

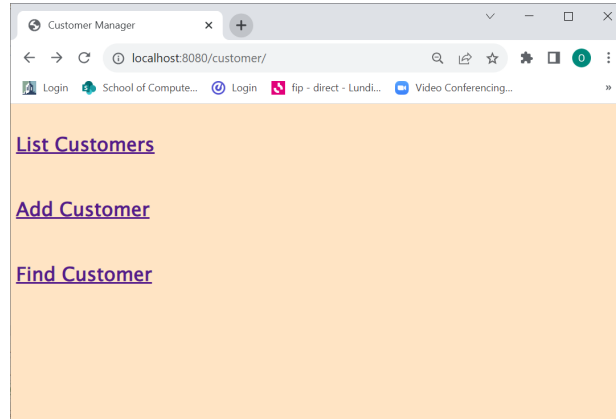
Assignment 3 – JPA

In this assignment, you are asked to create a JPA application.

1. Make sure you have a MySQL database
2. Go through the procedures in the lecture slides to:
 - a. Connect to your database from NetBeans
 - b. Add the mysql-connector driver jar file to Payara using the asadmin.bat utility
 - c. Create a connection pool and jdbc resource connected to your MySQL database in the Payara admin interface
3. Create a new web application which has the following:
 - An entity class `Customer`.
 - A start page `index.html` which provides the user with the applications options.
 - A persistence unit which connects to the JDBC resource you created
 - A HTML page (`addCustomer.html`) which allows the user to enter the details for a new Customer in a form which calls the servlet `AddCustomer`.
 - A servlet (`AddCustomer`) which uses an entity manager to create and persist the new Customer to the database.
 - A HTML page (`findCustomer.html`) containing a form where you can enter the number of the Customer you want to look for.
 - A servlet (`FindCustomer`) which uses an entity manager to retrieve a Customer, given the customer number. The customer is added to the session as an attribute. It then calls the JSP page `displayCustomer.jsp` which displays the customer information.
 - A servlet `GetCustomers` which uses the entity manager to retrieve all Customers from the database and put them on the session. It then forwards to `displayCustomers.jsp`
 - A JSP page (`displayCustomers.jsp`) which can display the details of all Customers which it retrieves from the session object.

Sample pages

index.html



addCustomer.html

A screenshot of a web browser window titled "Add Customer". The address bar shows "localhost:8080/customer/addCustomer.html". The page content is titled "Add a New Customer" and contains a form with the following fields and values:

- Customer Number: 102
- Customer Name: Al Staples
- Phone: 0176345
- Email: al@m.ie
- Country: Ireland
- Post Code: r5619fr
- Credit Limit: 3000

At the bottom of the form is an "Add" button.

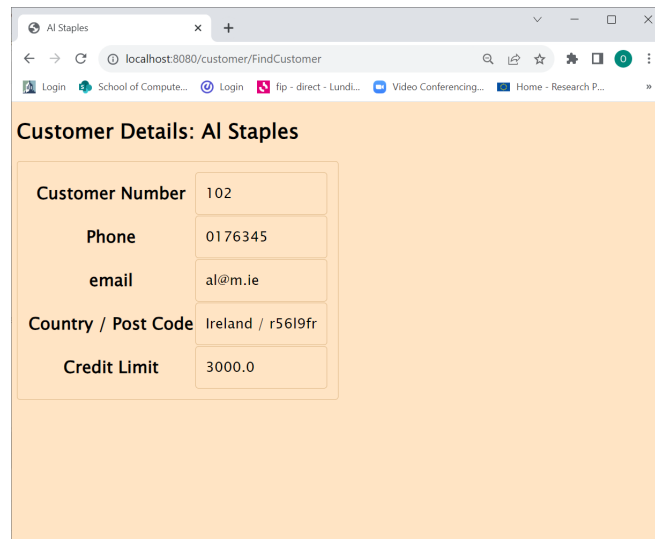
findCustomer.html

A screenshot of a web browser window titled "Find Customer". The address bar shows "localhost:8080/customer/findCustomer.html". The page content is titled "Find a Customer by Customer Number" and contains a form with the following field and value:

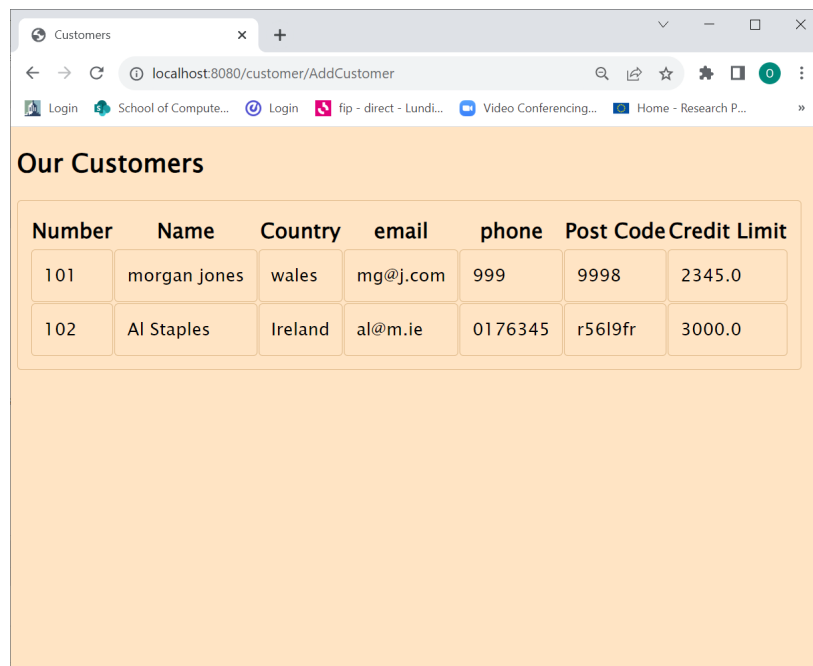
- Customer No.: 102

Below the input field is a "Find" button.

Output of displayCustomer.jsp



Output of displayCustomers.jsp



To submit your assignment:

- Perform a 'Clean' on the project
- Zip the project folder
- Submit the Zip file on Blackboard for the assignment