**Theory**

**HTTP Request Methods (GET, POST, PUT, DELETE)**

In web development, especially when building APIs, it's crucial to understand the standard HTTP request methods. These methods define how the client interacts with the server and what kind of operations are being performed on the server.

1. **GET**:
   * **Purpose**: Used to retrieve data from the server.
   * **Use case**: When you want to fetch information, for example, retrieving a list of doctors or details of a specific doctor.
   * **Example**: GET /doctors/ to retrieve a list of doctors.
2. **POST**:
   * **Purpose**: Used to submit data to the server, typically to create new records.
   * **Use case**: When you want to create a new resource, such as adding a new doctor.
   * **Example**: POST /doctors/ to add a new doctor.
3. **PUT**:
   * **Purpose**: Used to update an existing resource on the server.
   * **Use case**: When you want to update an entire resource. For example, changing a doctor's contact details.
   * **Example**: PUT /doctors/1/ to update doctor with ID 1.
4. **DELETE**:
   * **Purpose**: Used to delete a resource from the server.
   * **Use case**: When you want to remove a resource, such as deleting a doctor's profile.
   * **Example**: DELETE /doctors/1/ to delete doctor with ID 1.