Problem Set 02: Intermediate practice exercises

These exercises will help intermediate users solidify their understanding of HTML while exploring **new** concepts like forms, accessibility, and semantic elements.

Exercise 1: Create a Multi-Page Website

1. Create a simple website with the following pages:

    o   **index.html**: Home page with a navigation menu.

    o   **about.html**: About page with a brief description of yourself or a fictional company.

    o   **contact.html**: Contact page with a form containing the following fields:

        ▪   Name (text input)

        ▪   Email (email input)

        ▪   Message (textarea)

        ▪   Submit button

2. Ensure all pages are linked using an <nav> element with hyperlinks (<a> tags).

Exercise 2: Design a Table with Nested Elements

1. Create a table to represent a class schedule:

    o   Include a header row with the days of the week.

    o   Each row should represent a time slot (e.g., Morning, Afternoon, Evening).

    o   In at least one cell, including nested elements like a <ul> list of tasks or subjects.

Day	Seminar		
	Schedule		Topic
	Begin	End	
Monday	8:00 a.m.	5:00 p.m.	Introduction to XML
			Validity: DTD and Relax NG
Tuesday	8:00 a.m.	11:00 a.m.	XPath
	11:00 a.m.	2:00 p.m.	
	2:00 p.m.	5:00 p.m.	XSL Transformations
Wednesday	8:00 a.m.	12:00 p.m.	XSL Formatting Objects

2.

Exercise 3: Create an HTML Form with Validation

1. Build a form for event registration with the following fields:

    o   Full Name (required)

    o   Email Address (required, validate format)

    o   Password (required, minimum length 8 characters)

    o   Event Date (date input)

    o   Dropdown to select event type (e.g., Workshop, Seminar)

    o   Submit button

2. Use HTML5 form validation features.

Event Registration Form

Full Name:

> Enter your full name

Email Address: ! Please fill out this field.

> nurlan@gmail.kg

Password:

> •••••

Event Date:

> mm/dd/yyyy

Event Type:

> Select an event type

> Register

    3.

Exercise 4: Add Media Embeds

1. Create a page that includes:

     o   A YouTube video embedded using the <iframe> tag.

     o   An audio file embedded using the <audio> tag with controls.

     o   A local or external PDF file linked for download.

Exercise 5: Use Semantic HTML

1. Recreate the structure of a blog post using semantic tags:

   o Use <header> for the title and publication date.

   o Use <article> for the main content.

   o Include a <section> for related links.

   o Add <footer> for the author's name and social media links.

Exercise 6: Design a Modal Popup

1. Create a page with a button that says "Click Me".

2. When the button is clicked, a modal (popup) appears with some text and a "Close" button.

3. Use only HTML and CSS to create the popup.

Exercise 7: Build a Progress Bar

1. Create an HTML page with a simulated file upload progress bar using the <progress> tag.

2. Add a label above the progress bar to indicate its current state (e.g., "50% Completed").

File Upload Progress

Uploading File: ▬▬▬▬▬▬▬▬

50% completed

3.