

```
1 <?php
2 // Initialising session and connecting to database.
3 session_start();
4
5 $dbhost = "localhost";
6 $dbuser = "root";
7 $dbpass = "";
8 $dbname = "tetris";
9
10 $connection = mysqli_connect($dbhost,$dbuser,$dbpass,
$dbname);
11
12
13 ?>
14
15 <!DOCTYPE html>
16 <html>
17     <head>
18         <title>Signup</title>
19         <link rel="stylesheet" href="css/style.css"><
link>
20     </head>
21     <body>
22         <div class="navbar">
23             <a href="index.php">Home</a>
24             <a class="right" href="leaderboard.php">
Leaderboard</a>
25             <a class="right" href="tetris.php">Play
Tetris</a>
26         </div>
27
28         <div class="main">
29             <div id="box">
30
31                 <form method="post" action="index.php">
32                     <div class="input-title">Signup</div>
33                     <input class="input" type="text"
placeholder="First Name" name="firstName" required><br><br>
34                     <input class="input" type="text"
placeholder="Last name" name="lastName" required><br>
```

```
34  ><br>
35          <input class="input" type="text"
36          placeholder="Username" name="username" required><br><br>
37          <input class="input" type="password"
38          placeholder="Password" id="password" name="password"
39          required><br><br>
40          <input class="input" type="password"
41          placeholder="Confirm Password" id="confirm_password"
42          required><br><br>
43          <p><b>Display Scores on leaderboard</b></p>
44          <input type="radio" id="html" name="display" value="1" required>
45          <label for="display">yes</label>
46          <input type="radio" id="html" name="display" value="0" required>
47          <label for="display">no</label><br><br>
48
49          <input class="button" type="submit" value="Signup"><br><br>
50
51          <a style="margin-left: 5px;" href="index.php">Click to login</a><br><br>
52      </form>
53  </div>
54  </div>
55  <script> // Checks the password and confirm
56  password fields are equal.
57  let password = document.getElementById("password"),
58      confirm_password = document.
59      getElementById("confirm_password");
60
61  function validatePassword(){
62      if(password.value != confirm_password.
63      value) {
64          confirm_password.setCustomValidity("Passwords Don't Match");
65      } else {
```

```
58                     confirm_password.setCustomValidity('
');
59                 }
60             }
61         password.onchange = validatePassword;
62         confirm_password.onkeyup = validatePassword;
63     </script>
64
65
66     </body>
67 </html>
68
```

```

1 <?php
2 // Initialising session and connecting to database.
3 session_start();
4
5 $dbhost = "localhost";
6 $dbuser = "root";
7 $dbpass = "";
8 $dbname = "tetris";
9
10 $connection = mysqli_connect($dbhost,$dbuser,$dbpass,
$dbname);
11
12 if(!isset($_SESSION['username'])) {
13     // Redirect to index if not logged in.
14     header("Location: index.php");
15     die;
16 }
17
18 $username = $_SESSION['username'];
19 // Gets the score and updates the database if
applicable.
20 if($_SERVER['REQUEST_METHOD'] == "POST") {
21     // Gets score from invisible form accessed by
javascript.
22     $score = $_POST['score-from-form'];
23     // Gets the score of the user from the database.
24     $query = "SELECT * FROM scores WHERE Username = "
$username' limit 1";
25     $result = mysqli_query($connection, $query);
26     if ($result && mysqli_num_rows($result) > 0) {
27         $userData = mysqli_fetch_assoc($result);
28         if ($userData['Score'] < $score) { // If its
a high score update db.
29             $query = "UPDATE Scores SET Score = "
$score' WHERE Username = '$username' ";
30             mysqli_query($connection, $query);
31         }
32     } else { // If no username found add them and
their score.
