Assignment 3

Team Members –

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Deliverables -

As part of assignment 3, this document contains points mentioned below

- Report (Explaining Problem background, addressing solution and Entities involved)
- Sequence Diagram
- Class Diagram
- Dashboard (Screenshots attached)

REPORT

Problem Background -

One of the greatest challenges faced by US Universities now-a-days is to keep their curriculum fresh and ensure that they are preparing their students for the real-life challenges that await them once they graduate and start working. With post-secondary education becoming common, and with technology advancing rapidly, the half-life of knowledge for advanced education is rapidly decreasing. So much so, that most of what is taught to college students in today's day and age becomes obsolete within a decade. To ensure that they are delivering quality education that is indeed helpful to their students in their real-world jobs, it is of absolute importance for universities to have a framework that allows them to track how the resources that they provide to the students like their education and faculty is contributing to the career growth of their graduates.

Proposed Solution –

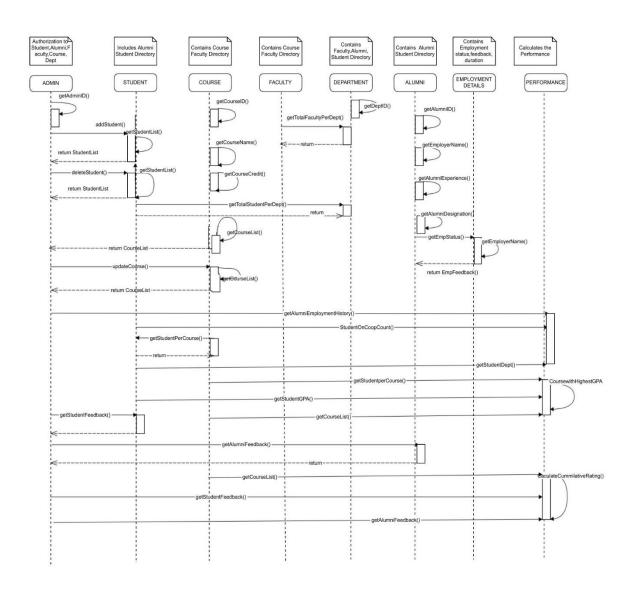
- We aim to address this problem by giving the university a platform based on Software Engineering paradigm to track the performances of all the students that belong to the various schools and colleges affiliated to the university.
- It is powered by a Dashboard that will not only take information from both the sources, that is, Student and Alumni, but also be helpful in tracking their performance and growth over 5 years based on a specific set of parameters.
- The parameters considered for performance review are grades, percentage of students employed in target areas, and acquired skills among others, while those considered for the measurement of student growth, from a career-standpoint, are promotions, and work-experience.
- One important metric to understand how successful the university has been in meeting the educational needs of its students is the measure of satisfaction among its students. For this purpose, we have incorporated a way for students and alumni to share their feedback.
- All these parts work in tandem to give a holistic picture of the performance overview of the university capturing what worked, and what didn't so that the university can target the areas it needs to work on which is the overarching goal of the solution.

Classes-

- 1. Student
- 2. Alumni
- 3. Faculty
- 4. Courses
- 5. Department
- 6. Administrator
- 7. Employment Details
- 8. Performance

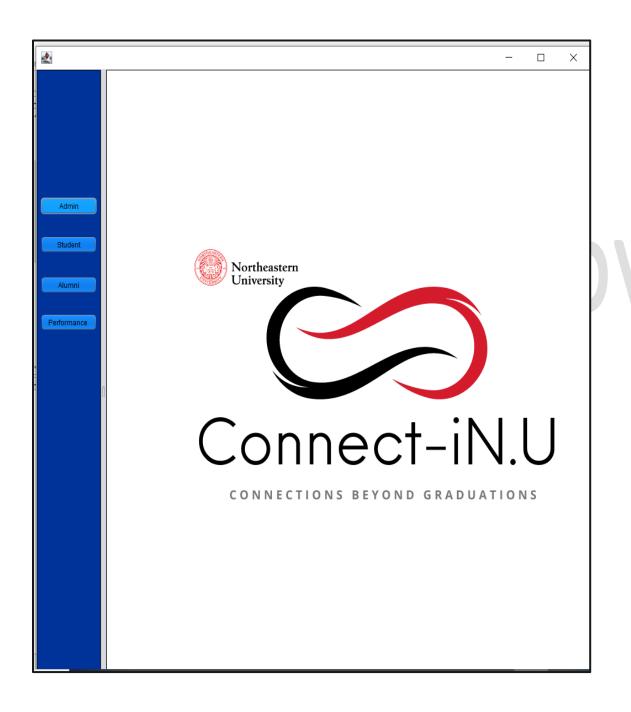
Class Diagram -Alumni Student Department + studentID: int + deptld: int + deptName: String + studentFirstName: String + studentLastName: String + studentGPA: float + alumniID : int + alumnilD : Int + alumniFirstName: String + alumniLastName: String + alumniCourse : String + alumniCourse : String + alumniLocation : String Alumni Student Directory + studentOnCoop: boolean + studentCourse: String + studentEmail: String + getDeptID() + studentl ist list<Student> + getTotalFacultyPerDepartment() + getTotalStudentPerDepartment() alumniList list<Alumni> + campusLocation: String + alumniFeedback : String + getStudentList() + getStudentID() + getAlumniList() + getAlumnilD() + getEmployerName() + getAlumniName() + getStudentFirstName() + getStudentLastName() + getStudentGPA() getAlumniDesignation() getAlumniCourseList() + getStudentOnCoopCount() + getStudentCourse() + getAlumniExperience() + getAlumniFeedback() + getCampusLocation() + getStudentEmail() Admin + adminID: int + adminName: String + getAdminID() + addStudent() + deleteStudent() Performance System Faculty + courseID : int getStudentFeedback() + courseName : String + facultvID: int getAlumniFeedback() + term :String + courseCredit : int + facultyID: int + facultyName: String + facultyDept: String + facultyCourse: String + facultyQualification: String calculateCummulativeRating() + updateCourse() getStudentPlacementCount() getCourseWithHighestGPA() + getAlumniEmploymentHistory() + getStudentPlacementCount() + getCourseID() + getCourseName() + getTerm() + getCourseCredit() + facultyExperience: int + getFacultyID() + getFacultyDept() + getFacultyQualification() getFacultyExperience() **Course Faculty Directory** + facultyList List<Faculty> + courseList List<Course> + getFacultyList() **Employment Details** + studentId : int + employerName : String + empStartDate: Date + empEndDate: Date + salaryFeedback: String + managerFeedback: String + empStatus: String + empFeedback: String + getStudentId() + getEmployerName() + getEmpStartDate() + getEmpEndDate() + getEmpEndDate() + getEmpStatus() + getEmpFeedback() + getManagerFeedback() + getSalaryFeedback()

