

LAB221 Assignment

Type:
Code:
LOC:
Slot(s):

Long Assignment
J2.L.P0003
300
N/A

Title

Employee Management.

Background

N/A

Program Specifications

In this assignment, you are required to build employee management application, in the form of a desktop application. The program has basic functions: login, add-delete-edit employee information. You are required to use the basic components to design interfaces, use the tabbed pane to organize employee management on the one screen. Array List is used to store information

Program organization must clearly separate functions according to MVC model.

Employee information is shown following table

Field Name	Type
EmpID	String
Fullname	String
Phone	String
Email	String
Address	String
DateOfBirth	java.util.Date
IsDelete	boolean

Features:

This system contains the following functions:

- **Verify constraint of following data type fields - 50 LOC**
 - emplID: max length is 10, not contains special characters (@, #, \$)
 - fullname: max length is 30
 - address: max length is 300
 - DateOfBirth: in format MM/DD/YYYY
 - Phone number: max length is 15, contain numeric characters only (0 – 9)
 - Email: max length is 30, contain only one “@” character, do not contain special characters (!, #, \$)
- **Function 1: Create Employee - 50 LOC**
 - When a user fills all information and click Create, the application starts accepting all the details of the new Emp and stores it into an ArrayList.
 - IsDelete field's value has default as FALSE and not displayed at Create Emp frame.
 - The program checks the validity of data, if data is not valid then display an error message, otherwise system will insert new employee into the database.
 - The employee table must be refreshed after new data has been successfully inserted.

▪ **Function 2: Show all Employees - 100 LOC**

- The screen is divided into 2 parts: Main information and Detail information.
- Main part: this part lists all available Emp with their information (empID, fullname, phone, email) in the system. (50 LOC)
- Detail part: When you click a row on the table, system call findByEmpID method (50 LOC), if the application finds a match EmpID. The details of the respective employee are displayed following information as EmpID(disabled), fullname, phone, email, address, DOB.
- 04 buttons Get All Emp, Create Emp, Update and Remove button are put in Detail part.

The screenshot shows a web application titled "Emp Management". On the left, there is a table with four columns: EmpID, Fullname, Phone, and Email. Below the table is a "Get All Emp" button. On the right, there is a section titled "Emp's Detail:" containing several input fields: EmpID (with a "Find By EmpID" button next to it), Fullname, Phone, Email, Address (a text area with scrollbars), and DOB. At the bottom of the detail section are three buttons: "Create Emp", "Update Emp", and "Remove Emp".

▪ **Function 4: Edit Employee - 50 LOC**

- The user clicks on the Employee that he/she wants to modify on the Employee table.
- The details of the respective employee are displayed.
- The user changes the information of the Employee (not allow modify the EmpID). Then user clicks the Update button.
- The program checks the validity of data, if data is not valid then display an error message, otherwise system will update Employee information.
- The employee information's table must be refreshed after new data had been successfully updated.

▪ **Function 5: Remove Employee - 50 LOC**

- The user clicks on the employee that he wants to delete on the employee information's table. Then users click the Remove button.
- The program must display a message to confirm the deletion. If the user confirms, system will delete the selected Employee.
- The Employee table must be refreshed after data had been successfully deleted.

- **Note:** If employees have constrained to others information of system, system cannot delete them.
- The above specifications are only basic information; you must perform a requirements analysis step and build the application according to real requirements.
- The lecturer will explain the requirement only once on the first slot of the assignment.