

XML Lab: Create an XML document

Objective:

In this lab, you will create an XML document representing a simple book catalogue. You will then validate the XML to ensure it's well-formed and finally display the XML data in an HTML page.

Instructions:

Create the XML Document:

- Create a new XML document named book.xml.
- Each book should have an id attribute.
- Each book should contain child elements: title, author, and price.

Validate the XML:

- Ensure that your XML is well-formed.
- Use online XML validators like XML Validation to check the structure.

Display the XML Data in an HTML Page:

- Fetch the XML data using JavaScript.
- Display each book's title, author, and price in the HTML page.

JSON Lab: Creating a Simple User Profile

Objective:

In this lab, you will craft a JSON document representing a set of user profiles. After creating the document, you will validate its structure to ensure its correctness. Finally, you will display the user profile data on an HTML page.

Instructions:

Create the JSON Document:

- Create a new JSON document named userProfiles.json.
- Each user profile should have the following data: firstName, lastName, email, dateOfBirth, and user preferences (which includes theme, language, notifications).
- Add at least 3 user profiles to the document, each with its unique details and preferences.

Validate the JSON:

- Confirm that your JSON structure is well-formed.
- Use online JSON validators like [JSONFORMATTER&VALIDATOR](#) to check the structure. Simply paste your JSON data into the validator and check for any errors.

Extend the JSON:

- Add an address field to the profile section of each user. The address should include street, city, state, and zipCode.
- Add a subscription field to the preferences section indicating whether the user has subscribed to the newsletter (true or false).

Display the User Profiles in an HTML Page:

- Fetch the JSON data employing JavaScript.
- Exhibit each user's firstName, lastName, email, dateOfBirth, and other attributes on the HTML page.

Local Storage Lab: To-Do List with Local Storage

Objective:

Create a simple to-do list where tasks can be added and removed. The list should be saved in Local Storage so that tasks persist even after the browser is closed.

Add Task

- task 1
- task 2
- task 3