33         $query = "INSERT INTO Scores (Username, Score
) VALUES ('$username', '$score')";

```

```
34         mysqli_query($connection, $query);
35     }
36 }
37 ?>
38 <!DOCTYPE html>
39 <html lang="en" dir="ltr">
40     <head>
41         <meta charset="utf-8">
42         <script src="app.js" charset="utf-8"></script>
43     >
44         <link rel="stylesheet" href="css/style.css"><
45 link>
46         <title>ECM1417</title>
47     </head>
48     <body>
49         <div class="navbar">
50             <a href="index.php">Home</a>
51             <a class="right" href="leaderboard.php">
52                 Leaderboard</a>
53             <a class="right" href="tetris.php">Play
54                 Tetris</a>
55         </div>
56
57         <div class="main">
58             <audio loop id="tetris_theme" preload="auto">
59                 <source url="tetrisTheme.mp3" type="audio
60 /mpeg" >
61             </audio>
62             <form id="score-form" name="score-form"
63 action="" method="POST">
64                 <input id="score-input" name="score-from-
65 form" value="">
66             </form>
67             <div id="score-div">Score: <span id="score">0
68             </span></div>
69             <button class="button" id="start-button">
70                 Start the game</button>
71             <div class="tetris-bg", id="tetris-bg"></div>
72         </div>
73
74     </body>
```

```
66 </html>
```

```
1 <?php
2 // Initialising session and connecting to database.
3 session_start();
4
5 $dbhost = "localhost";
6 $dbuser = "root";
7 $dbpass = "";
8 $dbname = "tetris";
9
10 $connection = mysqli_connect($dbhost,$dbuser,$dbpass,
$dbname);
11
12 // Gets the top 10 scores from the database.
13 // $query = "SELECT Username, Score FROM Scores ORDER
14 // BY Score DESC LIMIT 10";
14 $query = "SELECT Scores.Username, Users.Display,
Scores.Score
15 FROM Scores
16 INNER JOIN Users ON Scores.Username=Users.Username
17 ORDER BY Score DESC";
18 $result = mysqli_query($connection,$query);
19 ?>
20
21 <!DOCTYPE html>
22 <html>
23     <head>
24         <title>Leaderboard</title>
25         <link rel="stylesheet" type="text/css" href="
css/style.css"/>
26     </head>
27     <body>
28         <div class="navbar">
29             <a href="index.php">Home</a>
30             <a class="right" href="leaderboard.php">
Leaderboard</a>
31             <a class="right" href="tetris.php">Play
Tetris</a>
32         </div>
33
34         <div class="main">
35             <div class="leaderboard">
```

```
36          <table>
37          <tr>
38          <th>Username</th>
39          <th>Score</th>
40        </tr>
41        <?php // Iterates through each row in
   the database.
42        while($row = mysqli_fetch_array(
  $result)){
43          if ($row['Display'] == 1) {
44            // Creates a new row in
   the html table with the username and score.
45            echo "<tr><td>" . $row['
  Username'] . "</td><td>" . $row['Score'] . "</td></tr
 >";
46          }
47        }
48      ?>
49    </table>
50  </div>
51  </div>
52  </body>
53 </html>
54
```

```

1 <?php
2 // Initialising session and connecting to database.
3 session_start();
4
5 $dbhost = "localhost";
6 $dbuser = "root";
7 $dbpass = "";
8 $dbname = "tetrис";
9
10 $connection = mysqli_connect($dbhost,$dbuser,$dbpass,
$dbname);
11
12 // Gets registration details from form because
specification states to post to index.php.
13 if($_SERVER['REQUEST_METHOD'] == "POST" && isset(
$_POST['firstName'])) {
14     $username = $_POST['username'];
15     $firstName = $_POST['firstName'];
16     $lastName = $_POST['lastName'];
17     $password = $_POST['password'];
18     $display = $_POST['display'];
19
20     // Checks if name is unique.
21     $select = mysqli_query($connection, "SELECT *
FROM users WHERE username = '". $username . "'");
22     if(mysqli_num_rows($select)) {
23         // Redirect to register.php if username not
unique.
24         header("Location: register.php");
25         die;
26     }
27
28     // Checks all fields of the form were inputted.
29     if(!empty($username) && !empty($firstName) && !
empty($lastName) && !empty($password)) {
30         $query = "INSERT INTO Users VALUES (
$username', '$firstName', '$lastName', '$password', '$display');";
31         mysqli_query($connection, $query);
32     }else {
33         // Redirect to register.php if bad input.

```

```
34         header("Location: register.php");
35         die;
36     }
37 }
38
39 // If the user is not logged in we need to get their
40 // login details from the html form.
41 if(!isset($_SESSION['username'])) {
42     if($_SERVER['REQUEST_METHOD'] == "POST") {
43         $username = $_POST['username'];
44         $password = $_POST['password'];
45
46         // Check login details against the database.
