

SW Engineering CSC648/848

Spring 2021

Application Title: Milestone

Section 02 - Team 06

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Jeffrey Ye - Database Manager

Milestone 2

History Table

Submitted	Revised
3/10/2021	3/15/2021
Revision Summary	
CEO/CTO Feedback: Good documentation team "Milestone." Your functional reqs represent a good understanding of what the users and customer are looking for, and will help you to do a good implementation. Keep going.	

1. Functional Requirements

Priority 1

Users

1. First-time visitors shall be onboarded.
2. Guests (students, and headhunters) who do not want to sign up yet, shall be able to search.
3. Search capability for new graduates or students by major, demographics, and military code.
4. Students shall be able to search for open positions of interest to them.
5. Students shall have the option to automatically build a profile from their resume.
6. A new graduate or senior shall use the system to request endorsements from a professor at the university.
7. Students shall register and get alerts for matching profiles that they are looking for.
8. Endorsers shall rate students in a scale from 1-5 fashion, being 5 the highest ratings that implies knowledge, responsible, teamwork, leadership, committed to success, etc and enter recommendations.
9. Headhunters shall register to use the system.
10. Headhunters shall create job postings.
11. Headhunters shall specify demographic preferences and have results highlighted accordingly.

Admin

12. An Administrator shall verify a headhunter.
 13. Administrative capabilities shall trigger matching alerts to a headhunter and student that fits qualification of a job posting by headhunter.
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Priority 2

Users

14. Students shall be given suggestions to improve their profiles.
 15. Students and headhunters shall participate in a chat dialogue.
 16. Endorsers shall be able to login with verification of university email.
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Priority 3

Users

17. Students shall be able to upload video to showcase skills.

Table of Priorities Per Persona

	Profile (P1)	Login (P1)	Messaging (P2)	Searching (P1)	Posting (P1)	Endorse (P1)	Verify (P2)	Upload Video (P3)
Student	x	x	x	x				x
Endorsers			x	x		x		
Headhunters	x	x	x	x	x			
Admin		x	x	x			x	
Guest				x				

2. UI Mockups and Storyboards

Use Case 1

Edward wants to create a profile on our website. They choose to register for an account.

A registration form layout with three columns. The first column is titled "I'm A Student" and contains a "Create Profile" button, two text input fields, and a submit button. The second column is titled "I'm A Headhunter" and contains a single text input field. The third column is titled "I'm An Endorser" and contains a single text input field. Below these columns is a wide text input field with a submit button.

They fill out the registration form.

A detailed registration form titled "Register As A Student". It includes the following fields: "Email" (text input with placeholder "@mail.sfsu.edu"), "Full Name" (three text inputs for "first name", "M.I.", and "last name"), "Graduation Date" (a dropdown for "month" and a text input for "year"), "Resume" (a button labeled "Upload" and a checkbox labeled "fill out experience and skills for me"), "Coursework" (a text input with a "+" button), "Skills" (a text input with a "+" button), "Work Experience" (a text input with a "+" button), "Profile Picture" (a button labeled "Upload"), and "About You" (a large text area with a "+" button). A "Register" button is at the bottom.

They confirm their student email externally.

Please Check Your University E-Mail To Verify Your Account

Dismiss

Didn't Receive An E-Mail?
Resend Change Mail

They upload a video to the website showcasing their programming skills.

Student Name

About

Resume

Upload

Upload media to have it display here!

Upload Media

Title

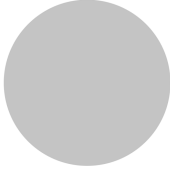
Media File Upload upload videos, portfolios, pdfs

Post

Use Case 2

Edward notices they can request ratings for some of their skills and classes.

[About](#) [Log Out](#)



Student Name


Skills

Coursework

Course Name [Request Rating](#)

About

Resume



When requesting a rating for the class they enjoyed and did well in, they leave a message for the professor.

