



King Saud University
College of Computer and Information Systems
Department of Computer Science
CSC 113: Java Programming-II, Spring 2022



Lab

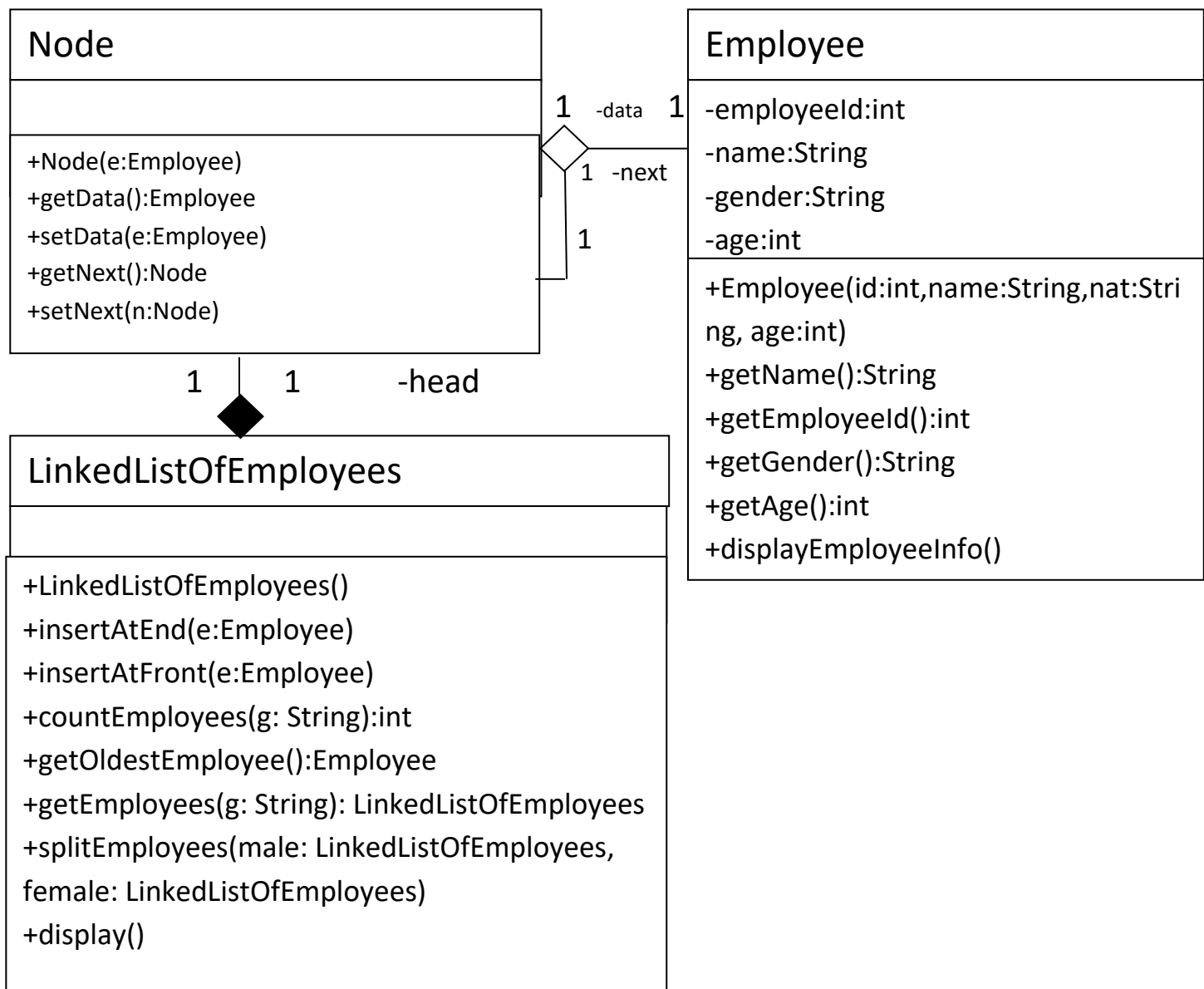
LinkedList Lab



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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*.



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- ***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

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:_____