**Adding a New Product in the Database**

**Description:**

To create a servlet-based web application that shows a form to add new products. A MySQL database will be created to store product data. The form data will be validated, and a row will be added to the database. All database processing will be done using Hibernate.

**The following are used:**

* Eclipse as the IDE
* Apache Tomcat as the web server
* JSP pages for the front end
* Servlets for backend processing
* Hibernate to store data into the database

**The following operations are performed:**

* An add product form in JSP is created.
* The form submission is handled in a servlet, and it is validated for any missing information
* The product information is added into the database using Hibernate.
* Hibernate configuration files are setup using XML for the product table
* A class has been created to store product data. This class is linked to Hibernate via an hbm.xml file
* The servlet will put the form data into the product class and then pass the product class into Hibernate to add into the database.

**Step by step process involved in performing the above task:**

1. Creating a dynamic web project
2. Adding the jar files in library folder for Hibernate and its dependencies
3. Creating a table product in the database.
4. Creating a class Product
5. Creating a HibernateUtil class to initiate Hibernate in code
6. Creating a hibernate table configuration file product.hbm.xml
7. Configuring Hibernate with hibernate.cfg.xml
8. Creating an HTML page index.html
9. Creating a AddProduct servlet
10. Checking for servlet-api.jar
11. Building the project
12. Publishing and starting the project
13. Running the project
14. Pushing the code to your GitHub repositories