Sequence Diagram -

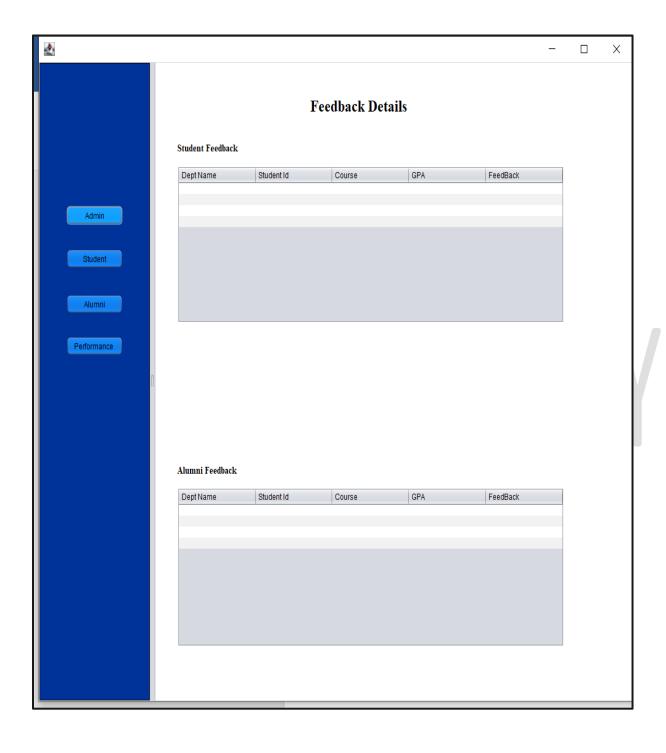


DASHBOARD

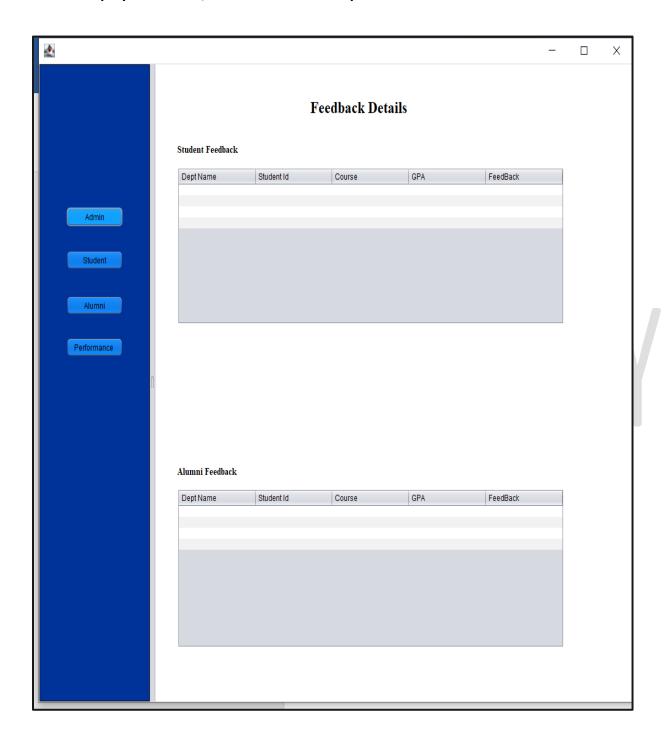
1. Homepage



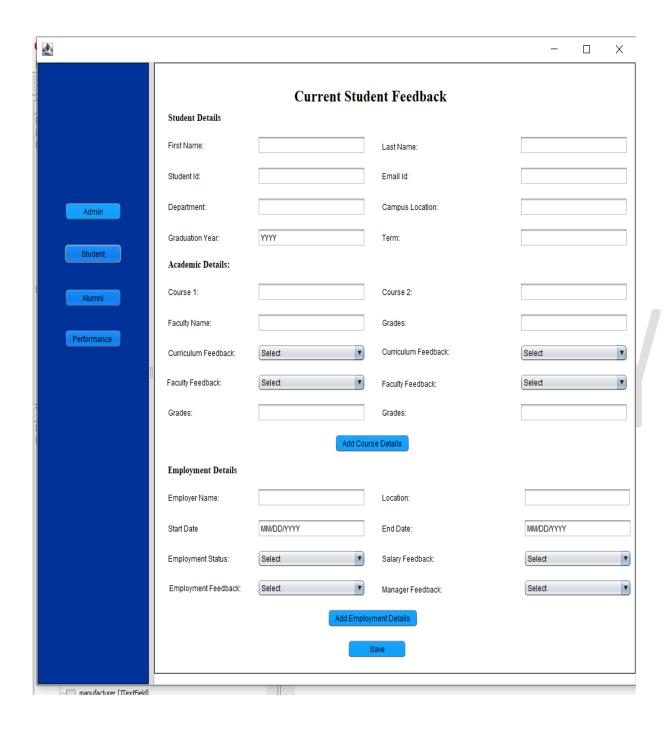
2. Display of Student/Alumni Feedback Responses



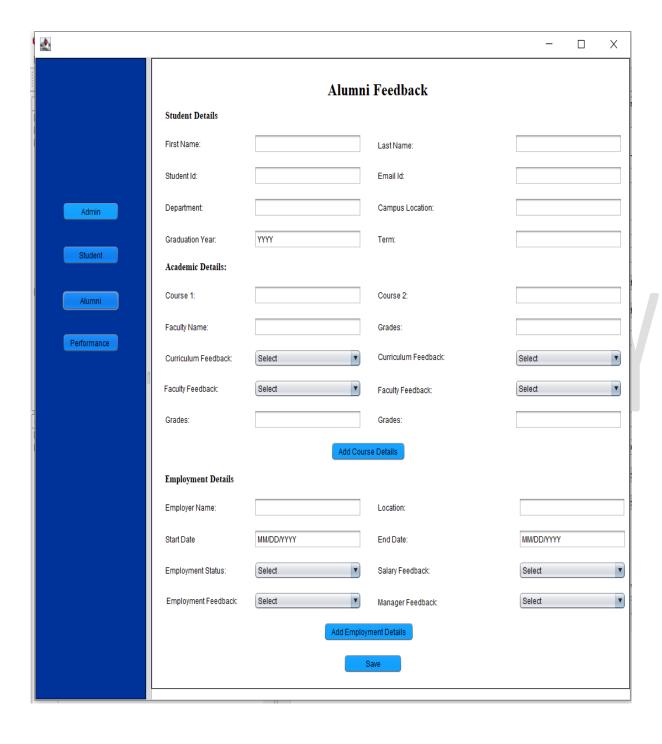
3. Display of Student/Alumni Feedback Responses:



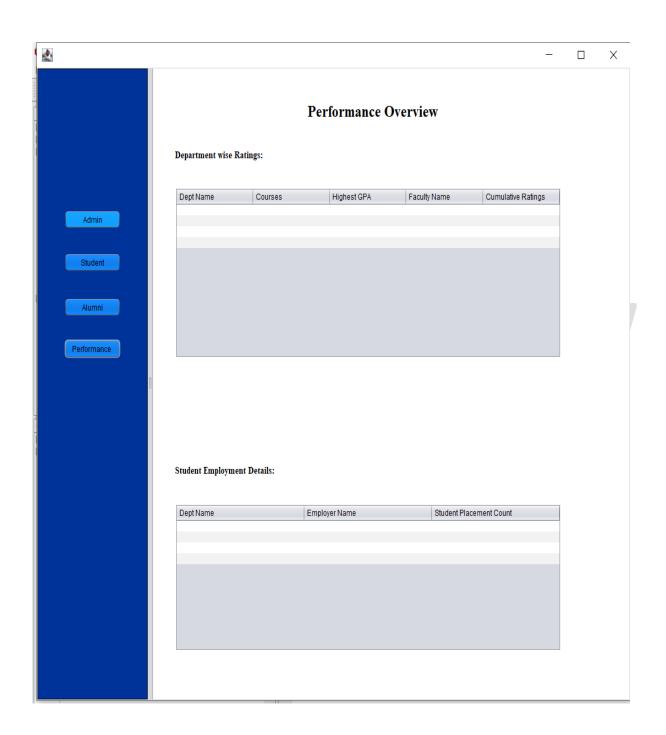
4. Form to collect Student Responses



5. Form to collect Alumni Responses



6. Display of Performace Metrics for Student/Alumni Employment and Curricular activities.



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