47         if(!empty($username) && !empty($password)) {
48             $query = "SELECT * FROM Users WHERE
49             Username = '$username' limit 1";
50             $result = mysqli_query($connection,
51             $query);
52             // If a result is received compare the
53             // passwords.
54             if ($result && mysqli_num_rows($result)
55             ) > 0) {
56                 $userData = mysqli_fetch_assoc(
57                 $result);
58                 if($userData['Password'] ===
59                 $password){
60                     $_SESSION['username'] = $userData
61                     ['UserName'];
62                 }
63                 }else {
64                     echo "wrong username or password!";
65                 }
66             }
67 }
68 ?>
69
70 <!DOCTYPE html>
71 <html>
72     <head>
73         <title>Welcome Page</title>
```

```
67      <link rel="stylesheet" href="css/style.css">
68      </head>
69      <body>
70          <div class="navbar">
71              <a href="index.php">Home</a>
72              <a class="right" href="leaderboard.php">
73                  Leaderboard</a>
74              <a class="right" href="tetris.php">Play
75                  Tetris</a>
76          </div>
77
78          <div class="main">
79              <div id="box">
80                  <?php if(isset($_SESSION['username'])):
81                      ?>
82                  <h1 id="welcome-message">Welcome to
83                      Tetris</h1>
84                  <a href="tetris.php" class="button"
85                      id="welcome-button">Click here to play</a>
86                  <?php else : ?>
87                  <form method="post">
88                      <div class="input-title">Login</
89                          div>
90                      <input class="input" placeholder
91                          ="username" type="text" name="username"><br><br>
92                      <input class="input" placeholder
93                          ="password" type="password" name="password"><br><br>
94
95                  <input class="button" type="
96                      submit" value="Login" name="login_button"><br><br>
97
98                  <p style="margin-left: 5px;">Don
99                      't have a user account? <a href="register.php">
100                         Register now</a>
101                     </p><br><br>
102
103                     </form>
104                 <?php endif; ?>
105             </div>
106         </div>
```

```
96
97      </body>
98 </html>
99
100
```

```
1 // The Pieces, each row represents a different
  rotation.
2 const lTetromino = [
3   [[1,1],[1,2],[1,3],[2,3]],
4   [[1,2],[0,2],[-1,2],[-1,3]],
5   [[0,2],[0,1],[0,0],[-1,0]],
6   [[-1,1],[0,1],[1,1],[1,0]]
7 ]
8
9 const zTetromino = [
10  [[1,1],[2,1],[2,2],[3,2]],
11  [[3,2],[3,3],[2,3],[2,4]],
12  [[2,4],[1,4],[1,3],[0,3]],
13  [[1,1],[1,2],[0,2],[0,3]]
14 ]
15
16 const sTetromino = [
17  [[1,2],[2,1],[2,2],[3,1]],
18  [[2,2],[3,3],[2,3],[3,4]],
19  [[2,3],[1,4],[1,3],[0,4]],
20  [[1,3],[0,2],[1,2],[0,1]]
21 ]
22
23 const tTetromino = [
24  [[1,1],[2,1],[2,2],[3,1]],
25  [[1,0],[1,1],[0,1],[1,2]],
26  [[0,0],[1,0],[1,-1],[2,0]],
27  [[2,-1],[2,0],[3,0],[2,1]]
28 ]
29
30 const oRotation = [[1,1],[1,2],[2,1],[2,2]]
31
32 const oTetromino = [
33   oRotation,oRotation,oRotation,oRotation
34 ]
35
36 const iTetromino = [
37  [[1,1],[1,2],[1,3],[1,4]],
38  [[-1,3],[0,3],[1,3],[2,3]],
39  [[0,1],[0,2],[0,3],[0,4]],
40  [[-1,1],[0,1],[1,1],[2,1]]
```

```
41 ]
42
43 const theTetrominoes = [lTetromino, zTetromino,
    sTetromino, tTetromino, oTetromino, iTetromino]
44 const typeOfTetrominoes = ['l', 'z', 's', 't', 'o',
    'i']
45 const colours = ['orange', 'red', 'green', 'purple',
    'yellow', 'blue']
46 const fallTime = 1000 // Default 1000 = 1 second.
47 const tileSize = 20 // Laptop preferred 20px, desktop
    preferred 40px, must change css accordingly.
