

Assignment 2

Professor: Tevin Apenteng

Due on: April 8, 2019 23:59

Value: 16% of final grade

Late Penalty: No extensions. Deadline is firm.

INTRODUCTION

Assignment 2 is the second part of the Java web application - HR Management. You will continue the group work in the assignment. In assignment 2, you will use Model-ViewController software pattern to design and implement a web application. The assignment also gives you an opportunity to practice the servlet, JSP, Bootstrap and connection pooling knowledge and skills. After completing the assignment, you will get good understanding of Java web development technology and the knowledge regarding MVC pattern which we conformed in this assignment.

ASSIGNMENT REQUIREMENTS/ SPECIFICATIONS

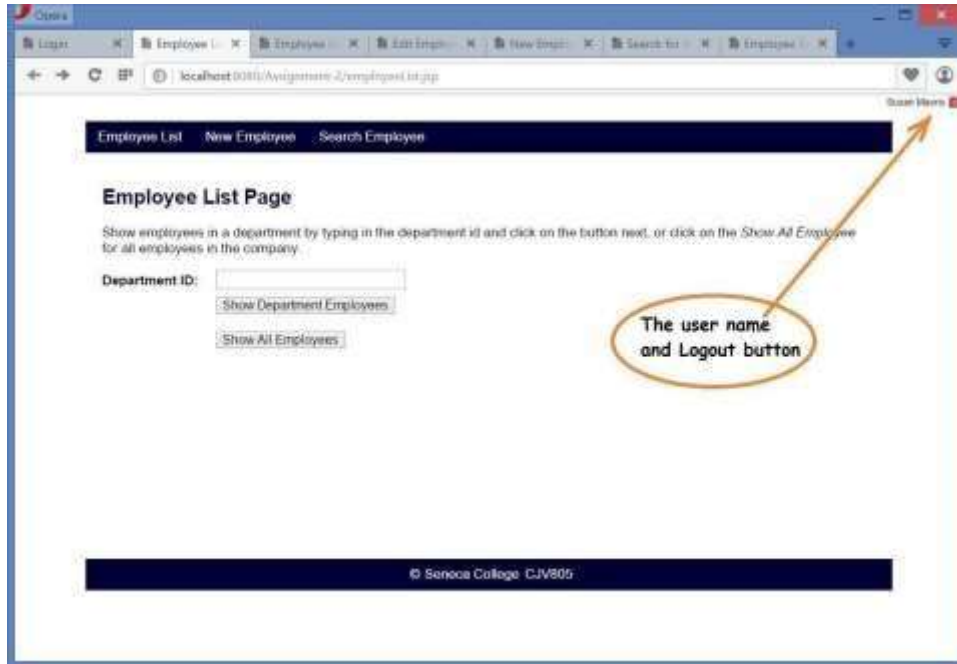
1. The starting point of the application of your assignment 2:



Once logging in, a page with navigation/menu bar on top should show up. The user name and a **Logout** button should be displayed at the top-right corner of the screen. The menu

provides links to **Employee List**, **New Employee** and **Search Employee** pages which must have the same theme. The Employee List page should be the default page after logging in.

2. The **Employee List** page



The **Employee List** page allows users to display employees in a department by providing department ID. It also allows users to list all employees in all departments.

The following screenshot is the demo page that displays the employee list of the Sales department (80):

Employee List

Here is the information of employees from department of Sales.