Request Rating For [Course Name]

Endorser

endorser name ▼

 OR

endorser email

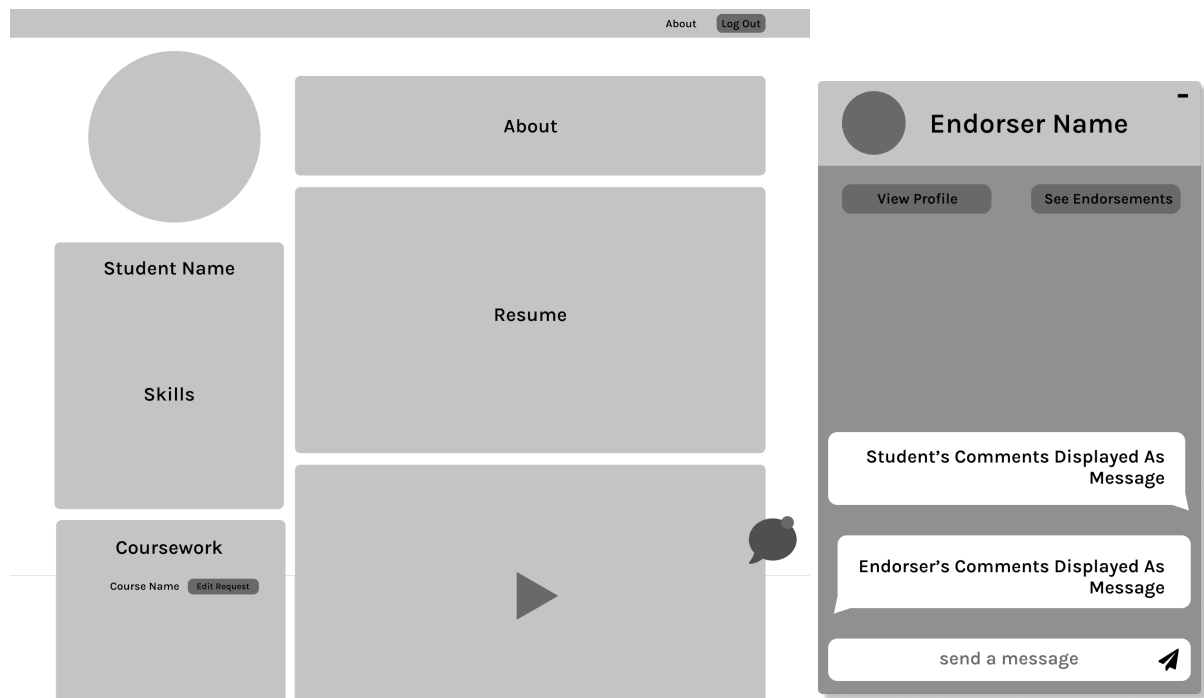
@mail.sfsu.edu

Comments

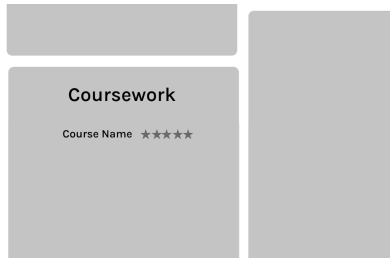
//

Request

After walking away for a cup of coffee, they see a notification for a message with the professor and talk to him.



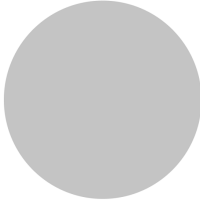
They are pleased to see a high rating for the course.



Use Case 3

Stan wants to post an open position in their company. When they are logged in, they fill out a job posting form with required and preferred criteria.

[About](#) [Log Out](#)



Headhunter Name
Company Name

Your Job Postings

[Create A Job Posting](#)

Job Name X
Job Information...
[View More Info](#)

They include the amount of experience, technical skills, and demographics.

