

:: JAVASCRIPT ::

INFO 30005



WARM UP...

WARM UP

What does this do?

```
document.getElementById("main")
```

What does this do?

```
document.getElementById("main").getElementsByTagName("section");
```

What does this do?

```
document.body.style.backgroundColor = "info30005"
```

[7 MINUTES]

WARM UP

Please modify the style (font type, font size, font colour) of the paragraph text and button through Javascript code (inside the HTML file. Do not create a javascript file for this exercise).

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title> INFO30005 :: JavaScript - Workshop #3 </title>
</head>
<body>
  <p id ='text'> Javascript DOM :: Changing paragraph style</p>
  <div>
    <button id="style" onclick="js_new_style()">New style</button>
  </div>
</body>
</html>
```

Step 1: click on the button 'New style' to see the style changes on the paragraph

Step 2: change the label of the button to 'Previous style'

Step 3: click on the button 'Previous style' to see the paragraph on the original way

Step 4: change the label of the button to 'New style'

[12 MINUTES]

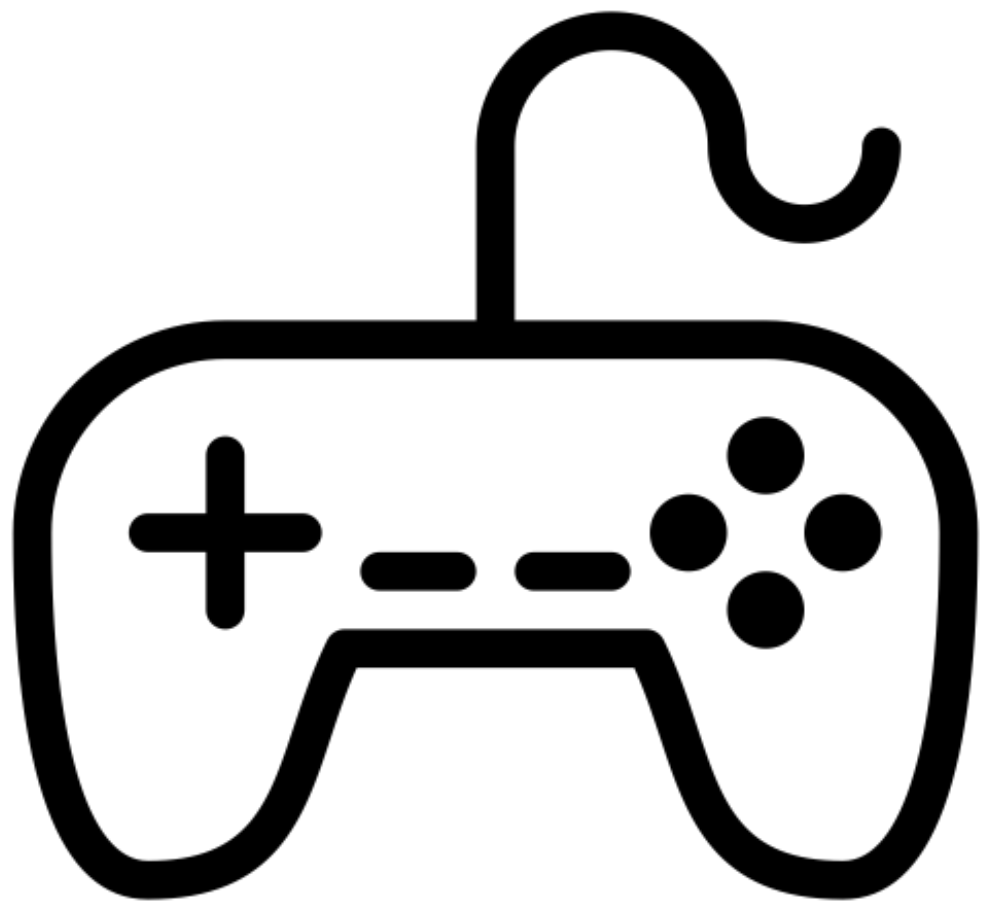
WARM UP

Write a JavaScript function to get/alert the values of First and Last name of the following form. Create a .js file for that and add it to the sample HTML below.

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title>INFO30005 :: JavaScript - Workshop #3</title>
</head>
<body>
  <form id="formname" onsubmit="getFormValue()">
    First name: <input type="text" name="firstname" value="Obi-Wan"><br>
    Last name: <input type="text" name="lastname" value="Kenobi"><br>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

[12 MINUTES]

TODAY'S TASK IS...



LET'S DEVELOP A WORD-GUESSING GAME!
YEEEEAAH!

INSTRUCTIONS

In this game, a player will try guessing letters in a word (maximum size of the word is 15 letters).

Whenever a player makes a correct guess, the tiles in the target word should be updated to show the correct guesses.

If a player makes an incorrect guess, a game board should display each incorrect guess and the total number of remaining guesses.

The maximum number of incorrect attempts is ten.

The player wins by guessing the complete word before running out of guesses.

[1 HOUR AND 20 MINS]

SAMPLE HTML

```
<center>
<div id="wordTiles">
  <!--
  <div class="char">w</div>
  <div class="char">o</div>
  <div class="char">r</div>
  <div class="char">d</div>
  -->
</div>
<br></br>
<form>
  <label>Enter your guess</label>
  <input type="text" name="guess">
  <button>Submit</button>
</form>
<br></br>
```

```
<br></br>
Game board
<hr width=20%>

<table id="gameboard" border=1>
  <tr>
    <th>Incorrect Guesses</th>
    <td>ooo</td>
  </tr>
  <tr>
    <th>Remaining Guesses</th>
    <td>ooo</td>
  </tr>
</table>
<hr width=20%>
<br></br>
<button>Set word to be guessed</button>
</center>
```

SAMPLE JS

```
let gameState = {  
  incorrectGuesses : [],  
  remainingGuesses : 10  
};  
  
function setWord (word) {  
  //set word to be guessed  
}  
  
function validate (guess) {  
  //validate the input from the form (letter)  
}  
  
function check (guess) {  
  //check if the guess is correct  
}
```

```
function updateWordTiles (index) {  
  //update the tiles on the HTML  
}  
  
function checkEndOfGame(){  
  //check if the player has guessed the secret word or if the game is over (no more  
  //remaining guesses  
}  
  
function reset () {  
  //reset the game (set new word to be guessed, clean word tiles, incorrect  
  //guesses and remaining guesses  
}
```

UP FOR A CHALLENGE?



CHRONOMETER

Can you add a chronometer on your game to display how long is taking the player to guess the word?

Try building it from scratch (do not look for samples on the Web).

The chronometer should start as soon as the word is set.

Consider the following template: hh:mm:ss (hours:minutes:seconds).

After 59minutes, the chronometer should be changed to 1:00:00 and not to 00:60:00

Remember to stop the chronometer at the end of the game.

RANKING

You can also develop a ranking board based on time or number of attempts.

For this challenge you need to:

- Request the Player's name;
- Develop a ranking board on your HTML page;
- Consider the number of attempts or chronometer as a criteria to rank the top 5 players.

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