48 let grid = createGrid()
49 let currentBlock
50 let scoreDisplay
51 let tetrominoID
52 let currentColumnIndex
53 let currentRowIndex
54 let rotation = 0
55 let timerId
56 let startBtn = null
57 let gameMusic = null
58 let score = 0
59
60 /**
61 * Plays the tetris theme on loop.
62 */
63 function playMusic() {
64     gameMusic = new Audio('audio/tetrisTheme.mp3');
65     gameMusic.loop = true;
66     gameMusic.volume = 0.5
67     gameMusic.load();
68     gameMusic.play()
69 }
70
71 /**
72 * Pauses the tetris theme.
73 */
74 function pauseMusic() {
75     gameMusic.pause()
76 }
77
```

```
78 /**
79  * Plays audio specified by filename.
80 *
81 * @param soundFileName
82 */
83 function playSound(soundFileName) {
84     if(typeof soundFileName === "string") {
85         let gameSound = new Audio('audio/'+
soundFileName+'.mp3')
86         gameSound.play()
87     }
88 }
89
90 /**
91 * @returns A 20x10 2D array populated with empty
strings.
92 */
93 function createGrid() {
94     console.log("grid")
95     let gridSquares = []
96     for (let i = 0; i < 20; i++) {
97         gridSquares[i] = []
98         for (let j = 0; j < 10; j++) {
99             gridSquares[i][j] = ''
100        }
101    }
102    return gridSquares
103 }
104
105 /**
106 * Randomly spawns a new tetromino after checking
for game over conditions.
107 */
108 function newTetromino() {
109     console.log("newTetromino")
110     tetrominoID = Math.floor(Math.random() *
theTetrominoes.length)
111     currentRowIndex = 0
112     currentColumnIndex = 4
113     rotation = 0
114     let currentPiece = theTetrominoes[tetrominoID]
```

```
115     let tilesOfPiece = []
116     for (let i = 0; i < currentPiece.length; i++) {
117         tilesOfPiece[i] = document.createElement('
118             div')
119             tilesOfPiece[i].setAttribute("class", "block"
120             )
121             tilesOfPiece[i].setAttribute("id",
122                 typeOfTetrominoes[tetrominoID])
123                 document.getElementById("tetris-bg").
124                 appendChild(tilesOfPiece[i])
125             }
126             currentBlock = tilesOfPiece
127
128             // Checks top of grid is empty
129             let associativeArray = theTetrominoes[
130                 tetrominoID][rotation]
131                 if (associativeArray.some(index => grid[
132                     currentRowIndex + index[1] - 1][currentColumnIndex
133                     + index[0] - 1] !== '')) {
134                     gameOver()
135                 } else {
136                     // Update score
137                     addScore()
138
139                     // Draws tile onto screen
140                     currentBlock.forEach(tile => {
141                         tile.style.backgroundColor = colours[
142                             tetrominoID]
143                             tile.style.backgroundImage = 'url(images
144                             /' + colours[tetrominoID] + 'Tile.png)'
145                         })
146                         translate()
147
148                     }
149
150
151 /**
152 * Checks every row in the grid to see if it is full
153 , then removes said rows and shifts the rest of the
154 tiles down
155 * whilst adding new empty rows to the top of the
156 grid.
```

```
144  */
145 function completeRow() {
146     console.log("complete row")
147     let emptyRow = ['', '', '', '', '', '', '', '',
148         '']
149     let tileToBeRemoved
150     let tileToBeShifted
151     let removeCount = 0
152     for (let rowIndex = 0; rowIndex < grid.length;
153         rowIndex++) {
154         let complete = 0
155         // Checks each column in the row to see if
156         // it is full.
157         for (let columnIndex = 0; columnIndex < grid
158             [rowIndex].length; columnIndex++) {
159             if (grid[rowIndex][columnIndex] !== '')
160             ) {
161                 complete++
162             } else {
163                 break;
164             }
165         }
166         // Remove a row.
167         if (complete === 10) {
168             removeCount++
169             complete = 0
170             // Deletes the div blocks.
171             for (let i = 0; i < grid[rowIndex].
172                 length; i++) {
173                 tileToBeRemoved = grid[rowIndex][i]
174                 tileToBeRemoved.remove()
175             }
176             // Shifts down all the pieces above the
177             // removed row.
