



## Tutorial 2: JS (Version 1)

### Required software:

- Web browser: Internet Explorer/...
- HTML editor: Notepad/...

### Exercise 1

#### Step 1: Modify the Attendance Table

1. Reuse and update the attendance table created in Tutorial 1.
2. The table must include:
  - At least 3 students
  - 6 session columns for attendance (Session 1 to Session 6)
  - 6 participation columns (P1 to P6)
  - One extra column titled "Message"

#### Example structure:

Last Name	First Name	S1		S2		S3		S4		S5		S6		Absences	Participation
		P	Pa	P	Pa	P	Pa	P	Pa	P	Pa	P	Pa		
Ahmed	Sara			✓	✓									5 Abs	1 Par
Yacine	Ali	✓				✓	✓	✓	✓	✓	✓	✓		1 Abs	4 Par
Houcine	Rania	✓	✓			✓	✓							4 Abs	2 Par

#### Step 2: JavaScript Implementation

1. Count the number of absences for each student.
2. Count the number of participations for each student.
3. Highlight the student's row according to the number of absences:
  - Green for fewer than 3 absences
  - Yellow for 3 to 4 absences
  - Red for 5 or more absences
4. Display a message in the "Message" column summarizing attendance and participation, such as:
  - "Good attendance – Excellent participation"
  - "Warning – attendance low – You need to participate more"
  - "Excluded – too many absences – You need to participate more"



## Exercise 2

1. Reuse the Add Student form from Tutorial 1.
2. Add JavaScript validation to ensure:
  - Student ID is not empty and contains only numbers.
  - Last Name and First Name contain only letters.
  - Email follows a valid format (e.g., name@example.com).
3. Display an error message under each field if validation fails.
4. Prevent the form from being submitted if there are validation errors.

## Exercise 3

1. Modify the Add Student form so that when the Submit button is clicked, the new student's data is automatically added to the attendance table without reloading the page.
2. Include a confirmation message after the student is successfully added.
3. Ensure that new entries follow the same structure as existing table rows.

## Exercise 4

1. Add a "Show Report" button to the attendance page.
2. When clicked, display in a separate section:
  - The total number of students
  - The number of students marked present
  - The number of students marked as having participated
3. Display the results clearly in a chart.

## Exercise 5

1. Reuse the attendance table from previous tutorials. Using jQuery:
2. Highlight a row when the mouse hovers over it.
3. Remove the highlight when the mouse leaves.
4. When a row is clicked, display a message box showing the student's full name and number of absences.

## Exercise 6

1. Add a "Highlight Excellent Students" button.

When the button is clicked use jQuery to:

2. Find all students with fewer than 3 absences.
3. Animate their rows (for example, fade in/out or change color gradually).
4. Add another button "Reset Colors" to restore the original appearance.