Integrating Frontend with Backend

1. Understanding Restful APIs

→ REST (Representational state transfer) is an architecture style for designing networked applications. RESTful APIs use HTTP requests to perform CRUD (Create, Read, Update, Delete)

Key char →

- Stateless : Each APT call is independant with no stored context on the server

- Resource - based : Each piece of data (resource) is identified by a URL

- Methods : Common HTTP methods include GET, POST, PUT, DELETE.

GET → Retrieve data from the server

POST → Send new data to the server

PUT → Update existing data on the server.

Delete : Remove data from the server

* Making API calls from the frontend

To integrate a frontend application with a backend server, the frontend needs to make HTTP req to the backend.

- Identifying the endpoints.
- Using HTTP methods appropriately
- Handling Responses:

Process

1 Initial Data fetch (GET Request)

- when the frontend app. loads, it makes a GET req to the backend to fetch initial data

- The backend responds with data in a structured fromat typically JSON

2 Sending Data (POST req)

- When a User submit a form or

performs an actions that requires adding new data, the frontend sends a POST req to the backend.

3 Updating Data (PUT Request)

- for updating existing data, the frontend sends a put req with the updated data to a specific URL identifying the resource.

- The backend updates the resource and responds with the updated resource or a success message

4 Deleting Data (Delete Req)

⌐ To delete a resource, the frontend sends a delete req to the specific URL of the resource.

⌐ The backend remove the resource & responds with a confirmation message.