

SENG102

Lab Assignment 11

Question1

A LINKED LIST OF EMPLOYEES

In this lab, you are going to practice linked list concept. The file `Employee.java` represents a single employee object and the file `EmployeeList.java` contains definitions for a linked list of employees. The class contains an inner class `EmployeeNode` that holds information for a single node in the list (a node has an employee object and a reference to the next node). You are not allowed to use java's `Collections` library. You are asked to do the following tasks:

Complete the `EmployeeList.java` for necessary methods as follows:

- `public EmployeeList()` : constructor; creates an empty list of employees
- `public void addToEnd(Employee e)` : takes an employee and puts it on the end of the list
- `public boolean search(String n)` : takes a name, checks whether the employee with that name is present in linked list and returns true/false according to result
- `public void print()` : prints the elements in the list from first to last

Do not delete or lose the files in the first question!!

Question02:

A LINKED LIST OF EMPLOYEES

Now complete the test program `EmployeeListTest.java` that contains a driver that allows you to experiment with your new methods. For each, add an option to the driver to test it. Compile and run `EmployeeListTest`, with your other .java files and play around with it to see how it works.

You can see an **example** output below:

```
Menu
====
0: Quit
1: Add an employee to the end of the list
2: Search for an employee due to name in the list3: Print the
list

Enter your choice: 1
Enter name(string) of employee to add to endJohn

Menu
====
0: Quit
1: Add an employee to the end of the list
2: Search for an employee due to name in the list3: Print the
```

Enter your choice: 2
Enter name(string) of employee to searchKaren
Yes, Employee Found!

Menu

====

0: Quit
1: Add an employee to the end of the list
2: Search for an employee due to name in the list3: Print the list

Enter your choice: 2
Enter name(string) of employee to searchMurat
No, Employee Not Found!

Menu

====

0: Quit
1: Add an employee to the end of the list
2: Search for an employee due to name in the list3: Print the list

Enter your choice: 0

Submission

You need to implement all the required tasks above and upload your Java source files (.java).