Online Shopping Store Deployment Guide

This document provides step-by-step instructions to deploy and run the Online Shopping Store Java project locally using Eclipse, MySQL Workbench, and Apache Tomcat v9.

1. Requirements

Before you begin, make sure you have the following tools installed:

- ☑ Java JDK 8 or above
- ☑ Eclipse IDE (preferably Eclipse IDE for Enterprise Java Developers)
- ☑ Apache Tomcat v9
- ☑ MySQL Workbench and MySQL Server
- ☑ Project archive: **OnlineShoppingStore.zip**
- ☑ Database script: **onlineshoppingstore new.sql**

2. Import Project into Eclipse

1. Launch Eclipse IDE.
2. Go to: **File ➔ Import... ➔ Existing Projects into Workspace**
3. Select **Archive File**, then click **Browse...** and choose **OnlineShoppingStore.zip**.
4. Click **Finish** to import the project.

3. Set Up the Database

1. Open MySQL Workbench.
2. Create a new schema, e.g., **onlineshoppingstore**.
3. Open the file **onlineshoppingstore new.sql**.
4. Execute the SQL script to create all tables and insert sample data.

4. Configure Database Connection

1. In Eclipse, go to the file **DBConnection.java** (located inside the **util** package).
2. Update the connection credentials as follows:

```java Copy
URL:      jdbc:mysql://localhost:3306/YOUR_DATABASE_NAME
USER:     root    PASSWORD:
your_password
```

3. Save the file.

5. Add Tomcat Server in Eclipse

1. Go to: **Window ➜ Show View ➜ Servers**.
2. Click **Create a new server**.
3. Choose: **Apache ➜ Tomcat v9.0 Server**.
4. Select the Tomcat installation directory.
5. Add the **OnlineShoppingStore** project to the server.
6. Click **Finish**.

6. Run the Project

1. Right-click on the Tomcat server in the **Servers** view.
2. Click **Start** or **Run**.
3. Open your browser and visit: **http://localhost:8080/OnlineShoppingStore/**

☑ Project Successfully Deployed!

If the project doesn't run correctly:

- 🔍 Make sure MySQL Server is running.
- 🔍 Double-check your database connection values.
- 📄 Review the console logs for exceptions or errors.

7. (Optional) Configure web.xml

1. Navigate to: **WebContent/WEB-INF/web.xml**.
2. Ensure the following structure is present for servlet and welcome file mapping:

```xml
xml Copy
<web-app>
    <servlet>
        <servlet-name>UserLoginServlet</servlet-name>
        <servlet-class>servlet.UserLoginServlet</servlet-class>
</servlet>
    <servlet-mapping>
        <servlet-name>UserLoginServlet</servlet-name>
        <url-pattern>/user/login</url-pattern>
    </servlet-mapping>
    <welcome-file-list>
        <welcome-file>user/UserLogin.jsp</welcome-file>
    </welcome-file-list>
</web-app>
```