Employee ID	First Name	Last Name	Email	Phone Number	Hire Date	Job ID	Salary	Commission Pct	Manager ID	Department ID
145	John	Russell	JRUSSEL	011.44.1344.429208	10/01/1995	SA_MAN	14000.0	0.8	100	80
146	Karen	Patterson	KPATTER	011.44.1344.457298	01/05/1997	SA_MAN	13500.0	0.3	100	80
147	Alberto	Ernst	AERNST	011.44.1344.429278	05/10/1997	SA_MAN	12000.0	0.3	100	80
148	Gerald	Cambrault	GCAMBRAU	011.44.1344.810208	10/10/2000	SA_MAN	11000.0	0.3	100	80
149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	01/25/2000	SA_MAN	10500.0	0.3	100	80
150	Peter	Tucker	PTUCKER	011.44.1344.129208	01/30/1997	SA_REP	9500.0	0.3	145	80
151	David	Bernstein	DBERNSTE	011.44.1344.345208	05/24/1997	SA_REP	9500.0	0.25	145	80
152	Peter	Hall	PHALL	011.44.1344.479908	06/25/1997	SA_REP	9000.0	0.25	145	80
153	Christopher	Olsen	COlsen	011.44.1344.498718	03/30/1998	SA_REP	8500.0	0.2	145	80
154	Natasha	Cambrault	NCAMBRAU	011.44.1344.367608	12/09/1998	SA_REP	7800.0	0.2	145	80
155	Oliver	Tuvault	OTUVAULT	011.44.1344.486808	11/23/1999	SA_REP	7900.0	0.15	145	80
156	Janeke	King	JKING	011.44.1345.429208	01/30/1996	SA_REP	5000.0	0.35	145	80
157	Patrick	Sully	PSULLY	011.44.1345.029208	09/04/1999	SA_REP	9500.0	0.35	145	80
158	Alex	Mueller	AMUELLER	011.44.1345.829208	08/01/1998	SA_REP	9000.0	0.35	145	80
159	Lexie	Smith	LSMITH	011.44.1345.729208	03/10/1997	SA_REP	8000.0	0.3	145	80
160	Lizette	Doran	LDORAN	011.44.1345.829208	10/15/1997	SA_REP	7500.0	0.3	145	80
161	Ravati	Sewall	RSEWALL	011.44.1345.329208	11/05/1999	SA_REP	7000.0	0.25	145	80
162	Clara	Vishney	CVISHNEY	011.44.1346.129208	11/11/1997	SA_REP	9500.0	0.25	147	80
163	Danalee	Green	DGREEN	011.44.1346.229208	10/16/1999	SA_REP	9500.0	0.15	147	80
164				011.44.1346.329208	01/24/2000	SA_REP	7800.0	0.1	147	80
165				011.44.1346.529208	02/23/2000	SA_REP	6800.0	0.1	147	80
166				011.44.1346.629208	03/14/2000	SA_REP	6400.0	0.1	147	80
167				011.44.1346.729208	04/12/2000	SA_REP	6200.0	0.1	147	80
168				011.44.1346.829208	05/11/1997	SA_REP	11500.0	0.25	148	80
169				011.44.1346.929208	06/23/1999	SA_REP	10500.0	0.2	148	80
170				011.44.1346.729208	01/24/1998	SA_REP	9900.0	0.2	148	80
171				011.44.1346.629208	02/23/1999	SA_REP	7400.0	0.15	148	80
172				011.44.1346.529208	03/24/1999	SA_REP	7300.0	0.15	148	80
173				011.44.1346.329208	04/21/2000	SA_REP	6700.0	0.1	148	80
174				011.44.1644.429207	05/11/1996	SA_REP	11000.0	0.3	149	80
175				011.44.1644.429206	05/16/1997	SA_REP	8800.0	0.25	149	80
176				011.44.1644.429205	05/24/1998	SA_REP	8500.0	0.2	149	80
177	Jack	Largen	JLARGEN	011.44.1644.429204	04/23/1998	SA_REP	8400.0	0.2	149	80
178	Charles	Johnson	CJOHNSON	011.44.1644.429203	01/04/2000	SA_REP	9200.0	0.1	149	80

To return the employee list page, click on the Back button in your browser or the Return button shown below.

Return

This is the demo of update and delete page (the data should be automatically loaded):

Edit Employee Page

Employee ID: 162

First Name: Clara

Last Name: Vishney

Email: SSEWALL

Phone Number: 011.44.1346.129268

Hire Date: 1997-11-11

Job ID: SA_REP

Salary: 10500.0

Comm Pct: 0.25

Manager ID: 147

Department: Sales

Update the Employee Delete the Employee

To return the Employee List page, click on the Back button in your browser or the Return button shown below.

