**Here’s a template for your README file that you can use for your Jersey REST API project:**

1. **Jersey REST API Project**

This project is a demonstration of my understanding of REST API development using the Jersey framework. It was developed as a class project to showcase my skills in building and documenting RESTful services with CRUD operations and pagination features.

Project Overview

- \*\*Author\*\*: Phumlani Nxumalo

- \*\*Framework\*\*: Jersey (RESTful Web Services)

- \*\*Documentation\*\*: Swagger (OpenAPI)

- \*\*Database\*\*: MySQL (via XAMPP)

- \*\*Web Server\*\*: Apache Tomcat 11

- \*\*IDE\*\*: Apache NetBeans 17

- \*\*Build Tool\*\*: Maven

Endpoints

The API provides CRUD operations for the following entities:

1. \*\*Users\*\*

2. \*\*Posts\*\*

3. \*\*Comments\*\*

Each endpoint supports full Create, Read, Update, and Delete (CRUD) operations, along with pagination for listing records.

Features

- \*\*CRUD Operations\*\*: Manage Users, Posts, and Comments via RESTful API endpoints.

- \*\*Pagination\*\*: Implemented to handle large datasets efficiently.

- \*\*Database Integration\*\*: Connected to a MySQL database managed by XAMPP.

- \*\*Swagger Documentation\*\*: Full API documentation generated with Swagger/OpenAPI.

Setup Instructions

Prerequisites

- \*\*Java Development Kit (JDK)\*\*

- \*\*Apache NetBeans 17\*\*

- \*\*Apache Tomcat 11\*\*

- \*\*MySQL Database (via XAMPP)\*\*

- \*\*Maven\*\*

**2. \*\*Import Project into NetBeans\*\*:**

- Open Apache NetBeans 17.

- Select "Open Project" and navigate to the project directory.

**3. \*\*Configure MySQL Database\*\*:**

- Ensure XAMPP is running, and MySQL is started.

- Update the database connection details in the `persistence.xml` or equivalent configuration file.

**4. \*\*Build the Project\*\*:**

```bash

mvn clean install

```

**5. \*\*Deploy to Tomcat\*\*:**

- Deploy the generated `.war` file to Apache Tomcat 11 or configure the server in NetBeans.

**6. \*\*Access the API\*\*:**

- The API will be accessible at `http://localhost:8080/RESTAPI`.

**7. \*\*View API Documentation\*\*:**

- Swagger UI will be available at `http://localhost:8080/RESTAPI/swagger-ui/`.

**Usage**

Once the project is set up and running, you can interact with the API endpoints using tools like Postman or directly via HTTP requests.

**API Documentation**

The full API documentation, including all available endpoints and their descriptions, can be accessed through Swagger UI.

**Contributions**

This was a class project, and contributions are not required. However, if you have suggestions or improvements, feel free to fork the project and submit a pull request.

**License**

This project is licensed under the MIT License.

Feel free to adjust the details to match your specific project setup. Let me know if you need any further adjustments!