MEAN Stack Development Task: **Task time: 30 Min to 60 min**

Form Description for MEAN Stack Task

Objective:

Create a form with 10-15 fields, including three cascading dropdowns, to collect user data that will be saved via CRUD operations, used for PDF generation, and linked to an external API.

Form Fields:

Full Name (Text Input)
Type: String
Validation: Required, min 2 characters, max 50 characters.

Email (Text Input)
Type: Email
Validation: Required, valid email format.

Phone Number (Text Input)
Type: String
Validation: Required, 10-digit number.

Date of Birth (Date Input)
Type: Date
Validation: Required, user must be at least 18 years old.

Gender (Dropdown)
Options: Male, Female, Other
Validation: Required.

Age
· Integrate a free external API (e.g., https://api.agify.io/?name={name}) to predict the user's age based on their name.

· Display the predicted age alongside each user in the table/list.

Address Line 1 (Text Input)
Type: String
Validation: Required, max 100 characters.

Address Line 2 (Text Input)
Type: String
Validation: Optional, max 100 characters.

Country (Dropdown - Cascading Dropdown 1)
Options: USA, India, Canada
Validation: Required.

Behavior: Selection triggers options in the "State/Province" dropdown.

State/Province (Dropdown - Cascading Dropdown 2)
Options: Dynamically populated based on "Country."
If USA: California, Texas, New York
If India: Maharashtra, Karnataka, Delhi
If Canada: Ontario, Quebec, British Columbia
Validation: Required.

Behavior: Selection triggers options in the "City" dropdown.

City (Dropdown - Cascading Dropdown 3)
Options: Dynamically populated based on "State/Province."
If California: Los Angeles, San Francisco, San Diego

If Texas: Houston, Austin, Dallas

If New York: New York City, Buffalo, Rochester

If Maharashtra: Mumbai, Pune, Nagpur

If Karnataka: Bangalore, Mysore, Mangalore

If Delhi: New Delhi, Noida, Gurgaon

If Ontario: Toronto, Ottawa, Hamilton

If Quebec: Montreal, Quebec City, Laval

If British Columbia: Vancouver, Victoria, Kelowna
Validation: Required.

Zip Code (Text Input)
Type: String
Validation: Required, 5-6 characters (alphanumeric).

Occupation (Dropdown)
Options: Student, Engineer, Doctor, Other
Validation: Required.

Annual Income (Text Input)
Type: Number
Validation: Optional, positive number.

Signature (Canvas E-Signature)
Type: Image (captured from canvas)
Validation: Required (user must draw a signature).

Form Behavior:
Cascading Dropdown Logic:
Selecting a Country filters the State/Province options.
Selecting a State/Province filters the City options.
Example: Choosing India → Maharashtra → Mumbai.

Validation:
Display error messages below each field if validation fails (e.g., "Email is invalid," "City is required").

Submission:
On submit, send all form data to the POST /api/users endpoint.

PDF Generation:
Include all 14 fields and the e-signature in the generated PDF.
Capture the user's signature as an image and embed it in the generated PDF.