[About](#) [Log Out](#)

Create A Job Posting

Visible

Title

Type

Description

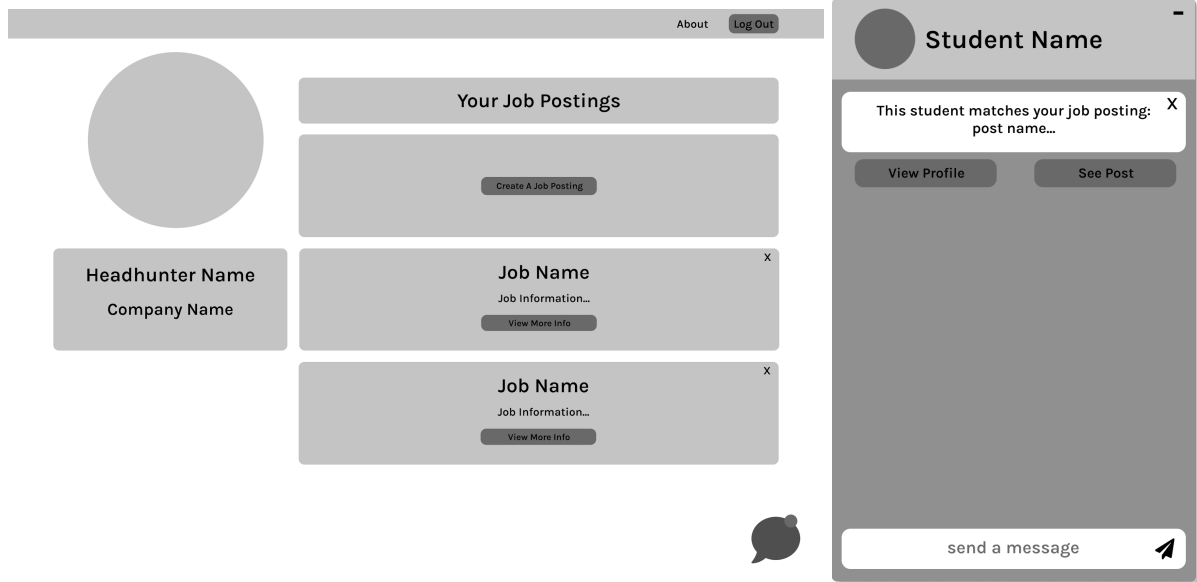
Coursework

Skills

Graduation Date **to**

[Post Job](#)

They receive a notification that a student matches the job post.



Use Case 4

Robin receives a request to rate a student in one of her classes.

AboutLog Out

Endorser Name
Department

About

Rating Requests

Student NameCourse NameMessageRate

Student NameSkill NameMessageRate

Student NameCourse NameMessageRate

Student NameSkill NameMessageRate

Rate [Course Name] For
[Student Name]