Return

Note:

- The field **Employee ID** must be showed as read-only.
- The field **Department** should be a dropdown list from which user can select department.
- After clicking **Update** or **Delete the Employee** button, the app should provide a page for confirmation with the brief info of employee who was updated or deleted. The page should have a **Return to Employee List** button on it.

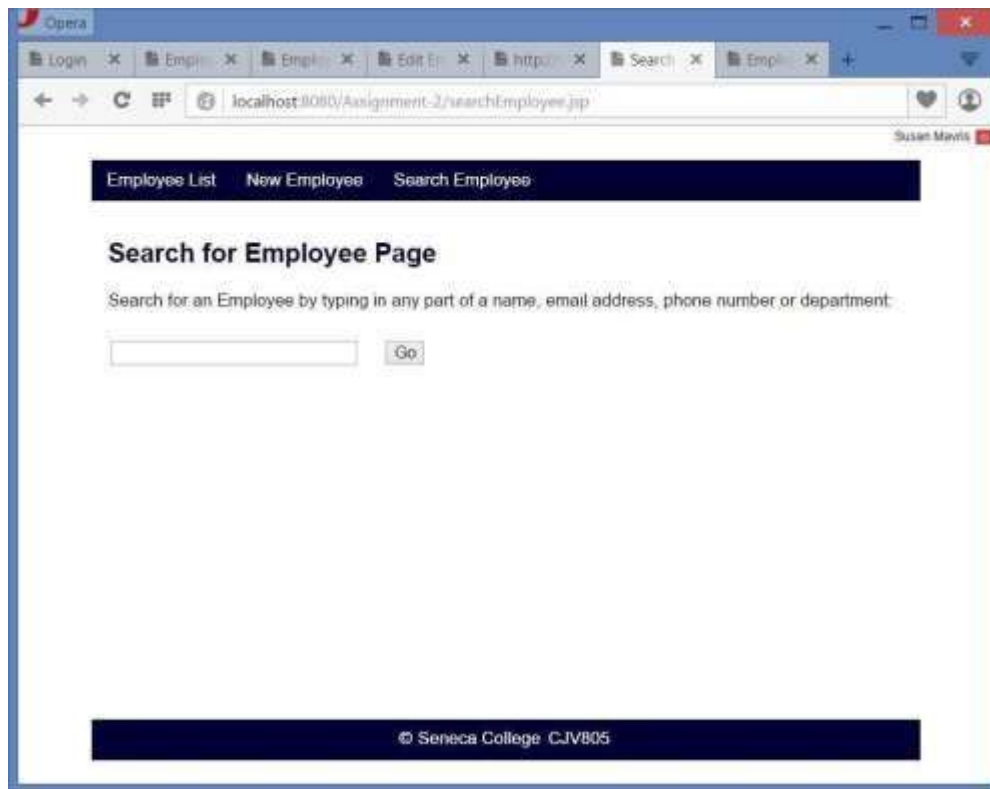
3. The **New Employee** page:

The screenshot shows a web browser window with the URL `localhost:8080/Assignment-2/newEmployee.jsp`. The page has a dark blue header with navigation links: [Employee List](#), [New Employee](#), and [Search Employee](#). The main content area is titled "New Employee Page" and contains a form with the following fields:

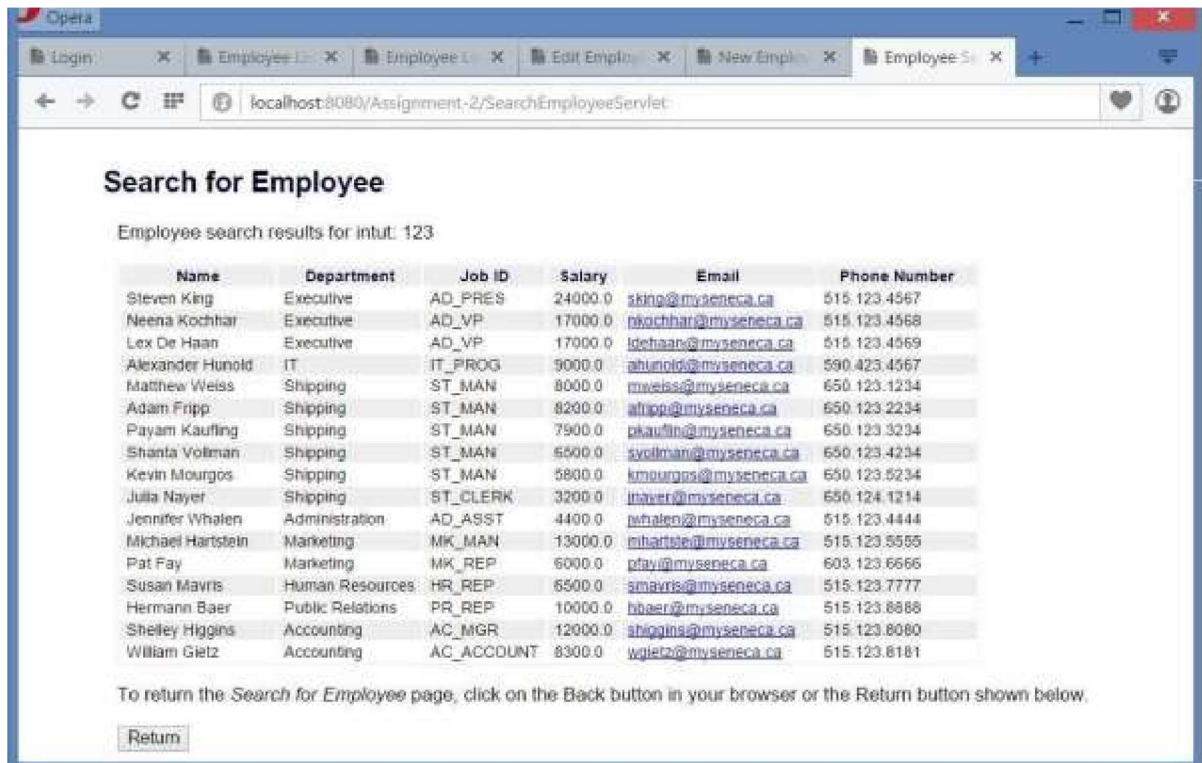
- Employee ID: (read-only text box)
- First Name: (text box)
- Last Name: (text box)
- Email: (text box)
- Phone Number: (text box)
- Hire Date: (text box with placeholder "yyyy-mm-dd")
- Job ID: (text box)
- Salary: (text box)
- Comm Pct: (text box)
- Manager ID: (text box)
- Department: (dropdown menu)

At the bottom of the form are two buttons: "Save the New Employee" and "Clear". The footer of the page displays "© Seneca College CJV805".

4. The **Search for Employee** page:



The demo of the results for the **Search for Employee** page: Search for Employee by typing in any part of a name, email address, phone number or department:



