



**KIDS & TEENS FREELANCING TRAINING INSTITUTE**

# JSON Course Outline

## Module 1: Introduction to JSON

- What is JSON and what it stands for (JavaScript Object Notation)
  - Real-life example: Packing information like a contact card
  - Why JSON is used to send and receive data online
  - JSON vs. XML in simple words
  - Activity: Look at a real example of a JSON file
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## Module 2: Understanding JSON Structure

- How JSON organizes data using key-value pairs
  - Real-life example: Listing a product with name, price, and color
  - Rules for writing correct JSON
  - How JSON looks compared to JavaScript objects
  - Activity: Write a simple JSON object describing your favorite book
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## Module 3: Working with JSON in JavaScript

- How to convert JSON data to JavaScript objects
  - Real-life example: Turning a list of products into usable webpage data
  - Using `JSON.parse()` and `JSON.stringify()`
  - How to safely read and create JSON in your code
  - Activity: Parse a small JSON and display values in the console
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## Module 4: JSON Arrays and Nested Data

- How to create arrays of objects in JSON
- Real-life example: Listing all your favorite movies

- Understanding nested objects and how to access them
  - How to loop through JSON arrays
  - Activity: Create a JSON array of 5 cities you want to visit
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## **Module 5: Fetching JSON Data from APIs**

- What is an API and how JSON plays a role
  - Real-life example: Getting weather updates from a server
  - Using `fetch()` to get JSON data from a web service
  - Displaying live data on a webpage
  - Activity: Fetch a sample JSON file and show the data
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## **Module 6: Sending JSON Data**

- How websites send JSON when you submit forms
  - Real-life example: Sending your signup info to a server
  - Using `POST` method to send JSON
  - How to structure and prepare data before sending
  - Activity: Create a mini form that collects and sends JSON data
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## **Module 7: Common Mistakes and Fixes**

- Why commas, quotes, and brackets matter
  - Real-life example: Debugging a broken JSON feed
  - Reading JSON error messages smartly
  - Tips for validating and cleaning JSON data
  - Activity: Fix a broken JSON sample
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## **Module 8: Final Project – Create a Mini JSON API**

- Build a mini JSON server (using mock tools like JSONPlaceholder)
  - Real-life example: A mini app that lists and adds comments
  - Displaying and updating data live
  - Activity: Create and show a live list of favorite books or movies using JSON
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## **Bonus Materials**

- JSON syntax cheat sheet
- List of free JSON API practice sites
- Validation tools for checking JSON errors
- Mini-challenges to practice parsing and creating JSON
- Certificate of Completion for JSON Basics