
type='text' id='"+(count+5)+"' class='input'></div><div class='cell'><input</pre>
type='text' id='"+(count+6)+"' class='input'></div><div class='cell'><input
type='text' id='"+(count+7)+"' class='input'></div><div class='cell'><input
type='text' id='"+(count+8)+"' class='input'></div><div class='cell'><input
type='text' id='"+(count+9)+"' class='input'></div>"
//how to play game instruction
function help(){
   window.open(
        "https://sudoku.com/how-to-play/sudoku-rules-for-complete-beginners/",
 _blank");
var level;
var choosen;
// easy_level board create
easy_board=['2-5---7--45---9---2-6-81----9---8567------2418---2---43-7-1----1-
--85--6---7-8','----35-86-1-9-7----269----54------527-9--75----7-6---3----
-2----56---2-14', '3-549-6---396--81-5-2--1494-276-1-39---583-46-1549--7-6-1-
824558-7-3-924---7-3-6', '47----3------179--4-93--5----6---7-48-------2716-34-
9----6---5--2381---54--1-','-2--18573-31--5-96---16----5--4-26--97--86------
98--1-6--79--2-5---8144-9-7---1'
```

easy=['21598673445286937152764819337912485678154369241893726586435721969317248593 6521748','12973548621396785434269157854386912749831527698175463278642135967524819 3567832914','31549267872396458185723614948276519391625837463154982796713824558471 3692429871356','47628531952386179414893265712364957848139726595271683489513762497 6452381763548219','42961857383124579638216495753749261897418632576125984318653794 2265793814459378621'];

//medium level board create

medium=['876345291982754163417638529493712568135826947359271684251968473746319825682594137','834615279152793468921546387512879346634258791463987125796342581978614235857123469','695138472243761589817356924428975361796854213532149687137264598851923476649782315','184936257623498715372561849259847136491375682514928763673521894758162439986347215','439671258825764193316582947612583497741239865924176358578429613396185742857934261'];

```
medium_board=['--6---9---75-1---1----9-9-7-25-8-3----4-3-92-1-8-2-----7--6-19--5-8---1-','----27---793-892-5-63-5-87-3--34-5-79---3-87--5-63-2-819--614---57-----','6-5-384--2---1-9-1---9-1---53--7-8-4--3-21-----7---9-8--9---6--978-3-5','-8493--576--4----5-----2--84----4-1-7-6-2---28--3-----7---2--998--4721-','43--7-2---2--1----5-9-----349-741---865-241----8-9----6---4---7-3--61'];
```

//hard level board create

```
hard_board=['---789----75-8-4---38----8--1--6--7-9--2--7--1----61---5-3-42----439---','-6----2--9-83---6-3-79---368--2---4--461---75-8--4---51-7--2---8-','-8-----4--15--3--69----2-73-1---9---2-6-----19--875--9-2-1--2-835---','---578-----3--19---3--75-5-2-8--4----6--1-7-24---7---6---142---3--9-3--','--346-5------9-4-8--5-9---18----4-3--7-----7--4-----9--81--6-3-71----'];
```

hard=['16578943229751834697382165484731259646372915828467593192354617885136429761 5439782','86179453261794832515628347949253687192836514778461925375381249634512796 8239574681','18725634942871596353469187292473815661948357286124739535619428757396 2418729835641','14365789252673841998436127595623817484359162731578246987214963579 1426583267954318','78346159231862795417924683556973218462549381724635897114295867 3497581326835719264'];

```
function start(){
   for(var i=0;i<6;i++){</pre>
```

```
document.getElementsByClassName("label")[i].setAttribute("onclick","return
false;");
    timer();
    if(document.getElementById("easy").checked){
        level='easy';
        var easy_random=Math.floor(Math.random()*5);
        choosen=easy_random;
        for(var i=0;i<81;i++){
            if(easy board[easy random][i]!='-'){
document.getElementById((i+1).toString()).value=easy_board[easy_random][i];
                document.getElementById((i+1).toString()).readOnly=true;
    }
    else if(document.getElementById("medium").checked){
        level='medium';
        var medium random=Math.floor(Math.random()*5);
        choosen=medium_random;
        for(var i=0;i<81;i++){
            if(medium_board[medium_random][i]!='-'){
document.getElementById((i+1).toString()).value=medium board[medium random][i];
                document.getElementById((i+1).toString()).readOnly=true;
//hard game
else{
    level='hard';
        var hard_random=Math.floor(Math.random()*5);
        choosen=hard_random;
        for(var i=0;i<81;i++){
            if(hard_board[hard_random][i]!='-'){
document.getElementById((i+1).toString()).value=hard_board[hard_random][i];
```