Search for Employee

Employee search results for input: 123

Name	Department	Job ID	Salary	Email	Phone Number
Steven King	Executive	AD_PRES	24000.0	sking@mysebeca.ca	515.123.4567
Neena Kochhar	Executive	AD_VP	17000.0	nkochhar@mysebeca.ca	515.123.4568
Lex De Haan	Executive	AD_VP	17000.0	ldehaan@mysebeca.ca	515.123.4569
Alexander Hunold	IT	IT_PROG	9000.0	ahunold@mysebeca.ca	590.423.4567
Matthew Weiss	Shipping	ST_MAN	8000.0	mweiss@mysebeca.ca	650.123.1234
Adam Fripp	Shipping	ST_MAN	8200.0	afripp@mysebeca.ca	650.123.2234
Payam Kaufing	Shipping	ST_MAN	7900.0	pkauflin@mysebeca.ca	650.123.3234
Shanta Vollman	Shipping	ST_MAN	6500.0	svollman@mysebeca.ca	650.123.4234
Kevin Mourgous	Shipping	ST_MAN	5800.0	kmourgous@mysebeca.ca	650.123.5234
Julia Nayer	Shipping	ST_CLERK	3200.0	jnayer@mysebeca.ca	650.124.1214
Jennifer Whalen	Administration	AD_ASST	4400.0	jwhalen@mysebeca.ca	515.123.4444
Michael Hartstein	Marketing	MK_MAN	13000.0	mhartste@mysebeca.ca	515.123.5555
Pat Fay	Marketing	MK_REP	6000.0	pfay@mysebeca.ca	603.123.6666
Susan Mavris	Human Resources	HR_REP	6500.0	smavris@mysebeca.ca	515.123.7777
Hermann Baer	Public Relations	PR_REP	10000.0	hbaer@mysebeca.ca	515.123.8888
Shelley Higgins	Accounting	AC_MGR	12000.0	shiggins@mysebeca.ca	515.123.8080
William Gietz	Accounting	AC_ACCOUNT	8300.0	wgietz@mysebeca.ca">wgietz@mysebeca.ca	515.123.8181

To return the *Search for Employee* page, click on the Back button in your browser or the Return button shown below.

Employee's (full) name, an email link and other info must be showed for each employee listed in the page above.

5. The **Logout** page

The **Logout** page informs the user that the user's state has become logout and provides a button which can lead the user to the **Login** page.

6. The **Error** page

The application should provide an error page for handling Java errors and exceptions that the user encounters when using the system.

DATABASE CONNECTIVITY REQUIREMENTS

You have two options for the database connectivity in the assignment:

Option 1: Modify your assignment 1 by implementing **CONNECTION POOL** for the setting up the JDBC connections, changing and testing the code that affected by the Connection Pooling. You may need to create some new methods in DBAccessHelper class to fit the requirements in the assignment 2.

Option 2: Give up the code of assignment 1. And use the JPA technology and the specifications of both assignment 1 and 2 to implement the database part - the model part of the web application.

OTHER REQUIREMENTS

- Your assignment should implement / mimic the screens showed and described above. Also, your assignment need to implement the functionality showed or implicated behind the screen. For any part that is not clear or you cannot understand, please ask question as early as possible.
- Your assignment as a web application should be built based-on HTML5, CSS3 technology and [Bootstrap framework](#). HTML5 should be used in each JSP and HTML page. HTML form should use HTML5 input types.
- The assignment application should conform to the MVC software pattern.
- Assignments should be well commented. Java classes must have properly defined documentation, based on **javadoc** style.
- The code in your project should be free of compiling errors or warnings. Meanwhile, the code in your assignment must be properly indented, e.g. a minimum of 3 spaces of indenting is required for each new code block. Indentation must be consistent (same number of spaces), and correct. Always tab, or manually space, but don't mix the two because tab stops change in different editors and mean your code won't line up nicely.
- Create a plain text file named **ReadMe.txt** in the web content folder of the project. The first part of the file should be the Assignment Submission Form. The second part is the brief description of the assignment project, including the package and file name, special notes in coding, testing and running your assignment (e.g. which part of code not works), as well as user/password for running the web app.

CJV805 Assignment 2 - Winter 2019

Assignment Submission Form

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I/we declare that the attached assignment is my/our own work in accordance with Seneca Academic Policy. No part of this assignment has been copied manually or electronically from any other source (including web sites) or distributed to other students.

Name (s)

Student ID(s)

Seneca LearnID(s)

< the brief description of the assignment >

ASSIGNMENT SUBMISSION

Demonstrate your program to your instructor in team after the assignment due date. The team members who are absent from the demonstration will get deduction for the assignment marks.

Only one student in a team should be selected to submit the assignment. Export the Assignment 2 project from Eclipse to a WAR file named: A2-Team<#>-<LastName>.war **with source code included**; then submit the WAR file to My.Seneca Blackboard.