178             for (let shiftDownRowIndex = rowIndex;
179                 shiftDownRowIndex >= 0; shiftDownRowIndex--) {
180                 for (let i = 0; i < grid[
181                     shiftDownRowIndex].length; i++) {
182                     tileToBeShifted = grid[
183                         shiftDownRowIndex][i]
184                     if (tileToBeShifted != '') {
```

```
175          let yAxis = parseInt(
  tileToBeShifted.style.top.slice(0,-2)) + tileSize
176          tileToBeShifted.style.top =
177          yAxis + 'px'
178      }
179    }
180    // Deletes the row from the grid and
181    // adds a new empty row.
182    grid.splice(rowIndex,1)
183    grid.unshift(emptyRow)
184    console.log(grid)
185  }
186}
187 // Plays a special sound if 4 or more rows are
188 // removed at once.
189 if (removeCount >= 4) {
190   playSound("line-removal4")
191 }else if (removeCount > 1) {
192   playSound("line-remove")
193 }
194 /**
195 * Moves the blocks representing the tetromino.
196 */
197 function translate() {
198   console.log("translate")
199   for (let i = 0; i < currentBlock.length; i++) {
200     let tile = currentBlock[i]
201     let pieceType = theTetrominoes[tetrominoID][
202       rotation]
203     let relativeColumnPosition = pieceType[i][0
204     ] - 1
205     let relativeRowPosition = pieceType[i][1] -
206     1
207     let xAxis = tileSize * (currentColumnIndex
208       + relativeColumnPosition)
209     let yAxis = tileSize * (currentRowIndex +
210       relativeRowPosition)
```

```
207
208     tile.style.left = xAxis + 'px'
209     tile.style.top = yAxis + 'px'
210 }
211 currentBlock.forEach(tile => {
212     console.log(tile)
213 })
214 }
215
216 // Assign functions to keyCodes.
217 function keyboardInterrupt(keyInput) {
218     console.log("keyboard interrupt")
219     if (keyInput.keyCode === 32) {
220         hardDrop()
221     } else if (keyInput.keyCode === 37 || keyInput.
keyCode === 65) {
222         moveLeft()
223     } else if (keyInput.keyCode === 38 || keyInput.
keyCode === 87) {
224         rotate()
225     } else if (keyInput.keyCode === 39 || keyInput.
keyCode === 68) {
226         moveRight()
227     } else if (keyInput.keyCode === 40 || keyInput.
keyCode === 83) {
228         moveDown()
229     }
230 }
231
232 /**
233 * @returns Boolean of if the tetromino would
234 * collide if it were to go down by one tile.
235 */
236 function downCollisionDetection() {
237     console.log("down collision detection")
238     // Checks if tile below is floor or occupied.
239     let associativeArray = theTetrominoes[
        tetrominoID][rotation]
240     try {
241         return (associativeArray.some(index =>
        currentRowIndex + index[1] === 20)) ||
```

```
240 associativeArray.some(index => grid[currentRowIndex
    + index[1]][currentColumnIndex + index[0] - 1] !==
    ''))
241     } catch (error) {
242         // Out of bounds but javascript returns
        undefined, so we catch a type error instead.
243         if (error instanceof TypeError) {
244             return true
245         }else {
246             throw error
247         }
248     }
249 }
250
251 /**
252 * @returns Boolean of if the tetromino would
    collide if it were to go left by one tile.
253 */
254 function leftCollisionDetection() {
255     console.log("left collision detection")
256     // Checks if tile below is left wall or occupied
    .
257     let associativeArray = theTetrominoes[
        tetrominoID][rotation]
258     try {
259         return (associativeArray.some(index =>
        currentColumnIndex + index[0] - 2 < 0) ||
        associativeArray.some(index => grid[currentRowIndex
            + index[1] - 1][currentColumnIndex + index[0] - 2
        ] !== ''))
260     } catch (error) {
261         // Out of bounds but javascript returns
        undefined, so we catch a type error instead.
262         if (error instanceof TypeError) {
263             return true
264         }else {
265             throw error
266         }
267     }
268 }
269
```

```
270 /**
271 * @returns Boolean of if the tetromino would
272 * collide if it were to go right by one tile.
273 */
274 function rightCollisionDetection() {
275     console.log("right collision detection")
276     // Checks if tile below is right wall or
277     // occupied.