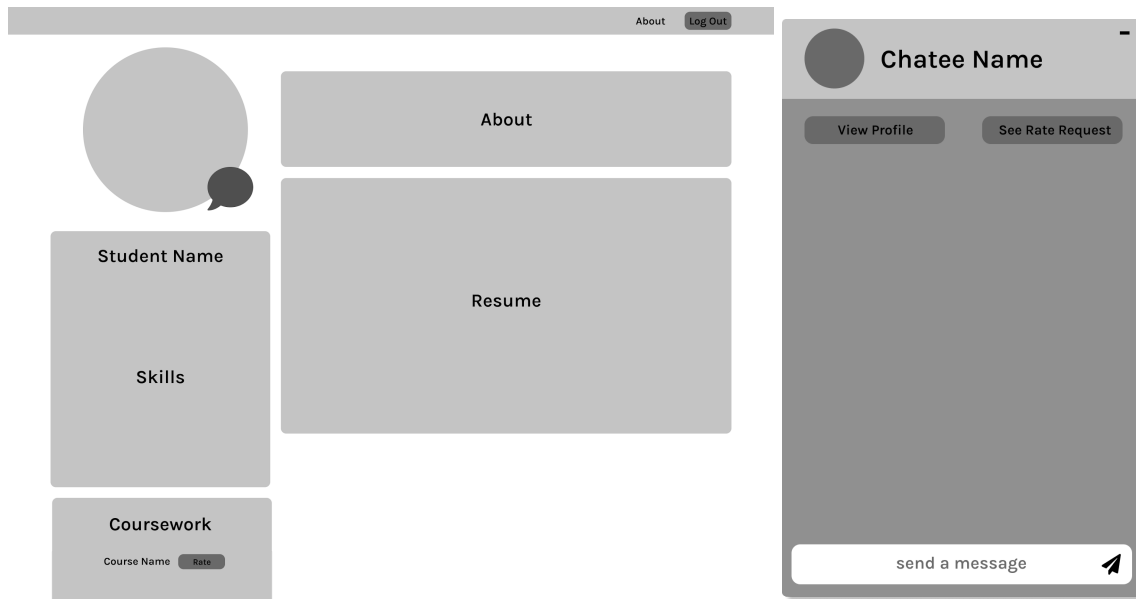
MessageProfile

Rating ★★★★★

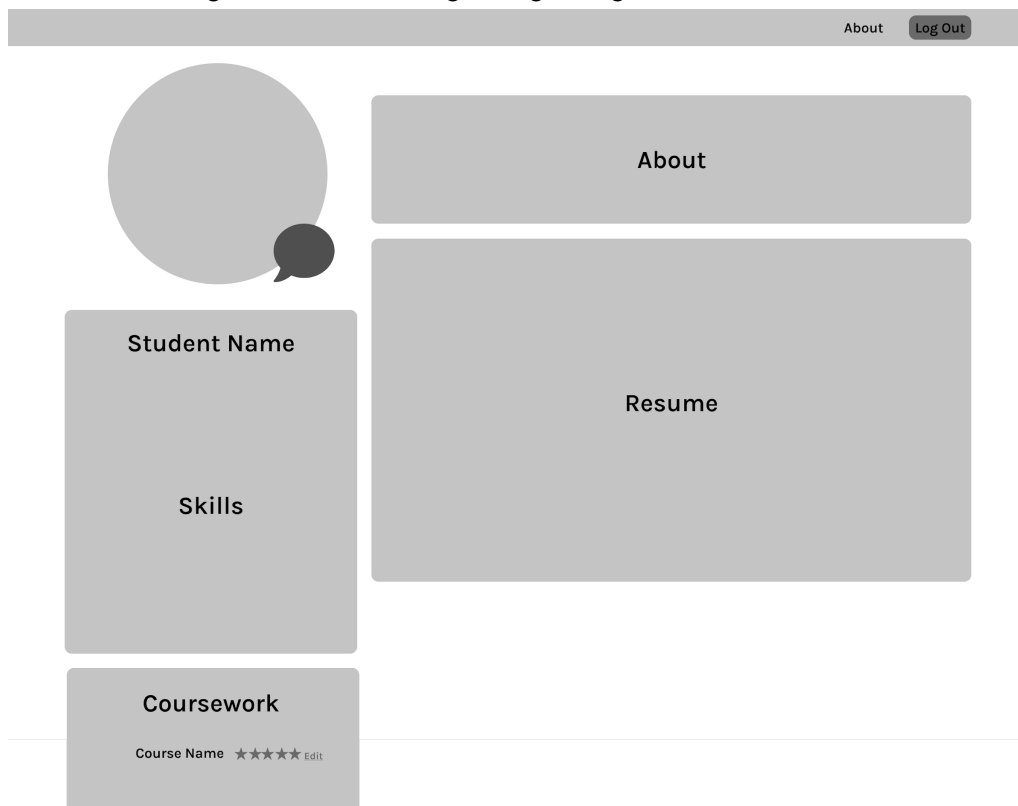
Comments

Post

She views the student's profile to jog her memory and messages the student.

