# Midterm: Data Input, Validation, and Display

**Objective:** This midterm's goal is to create an HTML and JavaScript-based form that captures, validates, and displays user data. This project will help reinforce your understanding of form creation, data validation, and DOM manipulation in JavaScript.

**Requirements:**

1. Form Creation:
   - Create an HTML form that collects the following information from the user:
     i. First Name (text input) – *first_name*
     ii. Last Name (text input) – *last_name*
     iii. Email Address (email input) – *email_address*
     iv. Department (dropdown) – *department*
     v. Title (dropdown or radio buttons) – *title*
     vi. Website (optional) – *website*
     vii. Phone Number (optional) – *phone_number*
   - Include a checkbox for "Dr." that, when checked, will prepend the title "Dr." to the name when displayed.

2. Validation:
   - Use JavaScript to validate the input before submission.
   - The following fields should be required:
     i. First Name
     ii. Last Name
     iii. Email Address
     iv. Department
     v. Title
   - Validation rules:
     i. Ensure the email address is valid and in the correct format.
     ii. Validate phone numbers to ensure they contain only digits and follow a valid format.
     iii. Only allow valid URLs to be entered for the website field (if filled out).

3. Form Display:
   - Upon form submission, the user's input should be displayed back to them on the page in a formatted manner.

- If the "Dr." checkbox is checked, prepend "Dr." to the name when displayed.
- The email address and website should be clickable links (i.e., using <a> tags).
- Ensure the display includes:
    i. Full Name (with or without "Dr.")
    ii. Department
    iii. Title
    iv. Email Address (as a clickable link)
    v. Phone Number (if provided)
    vi. Website (if provided, as a clickable link)

4. HTML & CSS Validation:
   - Ensure the form is valid HTML5 and passes W3C validation.
   - Use the following validators:
   - HTML Validator
   - CSS Validator
   - The form should be fully functional and accessible.

5. Design Requirements:
   - The form should be visually appealing and easy to use. Style the form and display area using CSS.
   - The form should be responsive and display correctly on desktop and mobile devices.
   - **Optional:** Use CSS frameworks like Bootstrap or custom styles to improve the overall design.

## Submission:

- Submit your completed project as a ZIP or RAR file containing:
    o index.html - The HTML file containing the form.
    o script.js - The JavaScript file handling validation and display.
    o styles.css - The CSS file for styling the form and display.
- Upload the ZIP file to the appropriate Dropbox in D2L.

## Grading Criteria:

- Form Creation (30%)
    o Correct structure of the HTML form.
    o Appropriate use of form elements (text input, dropdown, radio buttons, etc.).
    o Logical and user-friendly form layout.

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- JavaScript Validation (30%)
    - Correct implementation of JavaScript for form validation.
    - Properly handling required fields and valid input formats (email, phone number, URL).
    - Display of validation error messages.
- Data Display (20%)
    - Correct display of user input after submission.
    - Use of clickable links for email and websites.
    - Proper handling of the "Dr." checkbox.
- Code Quality and Responsiveness (20%)
    - Well-organized and readable code.
    - Proper use of HTML, CSS, and JavaScript.
    - Responsiveness of the form and display on different screen sizes.

**Conclusion:** By completing this midterm, students will have hands-on experience in form handling, data validation, and DOM manipulation in JavaScript, all while ensuring a user-friendly interface.