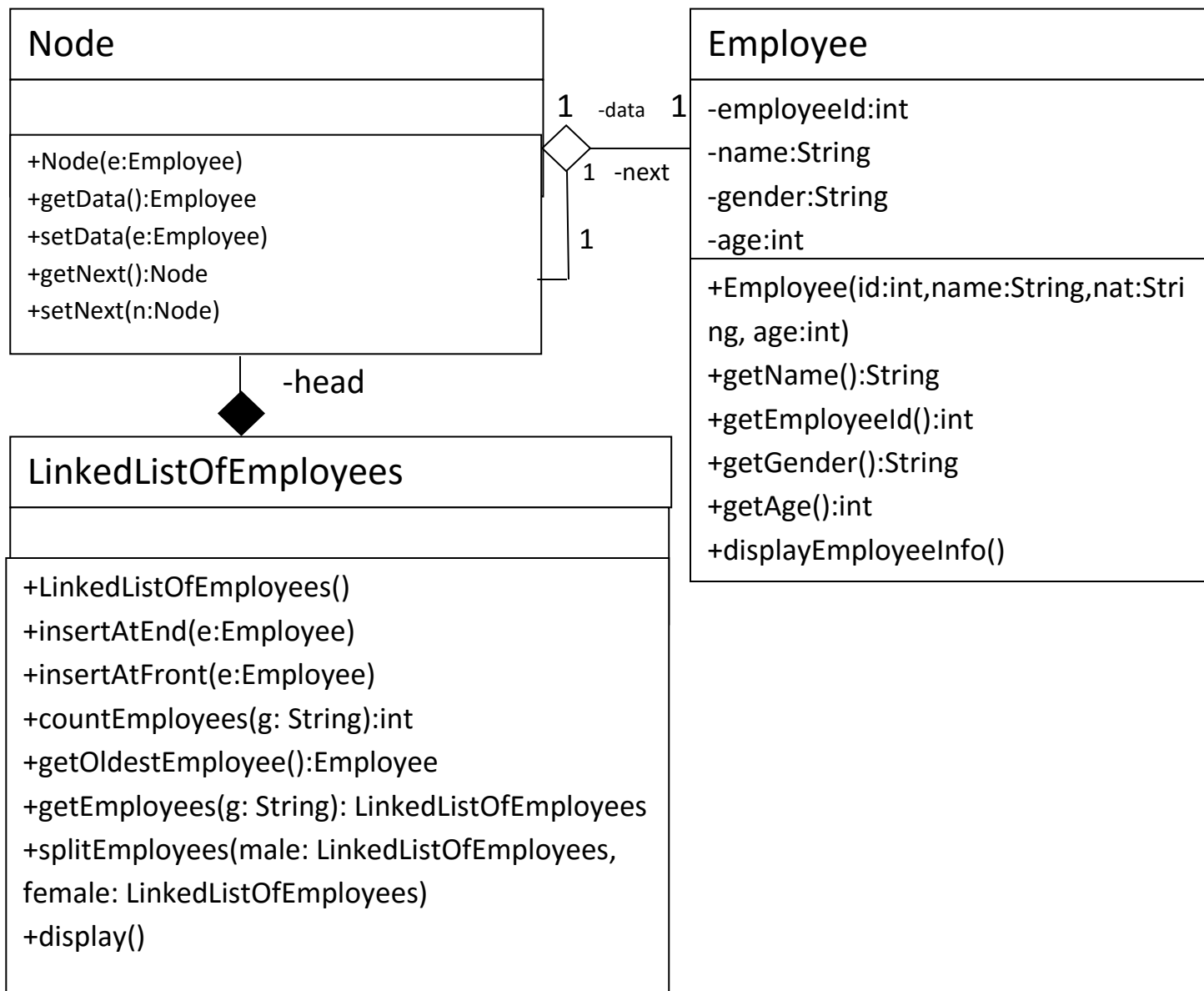




Lab: LinkedList

Create the classes along with the functionality given in the following UML Diagram. To understand the problem, please refer to the description given after the diagram.





King Saud University
College of Computer and Information Systems
Department of Computer Science
CSC 113: Java Programming-II, Spring 2016



Lab: LinkedList

Employee Class:

○ Attributes:

- **employeeId**: unique id of the employee.
- **name**: the name of the employee.
- **gender**: The gender of the employee.
- **Age**: The age of the employee

○ Methods:

- **Employee(id:int, name: string, gender: String, age: int)**: constructor
- **displayEmployeeinfo()**: this method displays all the attributes of the employee.
- **Getters**

Node Class:

○ Attributes:

○ Methods:

- **Node(e: Employee)**: constructor
- **Getters/Setters**

LinkedListOfEmployees Class:

○ Attributes:

○ Methods:

- **LinkedListOfEmployees**: constructor
- **insertAtFront(g:Employee)**: this method inserts an employee at the front of linked list.
- **insertAtEnd(g:Employee)**: this method inserts an employee at the end of linked list.
- **countEmployee(g:String)**: this method returns the number of employees who are of gender *g*.
- **getOldestEmployee()**: this method returns the oldest employee.
- **getEmployees(g:String)**: this method returns a linked list of all employees who are of gender *g*.
- **splitEmployees(male: LinkedListOfEmployees, female: LinkedListOfEmployees)**: This method inserts all Male employees linked list *male* and Female in to female linked list.
- **display()**: displays the data of each employee in the linked list



King Saud University
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CSC 113: Java Programming-II, Spring 2016



Lab: LinkedList

Write a java program that will display following Menu to execute different member functions of these classes.

To add a new employee, Enter 1

To get the number of employees of a given gender, Enter 2

To get and display the oldest employee, Enter 3

To get and display all employees of a given gender, enter 4

To view all Male employees in the Linked List, Enter 5

To Exit, Enter 0

Enter Your Option:_____