```
document.getElementById((i+1).toString()).readOnly=true;
document.getElementById("start").removeAttribute("onclick");
//check answer
var id=setInterval(() => {
    if (level=="easy"){
    if(document.activeElement.className=="input"){
if((document.getElementById(document.activeElement.id).value==easy[choosen][docum
ent.activeElement.id-
1])||(document.getElementById(document.activeElement.id).value=='')){
            for(var i=0;i<81;i++){
                if(i==80 && document.getElementById((81).toString()).value!='' ){
                        alert("you win !! congratulation....");
                        clearInterval(id);
                        window.location.reload();
                else if(document.getElementById((i+1).toString()).value==''){
                    break;
        else{
            if(document.getElementById("rem_live").innerHTML==1){
                document.getElementById("rem_live").innerHTML==0;
                alert("you lost !!");
                document.activeElement.value='';
                window.location.reload();
            else{
            alert("you choose wrong number, you loose your one life !!");
document.getElementById("rem_live").innerHTML=document.getElementById("rem_live")
.innerHTML-1;
            document.activeElement.value='';
```

```
else if(level=="medium"){
    if(document.activeElement.className=="input"){
if((document.getElementById(document.activeElement.id).value==medium[choosen][doc
ument.activeElement.id-
1])||(document.getElementById(document.activeElement.id).value=='')){
            for(var i=0;i<81;i++){
                if(i==80 && document.getElementById((81).toString()).value!='' ){
                        alert("you win !! congratulation....");
                        clearInterval(id);
                        window.location.reload();
                else if(document.getElementById((i+1).toString()).value==''){
                    break;
        else{
            if(document.getElementById("rem_live").innerHTML==1){
                document.getElementById("rem_live").innerHTML==0;
                alert("you lost !!");
                document.activeElement.value='';
                window.location.reload();
            else{
            alert("you choose wrong number, you loose your one life !!");
document.getElementById("rem_live").innerHTML=document.getElementById("rem_live")
.innerHTML-1;
            document.activeElement.value='';
else{
```

```
if(document.activeElement.className=="input"){
if((document.getElementById(document.activeElement.id).value==hard[choosen][docum
ent.activeElement.id-
1])||(document.getElementById(document.activeElement.id).value=='')){
            for(var i=0;i<81;i++){
                if(i==80 && document.getElementById((81).toString()).value!='' ){
                        alert("you win !! congratulation....");
                        clearInterval(id);
                        window.location.reload();
                else if(document.getElementById((i+1).toString()).value==''){
                    break:
        else{
            if(document.getElementById("rem_live").innerHTML==1){
                document.getElementById("rem live").innerHTML==0;
                alert("you lost !!");
                document.activeElement.value='';
                window.location.reload();
            else{
            alert("you choose wrong number, you loose your one life !!");
document.getElementById("rem_live").innerHTML=document.getElementById("rem_live")
.innerHTML-1;
            document.activeElement.value='';
}, 500);
//answer
function answer(){
    if(level=="easy"){
        for(var i=0;i<81;i++){
            document.getElementById((i+1).toString()).value=easy[choosen][i];
```

```
else if(level=="medium"){
        for(var i=0;i<81;i++){
            document.getElementById((i+1).toString()).value=medium[choosen][i];
    else if(level=="hard"){
        for(var i=0;i<81;i++){
            document.getElementById((i+1).toString()).value=hard[choosen][i];
    else{
        alert("first choose the game and start it !!");
//new game
function replay(){
    for(var i=0;i<81;i++){
        document.getElementById((i+1).toString()).value='';
    start();
//timer
function timer(){
if(document.getElementById("time1").checked==true){
document.getElementById("time_min").innerHTML="0"+(document.getElementById("time1
_min").innerHTML-1).toString();
    document.getElementById("time_sec").innerHTML='59';
else if(document.getElementById("time2").checked==true){
document.getElementById("time_min").innerHTML="0"+(document.getElementById("time2
_min").innerHTML-1).toString();
    document.getElementById("time_sec").innerHTML='59';
else{
document.getElementById("time_min").innerHTML="0"+(document.getElementById("time3
_min").innerHTML-1).toString();
    document.getElementById("time sec").innerHTML='59';
```

