Steps followed to implement the wishlist microservice in java

Installations:

1. **Download and Install JDK 1.11**
2. **Download and install VSCode 1.47.2**
3. **MySQL workbench download and install 8.0.21**
   Prerequisites for MySQL:
   1. Microsoft .NET Framework 4.5 - download and install
   2. Visual C++ Redistributable for Visual Studio 2019 - download and install

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Visual Studio code Editor Setup:

Open Visual studio code. Install the below extensions in visual studio code.Extension icon is seen in the leftmost column of the visual studio code editor.

1. Java extension pack
   - Debugger for Java
   - Language support for Java by Red Hat
   - Java Test Runner
   - Maven for Java
   - Java Dependency viewer
   - Visual studio intelli code

2. Spring Boot Extension Pack
   - Spring Boot Dashboard
   - Spring Boot Tools
   - Spring Initializer Java Support
   - Cloud foundry manifest
   - Concourse CI pipeline editor

3. MySQL client for VScode
4. MySQL management tool

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Adding dependencies to the Module

These are the dependencies required for the microservice Wishlist. It can be added while created a project(or it can be copied from the pom.xml)

Dependencies:

- Spring Data JPA
- Spring web
- Dev tools
- Lombok
- Actuator

- Mysql Connector Java
- Starter Test
- Javaee api
- Jersey server 2.13
- Jersey container servlet
- Javax.ws.rs-api

Properties:
- Java 1.8

Plugins:
- Maven Plugin

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Connecting mysql from Visual studio code to mysql server

Click on the image of Database from the left most column of the visual studio editor.
Type the DB name: teqapi and server: 104.154.82.220
And all other information like username and password are specified in the application.properties file. Once everything is given, it will get connected to the mysql server.

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WishList Microservice

8 Files are created for wishlist microservice.

Repository:
1. WishListRepository.java
2. ProductRepository.java

Model:
3. WishListModel
4. WishListId
5. ProductModel

Controller:
6. WishListController

Service:
7. WishListService

Application:
8. WishListApplication

WishListRepository.java:

This class provides the mechanism for storage, retrieval, search, update and delete operation on wishlist table in mysql.It is annotated with @**Repository**

ProductRepository.java:

This class provides the mechanism for storage, retrieval, search, update and delete operation on products table in mysql. It is annotated with @**Repository**

WishListModel.java:
This class is called an entity, it is nothing but a simple POJO(Plain old java object) , representing data that can be persisted to wishlist table. It is annotated with **@Entity**

WishListID.java:
This class holds the fields that together form a composite key for the wishlist table. So it is annotated with @**Embeddable**

ProductModel.java
This class is called an entity, representing data that can be persisted to the products table. It is annotated with **@Entity**

WishListController.java
This class maps the url and its parameters to the request handler method. Three requests are mapped. Delete, Get and Post. It is annotated with **@RestController**

WishListService.java
This class gives the business logic in different layer for all the three mapped requests. It is annotated with **@Service**