Retrieving the Product Details Using the Product ID.

Introduction:

Create a servlet-based application that shows a form to enter a product ID. The product ID is then validated, and product details are retrieved from the database and displayed to the user. You need to create a product table in MySQL and prepopulate it with data. Use JDBC to do all database processing.

Installation Guide:

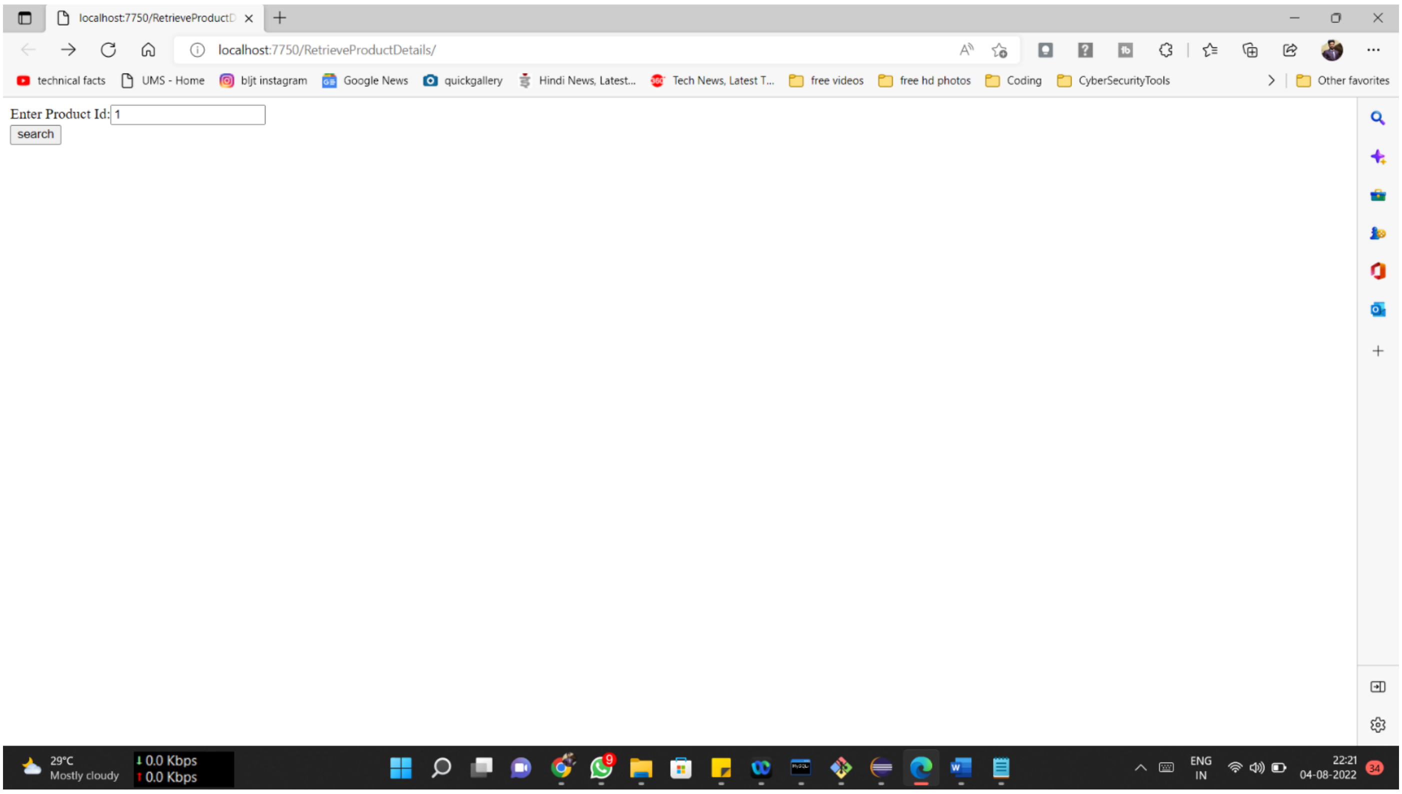
1. GitHub link: https://github.com/baljeet-singh97/JAVA-Projects/tree/main/Phase%202/RetrieveProductDetails