278     let associativeArray = theTetrominoes[
279         tetrominoID][rotation]
280     try {
281         return (associativeArray.some(index =>
282             currentColumnIndex + index[0] > 9) ||
283             associativeArray.some(index => grid[currentRowIndex
284                 + index[1] - 1][currentColumnIndex + index[0]] !==
285                 ''))
286     } catch (error) {
287         // Out of bounds but javascript returns
288         // undefined, so we catch a type error instead.
289         if (error instanceof TypeError) {
290             return true
291         } else {
292             throw error
293         }
294     }
295 }
296 /**
297 * @returns Boolean of if the tetromino is colliding
298 * with a border or block.
299 */
300 function selfCollisionDetection() {
301     console.log("self collision detection")
302     let associativeArray = theTetrominoes[
303         tetrominoID][rotation]
304     // Checks if the tetromino is colliding.
305     try {
306         return (associativeArray.some(index => grid[
307             currentRowIndex + index[1] - 1][currentColumnIndex
308             + index[0] - 1] !== ''))
309     } catch (error) {
```

```
299         // Out of bounds but javascript returns
      undefined, so we catch a type error instead.
300         if (error instanceof TypeError) {
301             return true
302         }else {
303             throw error
304         }
305     }
306 }
307
308 /**
309 * Moves the tetromino left by one tile.
310 */
311 function moveLeft() {
312     console.log("left")
313     if (!leftCollisionDetection()) {
314         currentColumnIndex--
315         translate()
316     }
317 }
318
319 /**
320 * Moves the tetromino right by one tile.
321 */
322 function moveRight() {
323     console.log("right")
324     if (!rightCollisionDetection()) {
325         currentColumnIndex++
326         translate()
327     }
328 }
329
330 /**
331 * Moves the tetromino down by one tile.
332 */
333 function moveDown() {
334     console.log("down")
335     if (!downCollisionDetection()) {
336         currentRowIndex++
337         playSound("whoosh")
338         translate()
```

```
339     }
340 }
341
342 /**
343 * Rotates the tetromino 90 degrees clockwise.
344 */
345 function rotate() {
346     console.log("rotate")
347     rotation++
348     rotation %= 4
349     if (selfCollisionDetection()) {
350         rotation--
351         rotation %= 4
352     }else {
353         playSound("block-rotate")
354     }
355     translate()
356 }
357
358 /**
359 * Moves the tetromino down until it collides.
360 */
361 function hardDrop() {
362     console.log("hard drop")
363     while (!downCollisionDetection()) {
364         currentRowIndex++
365     }
366     playSound("line-drop")
367     translate()
368     freeze()
369 }
370
371 /**
372 * Stops the tetromino in place and calls for a
373 * complete row check and a new tetromino.
374 */
375 function freeze() {
376     console.log(grid)
377     if (downCollisionDetection()) {
378         let associativeArray = theTetrominoes[
tetrominoID][rotation]
```

```
378         for (let i = 0; i < associativeArray.length  
  ; i++) {  
379             let index = associativeArray[i]  
380             let tile = currentBlock[i]  
381             try {  
382                 grid[currentRowIndex + index[1] - 1  
  ][currentColumnIndex + index[0] - 1] = tile  
383             } catch (error) {  
384                 // Out of bounds but javascript  
  returns undefined, so we catch a type error instead.  
385                 if (!(error instanceof TypeError)) {  
386                     throw error  
387                 }  
388             }  
389         }  
390         completeRow()  
392         newTetromino()  
393     } else {  
394         moveDown()  
395     }  
396  
397 }  
398  
399 /**
400 * Adds one to the users score and displays it on  
the webpage.  
401 */  
402 function addScore() {  
403     score++  
404     scoreDisplay.innerHTML = score  
405 }  
406  
407 /**
408 * Resets the game and posts the users score to the  
server.  
409 */  
410 function gameOver() {  
411     console.log("Game Over")  
412     startBtn.style.visibility = "visible";  
413     pauseMusic()
```

```
414     playSound('gameOver')
415     document.removeEventListener('keyup',
416         keyboardInterrupt)
417     clearInterval(timerId)
418     grid = createGrid()
419     let scoreForm = document.getElementById('score-
420         form')
421     let scoreInput = document.getElementById('score-
422         input')
423     scoreInput.setAttribute('value', score)
424     scoreForm.submit()
425 }
426
427 // Start of the code.