```
setInterval(() => {
        if(document.getElementById("time sec").innerHTML=='00'){
            document.getElementById("time_sec").innerHTML="59";
        else{
            if(parseInt(document.getElementById("time_sec").innerHTML)<=10){</pre>
document.getElementById("time_sec").innerHTML="0"+(document.getElementById("time_
sec").innerHTML-1).toString();
            else{
document.getElementById("time_sec").innerHTML=document.getElementById("time_sec")
.innerHTML-1;
    }, 1000);
    setInterval(() => {
        if(document.getElementById("time min").innerHTML=='00'){
            document.getElementById("time_sec").innerHTML='00';
            setTimeout(() => {
                alert("you lost !!");
            }, 50);
        else{
            if(parseInt(document.getElementById("time_min").innerHTML)<=10){</pre>
document.getElementById("time_min").innerHTML="0"+(document.getElementById("time_
min").innerHTML-1).toString();
            else{
document.getElementById("time_min").innerHTML=document.getElementById("time_min")
.innerHTML-1;
    }, 60*1000);
```

Style Sheet

```
body{
    background-color: #EAEAEA;
    color:black;
   margin: 0%;
 nav {
   padding: 3mm;
   margin-bottom: 1cm;
    background-color: #B2B2B2;
 nav a li.nav-item {
   font-weight: bolder;
   font-size: 1.5rem;
   color: black;
   font-family: "Acme", sans-serif;
   padding-right: 5mm;
 nav a li.nav-item:hover {
   text-shadow: 1px 3px rgba(33, 32, 32, 0.471);
 nav ul {
   list-style-type: none;
  margin: 0;
   padding: 0;
   overflow: hidden;
 nav li {
   float: left;
 nav li {
   float: left;
 nav .navbar-ul2{
  float: right;
 nav a{
   text-decoration: none;
   display: block;
 h1{
     margin-top: 0%;
    text-align: CENTER;
```

```
font-family: CURSIVE;
   font-size: XXX-LARGE;
.box{
   height: 156px;
   width: 156px;
   border: solid black 2px;
   background-color: #B2B2B2;
   display: grid;
   grid-template-columns: auto auto;
#main{
   height: 480px;
   width: 480px;
   border: solid black 4px;
   display: flex;
   flex-direction: row;
   margin-left: 30%;
   margin-top: -1%;
.cell{
   height: 50px;
   width: 50px;
   border: solid black 1px;
   text-align: center;
   background-color: #B2B2B2;
   text-align: center;
    font-size: x-large;
   font-weight: bold;
input{
   height: 45px;
   width: 44px;
   border: none;
   text-align: center;
   font-size: x-large;
   font-weight: bold;
    background-color: #B2B2B2;
   color: black;
button{
   height: 70px;
   width: 200px;
   font-size: x-large;
   font-weight: bold;
```

```
background-color: red;
    border: solid 4px black;
    border-radius: 30px;
    color: white;
    position: absolute;
    cursor: pointer;
#start{
   top: 26%;
   left: 5%;
#replay{
    top: 45%;
    left: 5%;
#answer{
   top: 65%;
   left: 5%;
#game_type{
    position: absolute;
    top: 24%;
    left: 75%;
.label{
    height: 15px;
    width: 15px;
    cursor: pointer;
#help{
    left: 0%;
    top: 150%;
#lives{
    position: absolute;
    top: 13%;
    left: 72%;
    color: orangered;
    font-weight: bold;
    font-size: x-large;
```

```
#timer{
    top: 10%;
    position: absolute;
    left: 3%;
    font-size: x-large;
    color: black;
    font-weight: bold;
}
```