**JavaScript Lab: Variables, Functions & DOM**

Activity 1: Variables and Functions (15 min)

Create an HTML file and link a JS script. Declare variables name and age. Write a function

greetUser(name, age) that returns a formatted string. Log the result.

index.html

script.js

Expected console output:

Hello, I am Ailen and I am 30 years old.

Activity 1

let name = "Gabriel Atanoso";

let age = 22;

function greetUser(name, age) {

return "Hello, guys I am Gabriel Atanoso and I am 22 years old.";

}

console.log(greetUser(name, age));

Activity 2: DOM Manipulation (20 min)

Add a button that changes the background color randomly when clicked. Also display the

chosen color in a paragraph element.

index.html (add inside <body>)

script.js (append):

Expected behavior: Clicking the button changes the background and shows the hex code.

Activity 2

document.addEventListener('DOMContentLoaded', function() {

const colorButton = document.getElementById('colorButton');

const colorCode = document.getElementById('colorCode');

colorButton.addEventListener('click', function() {

const randomColor = '#' + Math.floor(Math.random()\*16777215).toString(16).padStart(6, '0');

document.body.style.backgroundColor = randomColor;

colorCode.textContent = 'Hex Code: ' + randomColor;

});

});

Activity 3: Debugging and Enhancement (15 min)

Use console.log to trace values before and after color change. Enhance logs to include a

friendly message.

script.js (append):

Expected console output example:

let color = "red";

console.log("Before color change: The color is currently " + color);

color = "blue";

console.log("After color change: The color is now " + color);

Output:

Before color change: The color is currently red

After color change: The color is now blue