2. Download the entire project as Zip in local system.

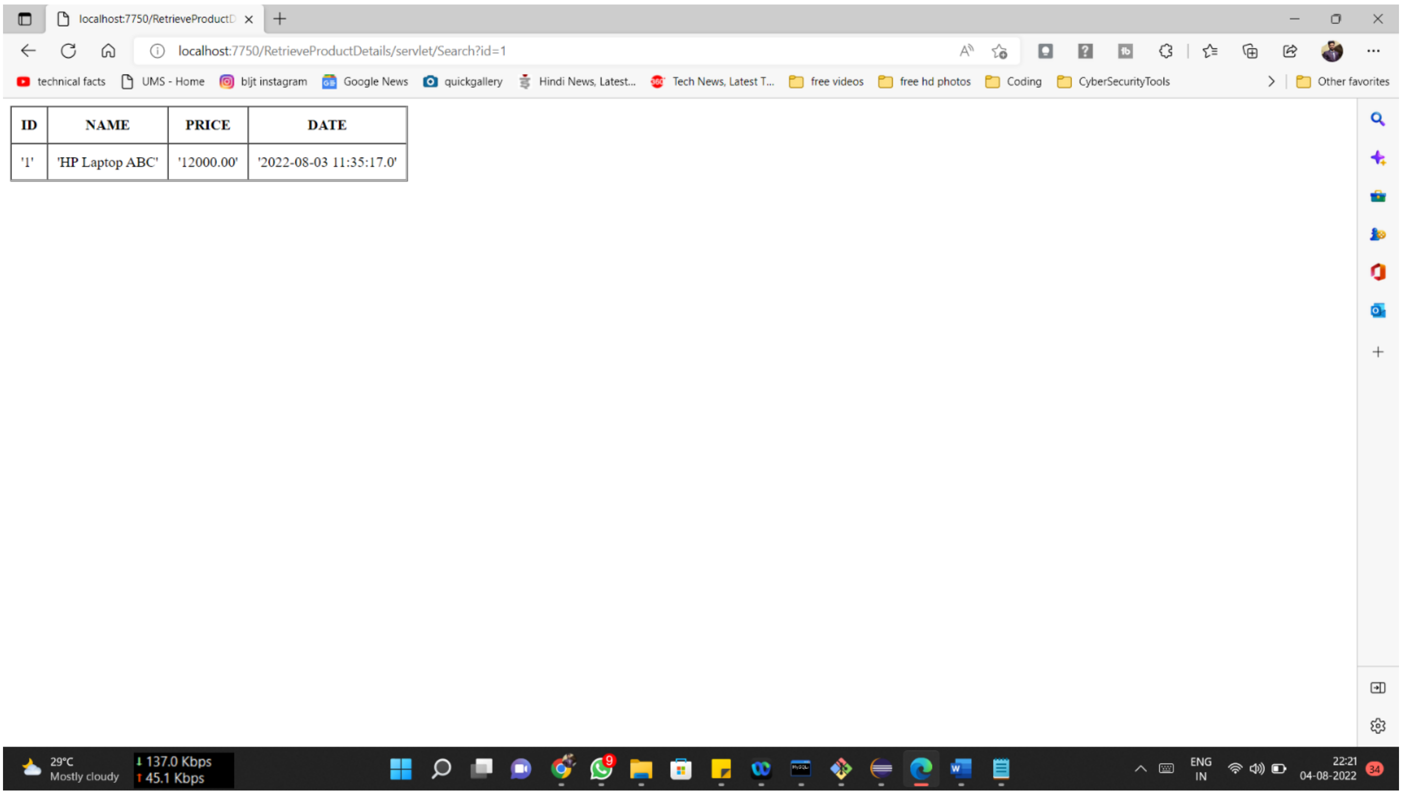
3. import the project in Eclipse IDE

How to use:

After running the web project use will see a page like this when user enter the id it will fetch the data from the database table and show it to the user as shown in below screenshots.



Enter Product Id: 1



ID	NAME	PRICE	DATE
'1'	'HP Laptop ABC'	'12000.00'	'2022-08-03 11:35:17.0'

Code Description

Index.html

Created a simple html page to get user id from the user. Code shown below.

```
<html>

<body>

<form action="servlet/Search">

Enter Product Id:<input type="text" name="id"/><br/>


<input type="submit" value="search"/>

</form>

</body>

</html
```

DBConfig.java

Created a config java servlet that is being used to store all the database related statements like id password and all required drivers.

Created a null connection and provided the mysql details.

```
Connection connection=null;

String driver="com.mysql.cj.jdbc.Driver";

String url="jdbc:mysql://localhost:3306/ecommerce1";

String username="root";

String password="978213";
```

Loading the driver

```
Class.forName(driver);
```

get connection and store it in conn object

```
connection=DriverManager.getConnection(url,username,password);
```

Retrievedata.java

Accessing the id entered by the user

```
String  param=req.getParameter("id");
```

Converting string to int

```
int  id=  Integer.parseInt(param);
```

Connecting to database

```
Properties props= new Properties();

InputStream  in= getServletContext().getResourceAsStream("/WEB-INF/application.properties");

props.load(in);

Connection  conn=DBConfig.getConnection(props);
```

Checking if conn!=null means connection is successfull

```
if(conn!=null)
```

PreparedStatement object provides a feature to execute a parameterized query.

```
PreparedStatement  stmt= conn.prepareStatement("SELECT * FROM eproduct WHERE  id= ?");
```

Inserting the id provided by the user to the querry

```
stmt.setInt(1, id);
```

Executing the query

```
ResultSet rs=stmt.executeQuery();
```

Running the loop while rs.next() and printing the data to the user by following code.

```
while(rs.next())
```

```
out.print("<tr>");

out.print("<td>'"+rs.getInt(1)+"'</td><td>'"+rs.getString(2)+"'</td><td>'"+rs.getBigDecimal(3)+"'</td><td>
'"+rs.getTimestamp(4)+"'</td>");

out.print("</tr>");
```