

Faculty of Information Technology First Semester 2024-2025

Assignment #2

Task: Employment Requests Management Using Stack.

Description:

You need to build a Java application that uses a **custom Stack** to store employment request entries. Each request contains applicant information including name, age, gender, job title, expected salary, marital status, application date, and an array of children (if any).

The program must provide a **menu interface** that allows the user to perform the following operations:

Employment Requests Management Menu

- 1. Add new application
- 2. Remove latest application
- 3. Display total number of applications
- 4. Show application with minimum and maximum salary
- 5. Search for an applicant by name
- 6. Display all applications (including children info)
- 7. Exit the program

EmploymentRequest Class:

Each applicant should have the following fields:

• applicantName: String

applicantAge: int

• salary: double

• applicantGender: char

• applicantJob: String

• applicationDate: Date

• isMarried: boolean

• children: Child[] (an array of child objects)

toString()

Child Class:

Each child should have:

name: String

age: int

gender: char

toString()

LinkedListStack Class:

- Sub class: Node
- Push()
- Pop()
- Peek()
- isEmpty()
- size()
- toString()
- findByName()
- findMinMaxSalary()
- top: Node
- size: int