428 document.addEventListener('DOMContentLoaded'
429     , () => {
430     // Page Setup
431     startBtn = document.querySelector('#start-button
432 ')
433     scoreDisplay = document.querySelector('#score')
434
435     startBtn.addEventListener('click', () => {
436         console.log("startbtn")
437         document.getElementById("tetris-bg").
438             innerHTML =
439             startBtn.style.visibility = "hidden";
440             playMusic()
441             score = 0
442             document.addEventListener('keyup',
443                 keyboardInterrupt)
444                 timerId = setInterval(freeze, fallTime)
445
446                 newTetromino()
447             })
448
449         })
450     })
451 }
```

```
1 html, body {  
2     margin: 0;  
3     height: 100%;  
4 }  
5  
6 table, th, td {  
7     border-spacing: 2px;  
8     border: 2px solid black;  
9     font-size: 25px;  
10 }  
11  
12 th {  
13     background-color: blue;  
14 }  
15  
16 #start-button {  
17     position: absolute;  
18     left: 30%;  
19     top: 30%;  
20     background-color: blue;  
21 }  
22  
23 #box{  
24  
25     background-color: #c7c7c7;  
26     box-shadow: 5px 5px;  
27     position: center;  
28     width: 400px;  
29     padding: 20px;  
30     margin: auto;  
31     margin-top: 20px;  
32 }  
33  
34 #welcome-button{  
35     margin-left: 35%;  
36 }  
37  
38 #welcome-message{  
39     text-align: center;  
40 }  
41
```

```
42 #score-div {  
43     color: white;  
44     background-color: blue;  
45     margin: auto;  
46     width: 130px;  
47     height: 50px;  
48     font-size: xx-large;  
49     border: black solid 3px;  
50 }  
51  
52 #score-input, #score-form {  
53     visibility: hidden;  
54 }  
55  
56 .main{  
57     background-image: url(..../images/tetris.png);  
58     background-repeat: no-repeat;  
59     background-size: cover;  
60     margin: auto;  
61     width: 95%;  
62     height: 93%;  
63 }  
64  
65 .input-title{  
66     font-size: 25px;  
67     margin: 10px;  
68     padding-top: 10px;  
69     text-align: center;  
70     color: Black;  
71     font-weight: bold;  
72 }  
73  
74 .button {  
75     background-color: #0096FF;  
76     border: none;  
77     color: white;  
78     padding: 10px 20px;  
79     text-align: center;  
80     text-decoration: none;  
81     display: inline-block;  
82     font-size: 16px;
```

```
83     cursor: pointer;
84 }
85
86 .input{
87
88     height: 25px;
89     border-radius: 5px;
90     padding: 4px;
91     border: solid thin #aaa;
92     width: 92%;
93     margin-left: 5px;
94 }
95
96 .container {
97     background-color: #c7c7c7;
98 }
99
100 .tetris-bg {
101     width: 200px;
102     height: 400px;
103     background-image: url(..../images/tetris-grid-bg.
png);
104     background-repeat: no-repeat;
105     background-size: cover;
106     background-color: #c7c7c7;
107     position: absolute;
108     box-shadow: 5px 5px;
109     top: 40%;
110     left: 50%;
111     margin: -100px 0 0 -100px;
112 }
113
114 .tetris-bg div {
115     height: 20px;
116     width: 20px;
117     background-repeat: no-repeat;
118     background-size: cover;
119 }
120
121 .block {
122     position: absolute;
```

```
123     top: 0px;  
124     right: 0px;  
125     bottom: 0px;  
126     left: 0px;  
127 }  
128  
129 .leaderboard {  
130     background-color: #c7c7c7;  
131     display: table;  
132     box-shadow: 5px 5px;  
133     margin: auto;  
134 }  
135  
136 .navbar {  
137     background-color: blue;  
138     overflow: hidden;  
139     margin: 0px;  
140     height: 7%;  
141 }  
142  
143 .navbar a {  
144     float: left;  
145     color: #f2f2f2;  
146     text-align: center;  
147     padding: 14px 16px;  
148     font-family: Arial;  
149     font-size: 12px;  
150     font-weight: bold;  
151     text-decoration: none;  
152 }  
153  
154 .navbar a:hover {  
155     background-color: #c7c7c7;  
156     color: black;  
157 }  
158  
159 .navbar a.right{  
160     float: right;  
161 }
```