

## **Project: Dynamic Form Builder**

**Duration: 2 Days**

### **Overview:**

Build a dynamic form builder where users can:

- Create a form by adding a title and then click the "Add More" button to dynamically add multiple dropdown fields.
- Each dropdown will have a fixed set of options, and users can mark the field as required.
- Upon form submission, the form title and the selected options will be saved in the database.

A Preview Page will display the saved form, where:

- The dropdowns are shown with:
  - The correct options for each dropdown.
  - The selected item is displayed in the dropdown.
  - A red asterisk (\*) next to required fields.

The layout will be styled to clearly highlight the required fields and selected options, making the form user-friendly and easy to use.

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### **Detailed Steps:**

1. Create a Form Title:
  - The user should be able to enter a title for their form.
2. Add More Dropdown Fields:
  - The user should see the "Add More" button.
  - When clicked, it should add a new dropdown field.
  - For each dropdown, the user should:
    - Set a label (e.g., "Select Country").
    - Choose if the field is required (checkbox).

- Choose an option from a fixed list (e.g., Option 1, Option 2, Option 3).

The screenshot shows a 'Dynamic Form Builder' application window. At the top, there's a 'Form Title' input field containing 'Form Title..'. Below it are two dropdown menus labeled 'Level 1' and 'Level 2', both currently showing 'Select Item'. At the bottom of the form creation area are three buttons: 'Add More' (blue), 'Save' (green with a save icon), and 'Clear' (dark grey).

### 3. Save the Form:

- When the user finishes creating the form, they should click the Submit button.
- The form's title and the dropdown field information (label, options, required status) should be saved in the database.

### 4. Display Forms in a Grid:

- After the form is saved, it should appear in a grid (table).
- Each row should have a Preview button that leads to the preview page.

The screenshot shows a 'History' section with a table listing saved forms. The columns are 'Form Title' and 'Action'. The data rows are:

Form Title	Action
Student Information	<a href="#">Preview</a>
Employee Information	<a href="#">Preview</a>
Company Information	<a href="#">Preview</a>

5. Preview the Form:

- When the user clicks Preview, they should be taken to another page where:
  - The dropdown fields are shown with the selected options.
  - If a dropdown is required, a red asterisk should appear next to it.

The screenshot shows a web-based application titled "Dynamic Form Builder". At the top, there's a header bar with the title. Below it is a form area divided into sections. The first section is labeled "Form Title" and contains a text input field with the placeholder "Form Title..". The second section is labeled "Level 1" and contains a dropdown menu with the placeholder "Select Item". The third section is labeled "Level 2" and also contains a dropdown menu with the placeholder "Select Item". At the bottom of the form are two buttons: a green "Save" button with a save icon and a dark blue "Clear" button.

**Technologies You Will Use:**

- ASP.NET Core MVC (for server-side logic)
- HTML/CSS/JavaScript (for building the form)
- Datatable grid.
- MS SQL Database

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**Things to do:**

1. Database Design
2. Form Builder UI.
3. Backend Logic.
4. ADO.NET with store procedure based.
5. Form Validation with jQuery validation.

6. Datatable grid with server site pagination.
7. Grid View with Preview

### **Bonus Points**

1. API Integration: Extra points for using API controllers with proper AJAX calls.
2. View Components: Bonus for dynamically rendering dropdowns using View Components.

### **Project Delivery via email**

1. project source code: Complete project source code including database with public repository link or single downloadable ZIP file.
2. PDF Summary Report:
  - o Code snippets,
  - o Form creation preview snippets,
  - o Grid and dropdown styling snippets,
  - o Database snippets,
  - o Result snapshot