Software Engineering 2

**Cover Sheet**

# Project Title:

……...employment dashboard......................................................................

# Project Description:

……....you can find and search for the available jobs you want...............................

.........................................................................................................................

# Main functions:

…….....login and search for jobs if you are applicant................................................

............add and delete applicants as admin and same for jobs................................

……............................................................................................................................

1

|  |  |  |  |
| --- | --- | --- | --- |
| # | Student ID | Student Name (In Arabic) | Grade(20) |
| 1 | **202000318** | **رحيم احمد موسى** |  |
| 2 | **202001058** | **يحيى طارق محمد جمعه** |  |
| 3 | **202000**243 | **حازم احمد سعد** |  |
| 4 | **202000206** | **بكر ابو حسيبه زكى** |  |
| 5 | **202000**181 | **ايمن شوقي محمد** |  |
| 6 | **202000253** | **حامد سامى حميده** |  |

|  |  |  |
| --- | --- | --- |
| Requirement | points |  |
| Backend project with RESTful APIs | 6 |  |
| DB architecture (schema and data) | 2 |  |
| SOLID principles | 3 |  |
| Clean Code | 2 |  |
| UML diagrams | 5 |  |
| OCL constraints | 2 |  |
| Total | 20 |  |

## Table Of Contents : page

## **Activity Diagram 4**

## **Communication Diagram 20**

## **Sequence Diagram 29**

## **State Diagram 43**

## **Use-case Diagram 44**

## **Class Diagram 47**

## **OCL Diagram 48**

## **DB architecture 51**

## Activity Diagram

## 1.1 create job.

Diagram

Description automatically generated

## get jobs.

## Diagram Description automatically generated

## get/delete/update job.

A picture containing application

Description automatically generated

## delete/update Request.

## Diagram Description automatically generated with medium confidence

## send Request

Diagram

Description automatically generated

## respond To Request

## Diagram Description automatically generated

## get Request

## 

## get Requests

## Diagram Description automatically generated

## delete/update/get User

## Diagram Description automatically generated

## get Applicant

## 

## Application Description automatically generated with low confidence

## gets Applicant

## Graphical user interface, text, application, chat or text message Description automatically generated

## add User

## Diagram Description automatically generated

## login Admin

## 

## login User

## 

## create Qualification

## 

## get Qualifications

## Diagram Description automatically generated

## get/update/delete Qualification

Diagram

Description automatically generated

## get skills

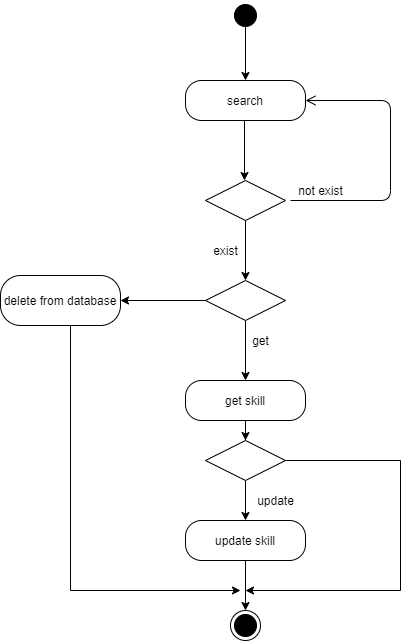
## Diagram Description automatically generated

