**DOCUMENTATION OF PROJECT\_1 OF WEB DEVELOPMENT**

### HTML and CSS Documentation:

#### **HTML Structure:**

1. **DOCTYPE Declaration:**
   * Specifies the document type and HTML version.
2. **HTML Tag:**
   * The root HTML tag with the "lang" attribute set to "en".
3. **Head Section:**
   * Meta tags for character set and viewport settings.
   * Internal CSS styles for styling the form.
   * Title tag for the page title.
4. **Body Section:**
   * Container div with three sections for login, signup, and forgot password.
   * Each section contains a form with specific fields and buttons.
   * JavaScript script tag for client-side validation and form interactivity.

#### **CSS Styles:**

1. **Body:**
   * Sets font family, margin, padding, display properties for the body.
   * Uses Flexbox to center the content vertically and horizontally.
   * Sets a background color.
2. **Container:**
   * Specifies the maximum width and centers it on the page.
3. **Form:**
   * Styles for the form, including background color, padding, border radius, and box shadow.
   * Flex container for arranging form elements vertically.
4. **Label, Input, Button:**
   * Styles for labels, inputs, and buttons within the form.
   * Defines padding, margin, background color, border, and border radius.
   * Hover effect for buttons.
5. **Forgot Password:**
   * Center-aligns the text and adds top margin.
6. **Media Query:**
   * Adjusts the container width for smaller screens (max-width: 480px).

#### **JavaScript Functions:**

1. **validateLogin():**
   * Validates login form fields (username and password) and shows alerts for invalid input.
   * Checks if the entered username is a valid email.
   * Checks if the password meets certain criteria.
   * Simulates login validation (replace with actual authentication logic).
2. **isValidEmail(email):**
   * Validates an email address using a regular expression.
3. **isValidPassword(password):**
   * Validates a password using a regular expression.
4. **displaySuccessMessage():**
   * Simulates a success message display (replace with actual logic).
5. **showForgotPasswordForm(), showSignupForm(), showLoginForm():**
   * Functions to toggle between different form sections.
6. **sendResetLink():**
   * Placeholder function for sending a reset link (can be extended with actual logic).
7. **goBack():**
   * Returns to the login section from the forgot password section.
8. **validateSignUp():**
   * Validates signup form fields and shows alerts for invalid input.
   * Checks if the email is valid, if the password meets certain criteria, and if the password and confirm password match.
   * Placeholder logic for successful signup (replace with actual signup logic).