

Title: Angular Template Driven Forms: Real World Scenario Lab Exercise

Objective: The objective of this lab exercise is to practice creating and working with Angular template-driven forms in a real-world scenario. By completing this exercise, you will gain hands-on experience in building a form that captures user information and simulates a common real-world scenario.

Scenario: You are tasked with building a user registration form for a conference registration website. The form should collect information such as the attendee's name, email address, organization/company, and their choice of workshops to attend. Additionally, the form should include validation to ensure that all required fields are filled out correctly.

Tasks:

1. Setup:

- Create a new Angular project using Angular CLI.
- Set up a new component named `registration-form` using Angular CLI.
- Open the project in your preferred code editor.

2. Form Creation:

- Inside the `registration-form` component, create a template-driven form using Angular's built-in form directives.
- Design the form to include the following fields:
 - Name (text input)
 - Email Address (email input with validation)
 - Organization/Company (text input)
 - Workshops (checkboxes or dropdown to select workshops)

3. Validation:

- Implement validation for the form fields:
 - Name: Required field.
 - Email Address: Required field and should be a valid email address.
 - Organization/Company: Required field.
 - Workshops: At least one workshop must be selected.

4. Submission:

- Handle form submission by logging the form data to the console for now.
- Display a success message upon successful form submission.

5. Styling:

- Apply basic CSS styling to make the form visually appealing and user-friendly.

6. **Testing:**

- Test the form by filling it out with various scenarios:
 - Valid input for all fields.
 - Invalid input for one or more fields.
 - Submitting the form with no input.
 - Ensure validation messages are displayed correctly.

Additional Challenges (Optional):

- Implement custom validation for the email field to check for a specific domain (e.g., only accept email addresses from a certain domain).
- Add additional form fields relevant to the conference registration scenario, such as a dropdown for selecting the type of registration (e.g., regular, VIP, student).
- Integrate the form with a backend service to store the registration data.

Conclusion: By completing this lab exercise, you have gained practical experience in building an Angular template-driven form for a real-world scenario. You have learned how to create form fields, implement validation, handle form submission, and apply basic styling. This exercise provides a solid foundation for working with forms in Angular applications.