

MAD 1 WEEK 7 LA

Introduction to CRUD

- **Definition:** CRUD represents the four basic functions of persistent storage.
- **Importance:** CRUD operations are the foundation of any interactive web application.
- **Where It's Used:** Databases, file storage, API interactions, and more.

2. Explaining Each Operation

a. Create

- **Purpose:** Adds new data to a database.
- **Examples:**
 - Registering a new user.
 - Adding a new product to inventory.
- **SQL Equivalent:** `INSERT INTO` statements.
- **HTTP Method:** `POST`.

b. Read

- **Purpose:** Retrieves data from the database without modifying it.
- **Examples:**
 - Viewing a user profile.
 - Listing items on an e-commerce site.
- **SQL Equivalent:** `SELECT` statements.
- **HTTP Method:** `GET`.

c. Update

- **Purpose:** Modifies existing data.
- **Examples:**
 - Updating a user's profile information.
 - Editing product details in a catalog.
- **SQL Equivalent:** `UPDATE` statements.
- **HTTP Method:** `PUT` or `PATCH`.

d. Delete

- **Purpose:** Removes data from the database.
- **Examples:**

- Deleting an item from a shopping cart.
 - Removing an account.
- **SQL Equivalent:** `DELETE FROM` statements.
- **HTTP Method:** `DELETE`.