

## Adding a New Product in the Database source code

Class:

**EProduct.java**→filename

```
package com.ecommerce;

//package com.ecommerce;

import java.math.BigDecimal;
import java.util.Date;

import javax.persistence.*;

@Entity
@Table(name = "eproduct")
public class EProduct {

    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    @Column(name = "ID")
    private long ID;

    @Column(name = "name")
    private String name;

    @Column(name = "price")
    private BigDecimal price;

    @Column(name = "date_added")
    private Date dateAdded;

    public EProduct() {
    }

    public EProduct(String name, BigDecimal price, Date dateAdded) {
        this.name = name;
        this.price = price;
        this.dateAdded = dateAdded;
    }

    public long getID() {
        return ID;
    }

    public void setID(long ID) {
        this.ID = ID;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
}
```

```

    }

    public BigDecimal getPrice() {
        return price;
    }

    public void setPrice(BigDecimal price) {
        this.price = price;
    }

    public Date getDateAdded() {
        return dateAdded;
    }

    public void setDateAdded(Date dateAdded) {
        this.dateAdded = dateAdded;
    }
}

```

## Servlet filename

**AddProductServlet->filename**

```

package com.simpli;

import java.io.IOException; import java.math.BigDecimal; import java.util.Date;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

import org.hibernate.Session;
import org.hibernate.SessionFactory;

import com.ecommerce.EProduct;

@WebServlet("/AddProductServlet")
public class AddProductServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;
    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
        String name = request.getParameter("name");
        BigDecimal price = new BigDecimal(request.getParameter("price"));
        Date dateAdded = new Date();

        EProduct product = new EProduct(name, price, dateAdded);

        SessionFactory sessionFactory = HibernateUtil.getSessionFactory();
        Session session = sessionFactory.openSession();
        session.beginTransaction();

        session.save(product);

        session.getTransaction().commit();
        session.close();
    }
}

```

```

        response.sendRedirect("index.jsp");
    }
}

```

## Classfile

### HibernateUtil->filename

```

package com.simpli;

import org.hibernate.SessionFactory;

import org.hibernate.boot.Metadata;
import org.hibernate.boot.MetadataSources;
import org.hibernate.boot.registry.StandardServiceRegistry;
import org.hibernate.boot.registry.StandardServiceRegistryBuilder;
public class HibernateUtil {

    private static final SessionFactory sessionFactory;

    static {
        try {
            StandardServiceRegistry standardRegistry = new
StandardServiceRegistryBuilder()
                .configure("hibernate.cfg.xml")
                .build();

            Metadata metaData = new MetadataSources(standardRegistry)
                .getMetadataBuilder()
                .build();

            sessionFactory = metaData.getSessionFactoryBuilder().build();
        } catch (Throwable th) {
            throw new
ExceptionInInitializerError(th);
        }
    }

    public static SessionFactory getSessionFactory() {
        return sessionFactory;
    }
}

```

### Hibernate.cfg.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration PUBLIC "-//Hibernate/Hibernate Configuration DTD
3.0//EN"
    "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
    <session-factory>
        <property
name="hibernate.dialect">org.hibernate.dialect.MySQL5Dialect</property>
        <property
name="hibernate.connection.driver_class">com.mysql.cj.jdbc.Driver</property>
        <property
name="hibernate.connection.url">jdbc:mysql://localhost:3306/products</property>
        <property name="hibernate.connection.username">rock</property>
    
```

```

        <property name="hibernate.connection.password">@aadi123</property>
        <property name="hibernate.hbm2ddl.auto">update</property>
        <property name="show_sql">true</property>
        <mapping class="com.ecommerce.EProduct" />
    </session-factory>
</hibernate-configuration>

```

## Web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<element>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" id="WebApp_ID" version="2.5">
    <display-name>phase2pro3</display-name>
    <welcome-file-list>
        <welcome-file>index.html</welcome-file>
        <welcome-file>index.jsp</welcome-file>
        <welcome-file>index.htm</welcome-file>
        <welcome-file>default.html</welcome-file>
        <welcome-file>default.jsp</welcome-file>
        <welcome-file>default.htm</welcome-file>
    </welcome-file-list>
    <servlet>
        <servlet-name>AddProductServlet</servlet-name>
        <servlet-class>com.simpli.AddProductServlet</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>AddProductServlet</servlet-name>
        <url-pattern>/AddProductServlet</url-pattern>
    </servlet-mapping>

    <welcome-file-list>
        <welcome-file>index.jsp</welcome-file>
    </welcome-file-list>

</web-app>
</element>

```

## Jsp

Add\_product->filename

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8" %>
<!DOCTYPE html>
<html>
<head>
    <title>Add Product</title>
</head>
<body>
    <h2>Add Product</h2>
    <form method="POST" action="add_product">
        <label for="name">Name:</label>
        <input type="text" id="name" name="name" required><br><br>
    </form>

```

```

        <label for="price">Price:</label>
        <input type="number" id="price" name="price" min="0" step="0.01"
required><br><br>

        <input type="submit" value="Add_Product">
    </form>
</body>
</html>

```

Index.jsp

```

<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <title>Add Product</title>
</head>
<body>
    <h3>Add Product</h3>
    <form action="AddProductServlet" method="post">
        <label for="name">Product Name:</label>
        <input type="text" id="name" name="name" required><br><br>
        <label for="price">Price:</label>
        <input type="text" id="price" name="price" required><br><br>
        <input type="submit" value="Add Product">
    </form>
</body>
</html>

```

Sql queries

use products;

select \* from eproduct;