## create skill

Diagram

Description automatically generated

## get/update/delete Skill



## 2. Communication Diagram

2.1 create job

Shape

Description automatically generated with medium confidence

2.2 delete job

A picture containing shape

Description automatically generated

2.3 get job

A picture containing shape

Description automatically generated

2.4 get jobs

Shape

Description automatically generated with medium confidence

2.5 update job

A picture containing shape

Description automatically generated

2.6 login admin

Shape

Description automatically generated with medium confidence

2.7 login user

Shape

Description automatically generated with medium confidence

2.8 create qualification

Shape

Description automatically generated with medium confidence

2.9 delete qualification

A picture containing shape

Description automatically generated

2.10 get qualification

A picture containing shape

Description automatically generated

2.11 get qualifications

Shape

Description automatically generated with medium confidence

2.12 update qualification

A picture containing shape

Description automatically generated

2.13 delete Request

A picture containing shape

Description automatically generated

2.14 get Request

A picture containing shape

Description automatically generated

2.15 get Requests

Shape

Description automatically generated with medium confidence

2.16 Respond To Request

A picture containing shape

Description automatically generated

2.17 send Request

Shape

Description automatically generated with medium confidence

2.18 create Skill

Shape

Description automatically generated with medium confidence

2.19 delete Skill

A picture containing shape

Description automatically generated

2.20 get Skill

A picture containing shape

Description automatically generated

2.21 get Skills

Shape

Description automatically generated with medium confidence

2.22 Add New User

Shape

Description automatically generated with medium confidence

2.23 Delete User

A picture containing shape

Description automatically generated

2.34 Get Applicant

A picture containing shape

Description automatically generated

2.35 Get Applicants

Shape

Description automatically generated with medium confidence

2.36 Update User

A picture containing shape

Description automatically generated

3 Sequence Diagram

3.1 Create Job

Graphical user interface, application, Teams

Description automatically generated

3.2 Delete Job

Graphical user interface, Teams

Description automatically generated

3.3 Get Job

Graphical user interface, application, Teams

Description automatically generated

3.4 Get Jobs

Graphical user interface, application, Teams

Description automatically generated

3.5 Update Job

Graphical user interface, Teams

Description automatically generated with medium confidence

3.6 Admin Login

Diagram

Description automatically generated

3.7 User Login

Diagram

Description automatically generated

3.8 Create Request

Graphical user interface, application

Description automatically generated

3.9 Delete Request

Teams

Description automatically generated with medium confidence

3.10 Get Request

Graphical user interface

Description automatically generated

3.11 Get Requests

Graphical user interface, application

Description automatically generated

3.12 Respond To Request

Diagram, Teams

Description automatically generated with medium confidence

3.13 Add New User

Graphical user interface

Description automatically generated with medium confidence

3.14 Delete User

Graphical user interface, Teams

Description automatically generated with medium confidence

3.15 Get Applicant

Graphical user interface

Description automatically generated

3.16 Get Applicants

Graphical user interface, application

Description automatically generated

3.17 Update User

Graphical user interface

Description automatically generated with medium confidence

3.18 Create Qualification

Table

Description automatically generated

3.19 Delete Qualification

Table

Description automatically generated

3.20 Get Qualification

Table

Description automatically generated

3.21 Get Qualifications

Diagram

Description automatically generated

3.22 Update Qualification

Table

Description automatically generated

3.23 Create Skill

Table

Description automatically generated

3.24 Delete Skill

Table

Description automatically generated

3.25 Get Skill

Table

Description automatically generated

3.26 Get Skills

Diagram

Description automatically generated

3.27 Update Skill

Table

Description automatically generated

4 State Diagram

4.1 Login



4.2 Request

Diagram

Description automatically generated

5 Use-Case Diagram

Diagram, table

Description automatically generated

Detailed Use-Case Description

|  |  |
| --- | --- |
| **User case name** | **createJob** |
| **ID** | **NW1** |
| **Goal** | **Admin can create job with their company name , position , description and offer** |
| **Actor** | **Admin** |
| **Pre-condition** | **Admin logged in** |
| **Post-condition** | **Job created successfully** |
| **Main scenario** | **steps** |
| 1. **Enter the company name.** 2. **Enter the position.** 3. **Enter the description.** 4. **Enter the offer.** |
| **Alternative scenario** | **steps** |
| 1. **Invalid information** 2. **The candidate number is max.** |

|  |  |
| --- | --- |
| **User case name** | **deleteJob** |
| **ID** | **NW2** |
| **Goal** | **Admin can delete job** |
| **Actor** | **Admin** |
| **Pre-condition** | **Admin logged in and the job is existed** |
| **Post-condition** | **Job deleted successfully** |
| **Main scenario** | **steps** |
| **Enter the job id.** |
| **Alternative scenario** | **steps** |
| **There is no job with this id** |

|  |  |
| --- | --- |
| **User case name** | **getJob** |
| **ID** | **NW3** |
| **Goal** | **Admin can get specific job with its id** |
| **Actor** | **Admin** |
| **Pre-condition** | **Admin logged in** |
| **Post-condition** | **Get job successfully** |
| **Main scenario** | **steps** |
| **Enter the job id** |
| **Alternative scenario** | **steps** |
| **The job is not existed** |

6 Class Diagram

Diagram, schematic

Description automatically generated

7 OCL

7.1 Login User

Diagram

Description automatically generated

7.2 Logout Admin

Diagram

Description automatically generated

7.3 Request Admin

Diagram

Description automatically generated

7.4 Skill User

Diagram

Description automatically generated

8 Database Architecture

