**UNIVERSITY RANKING MODEL**

October, 2021

Assignment submitted for Application engineering Development(AED)

**Team:**

Vachana Belgavi 2101078

Shahla Zainab Shaik 2194962

Ram Charan Teja Moodapally 2950328

**Contents**

Abstract…………………………………………………………………………….3

UML Diagram…………………………………………………………………...…4

Description…………………………………………………………………………5

Sequential Diagram ………………………………………………………………..6

Screenshots…………………………………………………………………………9

**ABSTRACT**

The agenda is to rank the universities. The factors considered for ranking are the Jobs opportunities of secured by the students, the amount of the research conducted, and paper published by the Professors and Students. This model is also based on the Alumni performance in the company which we get from the employer feedback.

**UML Diagram**

Diagram, schematic

Description automatically generated

**Description**

The university model is resolved into following independent blocks namely,

* University – List of the university
* College – List of colleges under the university
* Department – Manage the record of each department
* Programs- Programs under the Department
* Courses- Manages the courses under the program
* Professors – Manages professors
* Students – Manages students records
* Research – Manages the research
* Job – Manages Jobs
* Employers – Uses the employer system to get the feedback

Following are descriptions of each class (building block):

**University:** We will be storing the detail of the university, like university Name, code, location, and several students, and a number of graduates.

This class is defined as a public class.

The objective of this class is to provide the university details when selected based on the desired results.

**College:** We will be managing the details of the colleges under the university. For example College of computer science, College of Business and management studies, College of Law, College of medical, etc.

**Department:** This will be managing the details of the individual department like college name (to refer to college), Department name, Department code, etc.

**Programs:** Has the list of all the programs under the department, For example, information Systems, Mechanical Engineering, Industrial Engineering, etc.

**Course:** This has a list of all the courses for a particular department. Students need to select the course as per the credit history and the course eligibility. To enhance further, we had added the details like, credit per course, core courses, elective courses, program.

This is a public class

**Professors:** Details of the professor like name, id, number of years of experience, role, and courses taught by them.

This is a private class.

**Research:** List of research being conducted in the university, and area of the research, research paper published, if patent, student in the research, professor in the research.

**Job:** Details of the job like job role, company, experience, salary promotion, student. Here whenever we a student gets a job, we will be adding the details of the student along with the job details. This will provide the information of all lists of jobs, students in a particular company and Avg salary of the company avg salary of a particular job role.

This is a private class.

* For a particular job role, we can get the list of all the students working in that job role. Hence, we will get answer the question of what a course is is chosen for a particular job role and thereby suggest the students inspired for that particular job role. (Which is one way to suggest the student the best college)
* No of student in a particular course.
* Which professor contributing to a particular job role

List of students of job role – get the course – and the professor details

* From the same above result, we can also get the faculty who is contributing to that particular job role.

**Student**: This class tracks the details of the student as an independent entity. We have also added some additional details like if the student is already graduated. GPA of the student.

Hence with the following details.

This is a private class.

We also have an option to edit the details of the students. (To the university admins).

* From Student details, we can navigate to the course, department, professor, and research of that professor (if any)

**Employer:** This is an asset for the university. This is like a feedback mechanism; we will be receiving the employee rating. The average performance of the job role. This helps us in assisting the growth of the graduate over the period.

* We will take the average of the performance of the employers and generate the graph over a period of 5 years or more. (Using a simple line graph)

**Our ranking strategy on dashboard:**

We will rank a university by **generating a score** based on the number of placements or research conducted or both jobs and research.

1. Score for number of job = number of actual jobs.
2. Score for number research = 5\* number of research.
3. Score for number of job and research = 1 research = 5\* job.

Another suggestion, which is not included in the score but based on the employer feedback is to show the growth of the students in the company by considering the “overall performance “and displaying it in the graph over a period of 5 years or more.

**Sequential Diagram**

Professor dashboard:

**Diagram

Description automatically generated**

Course sequential diagram

**Diagram

Description automatically generated**

Student sequential diagram:

**Diagram

Description automatically generated**

Employer feedback:

**Diagram

Description automatically generated**

**Screenshots of UI:**

**Dashboard:**

Chart, bar chart

Description automatically generated**Table

Description automatically generated with medium confidence**

Chart, line chart

Description automatically generated

Manage (add or update) college:

![Graphical user interface, application

Description automatically generated]()

Manage (add /update) course:

![Graphical user interface

Description automatically generated]()

Manage (add/update) Department:

![Graphical user interface, application

Description automatically generated]()

Manage (add/update) Employer:

![Graphical user interface, application

Description automatically generated]()

Manage Professor

![Graphical user interface

Description automatically generated]()

Manage(add/update) professor

![Graphical user interface, application

Description automatically generated]()

Manage student:

![Graphical user interface, application

Description automatically generated]()

Manage university details:

![Graphical user interface, application

Description automatically generated]()