



**Final Examination Test**

*PRJ301 # Java Web Application  
Development*

**Do not write on this question paper and return it to the Invigilator after the examination.**

1. Create a database named “**PE\_Test**” in SQL Server.
2. Create a table named **Account** in PE\_Test database. The structure of table is described as below:

username	Varchar(50)	Primary key
password	Varchar(32)	Not null
fullname	Varchar(100)	Not null
gender	Varchar(6)	Not null
birthday	Date	Not null
department	Varchar(100)	Not null

3. Create a table named **Product** in PE\_Test database. The structure of table is described as below:

pro_id	Varchar(50)	Primary key
pro_name	Varchar(100)	Not null
pro_quan	Int	Not null
pro_price	long	Not null
pro_des	Varchar(1000)	Not null

4. Create a table named **Order** in PE\_Test database. The structure of table is described as below:

order_id	Varchar(20)	Primary key
username	Varchar(50)	Not null
order_total	Int	Not null
order_date	date	Not null
order_des	Varchar(1000)	Not null

5. Adding 05 data rows into the table. The password field must be hashed by using MD5 algorithm.
6. Create a project named **PE\_Test** in Netbeans and using JSP Model 2.
7. Create a login page named **index.jsp**. When client login successfully, using the cookie to store the username with 03 days expiry and the cookies will be sent to the client.
8. After login successfully, client will be redirected to **listProduct.jsp**. At the top right of the page, display the information:

Hello, <fullname of client> (Sign out)

- a. The page **listProduct.jsp** will display all the data of product table in database.
- b. The page **listOrder.jsp** will display all the data of order table in database.
- c. When client click on the Sign out link, all the sessions and cookies will be destroyed and client must be relogged in again.

<i><b>Function</b></i>	<i><b>URL syntax</b></i>	<i><b>JSP file</b></i>
Login	http://localhost:8080 http://localhost:8080/login	index.jsp
List of Products	http://localhost:8080/list	listProduct.jsp
Add Product	http://localhost:8080/addProduct	addProduct.jsp
Edit Product	http://localhost:8080/editProduct	editProduct.jsp
List of Products	http://localhost:8080/listOrder	listOrder.jsp
Add Product	http://localhost:8080/addOrder	addOrder.jsp
Edit Product	http://localhost:8080/editOrder	editOrder.jsp

GUI:

index.jsp:

### Login

Username

Password

Login

<i><b>Control</b></i>	<i><b>Type</b></i>	<i><b>Target</b></i>	<i><b>Note</b></i>
Username	input[text]	<i>name[/txtUser/]</i>	<i>Accept “test”</i>
Password	input[password]	<i>name[/txtPass/]</i>	<i>Accept “123”</i>
Login button	input[submit]	<i>btnLogin</i>	-

listProduct.jsp

Full name

Hello, Test Account([Sign out](#))

## List of products

[Add new](#)[Order](#)

ID	Name	Quantity	Price	Description	Action
IP11P	Iphone 11 Pro	28	28000000	New	<a href="#">Edit</a> <a href="#">Delete</a>
IP12P	Iphone 12 Pro	30	30000000	New	<a href="#">Edit</a> <a href="#">Delete</a>
IP13P	Iphone 13 Pro	35	35000000	New	<a href="#">Edit</a> <a href="#">Delete</a>
IP14PM	Iphone 14 Promax	40	40000000	Old	<a href="#">Edit</a> <a href="#">Delete</a>
IP15PM	Iphone 5 Promax	45	45000000	New	<a href="#">Edit</a> <a href="#">Delete</a>

Control	Type	Target	Note
Full name	p	name[pFullName]	Get fullname in cookie of account
Edit	a	class[btn-warning]	Go to: /editProduct?id=<id>
Delete	a	class[btn-danger]	Delete product
Add new	a	class[btn-primary]	Go to: /addProduct
Other	a	class[btn-secondary]	Go to: /listOrder

addProduct.jsp

## Add new a product

Product ID:

Product Name:

Product Quantity:

Product Price:

Product Description:

[Save](#)[Back to List](#)

Control	Type	Target	Note
Product ID	input[text]	name[txtProID]	
Product Name	input[text]	name[txtProName]	

Product Quantity	input[number]	name[txtProQuantity]	
Product Price	input[number]	name[txtProPrice]	
Product Description	input[text]	name[txtProDescription]	
Save	input[submit]	class[btn-primary]	<i>Put: /addProduct</i>
Back to List	a	class[btn-secondary]	<i>Back to: /list</i>

updateProduct.jsp

## Update a Product

Product ID:

IP11P

Product Name:

Iphone 11 Pro

Quantity:

28

Price:

28000000

Description:

New

Update

Back to List

<b>Control</b>	<b>Type</b>	<b>Target</b>	<b>Note</b>
Product ID	input[text]	name[txtProID]	<i>Disable</i>
Product Name	input[text]	name[txtProName]	
Quantity	input[number]	name[txtProQuantity]	
Price	input[number]	name[txtProPrice]	
Description	input[text]	name[txtProDescription]	
Update	input[text]	class[btn-primary]	<i>Post: /UpdateProduct</i>
Back to List	a	class[btn-secondary]	<i>Back to: /list</i>

orderList.jsp

Hello, Test Account([Sign out](#))

## List of Orders

[New Order](#)[List Product](#)

ID	Username	Total	Date	Description	Action
1	test	2	2024-07-17	12	<a href="#">Edit</a> <a href="#">Cancel</a>

Control	Type	Target	Note
Edit	a	class[btn-warning]	Go to: /editOrder?id=<id>
Delete	a	class[btn-danger]	Delete order
New Order	a	class[btn-primary]	Go to: /addOrder
List Product	a	class[btn-secondary]	Go to: /list

addOrder.jsp

Hello, Test Account([Sign out](#))

## Add Orders

Order ID:

Username:

Order Total:

Order Date:

Description:

[SUBMIT](#)[Back to List](#)

Control	Type	Target	Note
Order ID	input[text]	name[txtOrID]	
Username	input[text]	name[txtOrName]	Disable. Value is account login
Order Total	input[number]	name[txtOrTotal]	
Order Date	input[date]	name[txtOrDate]	
Description	input[text]	name[txtOrDescription]	
Submit	input[submit]	class[btn-primary]	Put: /addOrder
Back to List	a	class[btn-secondary]	Back to: /listOrder

editOrder.jsp

Hello, Test Account([Sign out](#))

## Edit Order

Order ID:

1

Username:

test

Order Total:

2

Order Date:

17/07/2024



Description:

12

SAVE

Back to List

<i>Control</i>	<i>Type</i>	<i>Target</i>	<i>Note</i>
Order ID	input[text]	name[txtOrID]	<i>Disable</i>
Username	input[text]	name[txtOrName]	<i>Disable. Value is account login</i>
Order Total	input[number]	name[txtOrTotal]	
Order Date	input[date]	name[txtOrDate]	
Description	input[text]	name[txtOrDescription]	
Save	input[submit]	class[btn-primary]	<i>Put: /updateOrder</i>
Back to List	a	class[btn-secondary]	<i>Back to: /listOrder</i>

**Rules:**

- The exams are **similar from 40%** includings: interface, variable names, control names, ... will get **zero point**.
- The exam will get **zero point**, if it has any errors after opening project.
- Using JQuery to validate the data user input. If not, you will be **deducted 30%** of points for those functions.
- Using Bootstrap to design the user interface. If not, you will be **deducted 30%** of points for those functions.