



# ***JavaScript Essentials***

## **Assignments**

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| Document Code  | 25e-BM/HR/HDCV/FSOFT |
| Version        | 1.1                  |
| Effective Date | 20/11/2012           |

**RECORD OF CHANGES**

| No | Effective Date | Change Description    | Reason     | Reviewer | Approver |
|----|----------------|-----------------------|------------|----------|----------|
| 1  | 25/Jun/2018    | Create a new Lab      | Create new | DieuNT1  | VinhNV   |
| 2  | 01/May/2019    | Update Fsoft Template | Update     | DieuNT1  | VinhNV   |
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| Problem 4:.....             | <b>Error! Bookmark not defined.</b> |



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|-----------|-------------|
| CODE:     | JS-E.M.A901 |
| TYPE:     | Medium      |
| LOC:      | N/A         |
| DURATION: | 60 MINUTES  |

## Unit 9 – Functions

### Objectives:

- ✓ Understand function feature of JavaScript and able to create your own function that solve common problem

### Project Structure

- A project called **JS-E.M.A901** (this will be your root folder) is provided to you
- Put your work for each problem in corresponding folder inside root folder

### Problem 1:

For the first task, you have to create a simple function — `chooseName()` — that prints a random name from the provided array (names) to the provided paragraph (para), and then run it once.

Try updating the code in corresponding folder to recreate the expected output below:

Anne

### Problem 2:

For our second functions-related task, you need to create a function that draws a rectangle on the provided `<canvas>` (reference variable `canvas`, context available in `ctx`), based on the five provided input variables:

- `x` — the x coordinate of the rectangle.
- `y` — the y coordinate of the rectangle.
- `width` — the width of the rectangle.
- `height` — the height of the rectangle.
- `color` — the color of the rectangle.

You'll want to clear the canvas before drawing, so that when the code is updated in the case of the live version, you don't get lots of rectangles drawn on top of one another.

Try updating the code in corresponding folder to recreate the expected output below:



**Problem 3:**

In this task, you return to the problem posed in Problem 1, with the aim of improving it. The three improvements we want you to make are:

1. Refactor the code that generates the random number into a separate function called **random()**, which takes as parameters two generic bounds that the random number should be between, and returns the result.
2. Update the **chooseName()** function so that it makes use of the random number function, takes the array to choose from as a parameter (making it more flexible), and returns the result.
3. Print the returned result into the paragraph (para)'s **textContent**.

Try updating the code in corresponding folder to recreate the expected output below:

Bert

-- THE END --