Advanced JS - Assessment

Introduction

In this phase of our Food Order application development, we'll focus on enabling seamless interaction between the front-end and back-end. You'll learn how to fetch and post data using a local JSON Server, which will simulate real-world backend operations. Additionally, we'll implement user authentication using **Local Storage** and **Session Storage**. Once a user successfully logs in, you will fetch the username and display it on the header to create a more personalized experience. This stage lays the foundation for data-driven features and secure user sessions in our application.

Objectives of the Assessment:

✔ Learn how to **launch and use a local JSON Server.**
✔ **Fetch and post data** to/from the JSON Server using JavaScript.
✔ Use **Local Storage and Session Storage** for login authentication.
✔ **Dynamically render table rows** using JSON data.
✔ **Handle form submissions** and update the UI in real time.
✔ Write **clean, modular, and error-free JavaScript code** for frontend-backend communication.

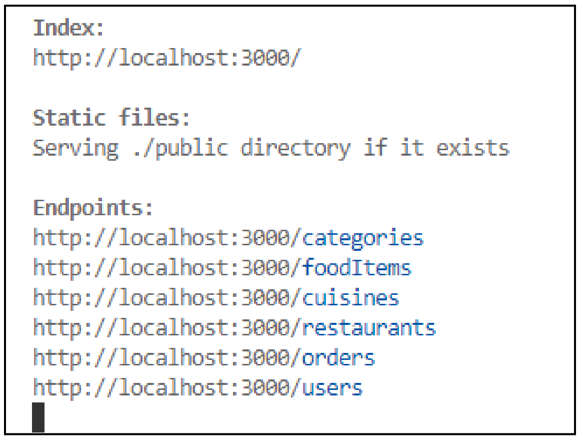
Problem Statement

To proceed with the development, we must have the server running with the required data. Follow the instructions in the Readme.txt file from the source code to launch a JSON server and complete the tasks below.

While writing the JS code, use the try-catch blocks where needed to handle errors.

1. Table Data

a. Once the JSON Server is up and running, a list of API URLs will appear in the terminal.
b. Use these URLs to **fetch data** and display it in the corresponding **tables on your web pages**.
c. Create a new JavaScript file inside the `js` folder and link it to the appropriate HTML file.
d. Use the **Fetch API with error handling** to retrieve data from the server and dynamically add it to the table's `<tbody>` section.
e. Repeat this process for **all tables** in the application to ensure each one is populated with server data.



```
Index:
http://localhost:3000/

Static files:
Serving ./public directory if it exists

Endpoints:
http://localhost:3000/categories
http://localhost:3000/foodItems
http://localhost:3000/cuisines
http://localhost:3000/restaurants
http://localhost:3000/orders
http://localhost:3000/users
```

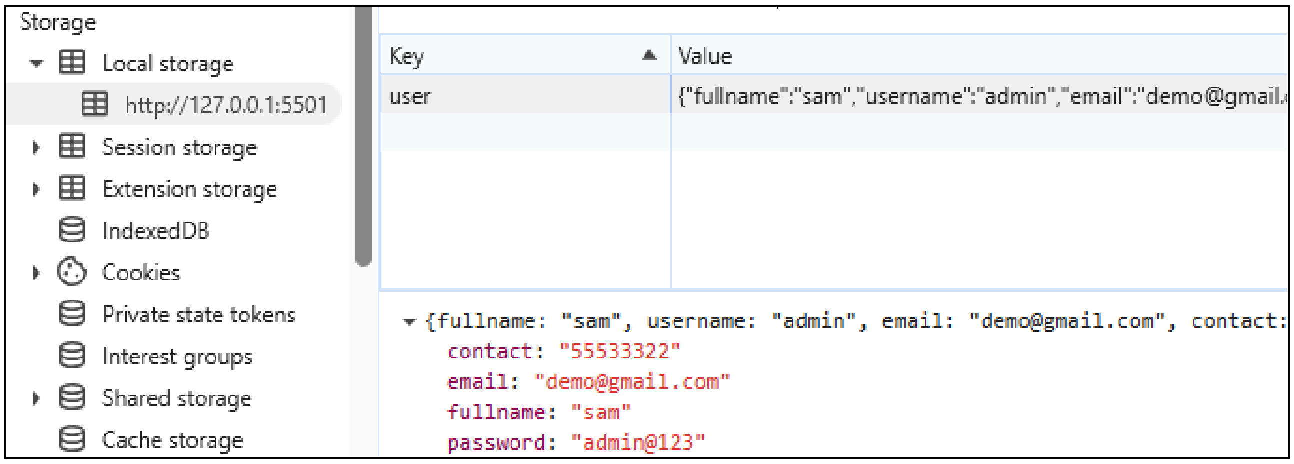
2. Form Data

a. When the form is submitted, **collect and validate** the input data to ensure it's complete and correct.
b. Use the **Fetch API with error handling** to **upload the data to the JSON Server** via a POST request.
c. **After successful submission, reset the form** and **redirect the user** to the corresponding table view page
—*for example, submitting the* ***Add Category*** *form should navigate to the* ***View Categories*** *page.*
d. Ensure the **newly added data appears** in the table immediately.
e. Repeat this process for **all form web pages** in the application to ensure each one is populated with server data.

3. Register

A user **must be registered** before accessing any page on the website.

a. Use the **Registration form** to collect user details and handle the **form submission** using JavaScript.
b. **Fetch the input data** and **validate** it upon submission.
c. Store the **data** as an **object in Local Storage** for reference and authentication purposes as shown below.

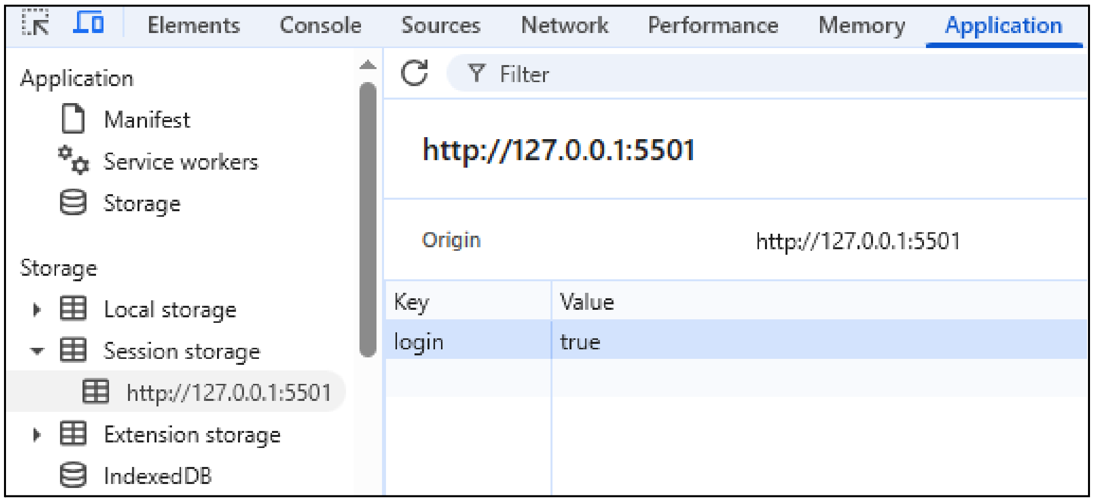


Key	Value
user	{"fullname":"sam","username":"admin","email":"demo@gmail.

```
▾ {fullname: "sam", username: "admin", email: "demo@gmail.com", contact:
    contact: "55533322"
    email: "demo@gmail.com"
    fullname: "sam"
    password: "admin@123"
```

4. Sign In

a. Use the **Sign In form** to **capture the username and password** upon submission.
b. **Retrieve the stored user data** from **Local Storage** and **verify the credentials** against it.
c. If the credentials are valid, **set the login status to true** and **store it in Session Storage**. Also, **redirect the user to the home page** of the application.
d. If the credentials are not valid, **show a message on the page to register before Sign in.**
e. Ensure that access to the home page is **restricted** unless the user has successfully **signed in** and the login status is verified.



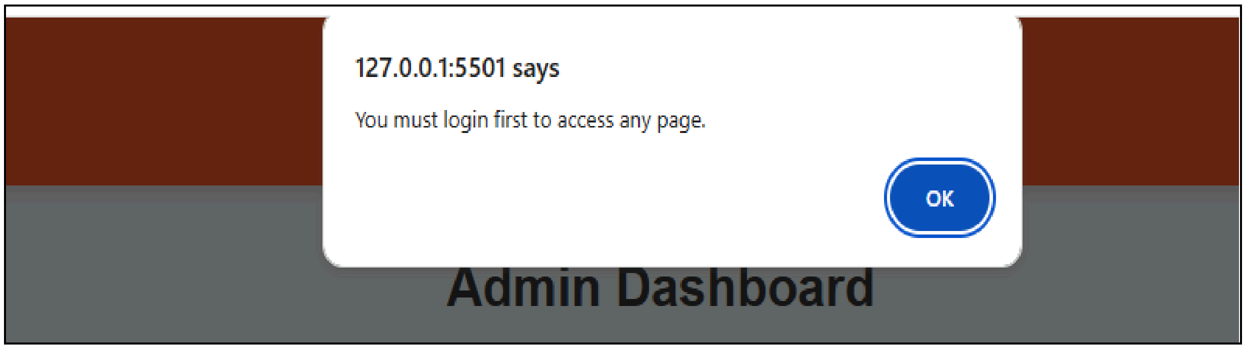
http://127.0.0.1:5501

Origin http://127.0.0.1:5501

Key	Value
login	true

5. Validate Sign In

a. On loading **any web page**, first **check the log-in status** from **Session Storage**.
b. If the login status is **false or missing**, display an **alert** prompting the user to sign in, and **redirect** them to the **Sign In** page.
c. If the login status is true in session storage, allow access to the page and **display the username in the header**.
d. Apply this validation logic to **all HTML pages** in the application **except** `sign-in.html` and `register.html`.
e. Add an event listener to the **Sign Out** button on every page header, when clicked, **removes the login status from Session Storage** and **redirects the user to the Sign In page**.



127.0.0.1:5501 says

You must login first to access any page.

!!! Happy Coding !!!