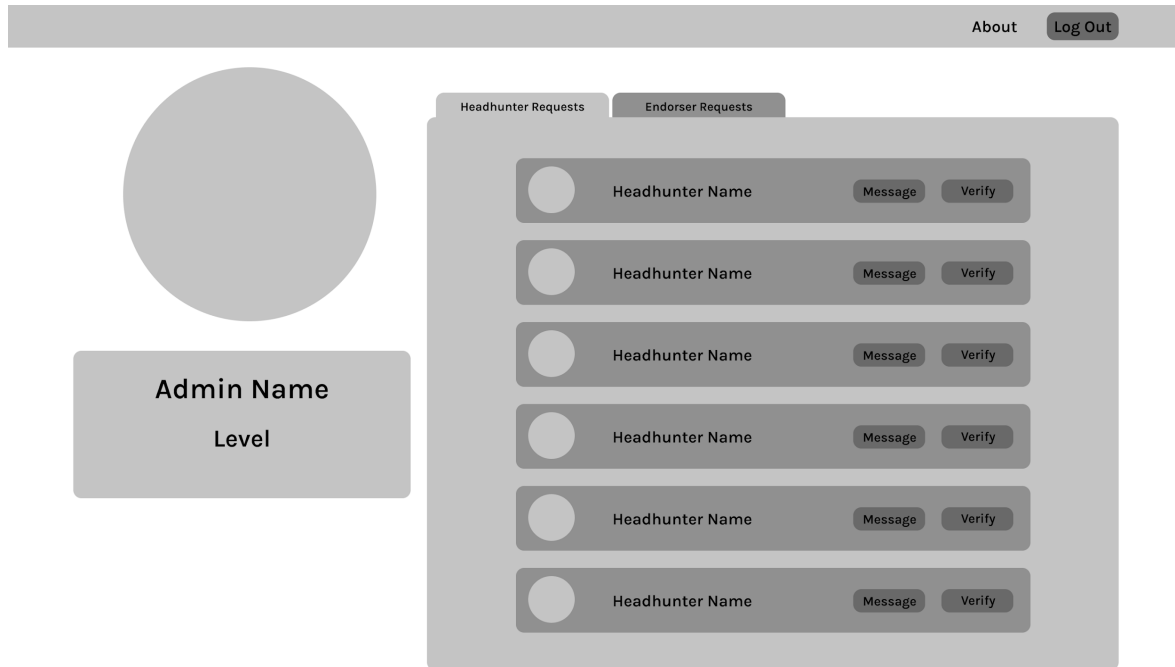


She decides to give the student a glowing rating for the course.



Use Case 5

Admin consistently receives user account requests from headhunters and endorsers.



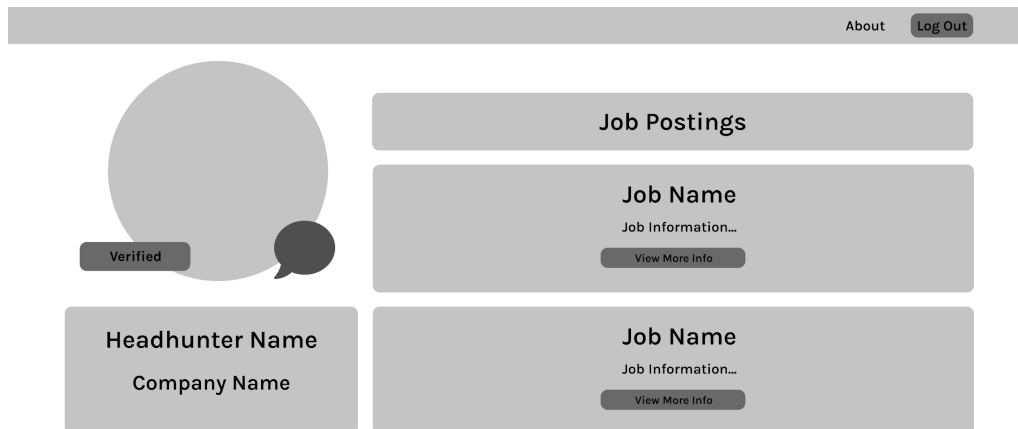
They view a request for a headhunter account.



In order to fulfill these demands, they ensure the legitimacy of their company and job description.

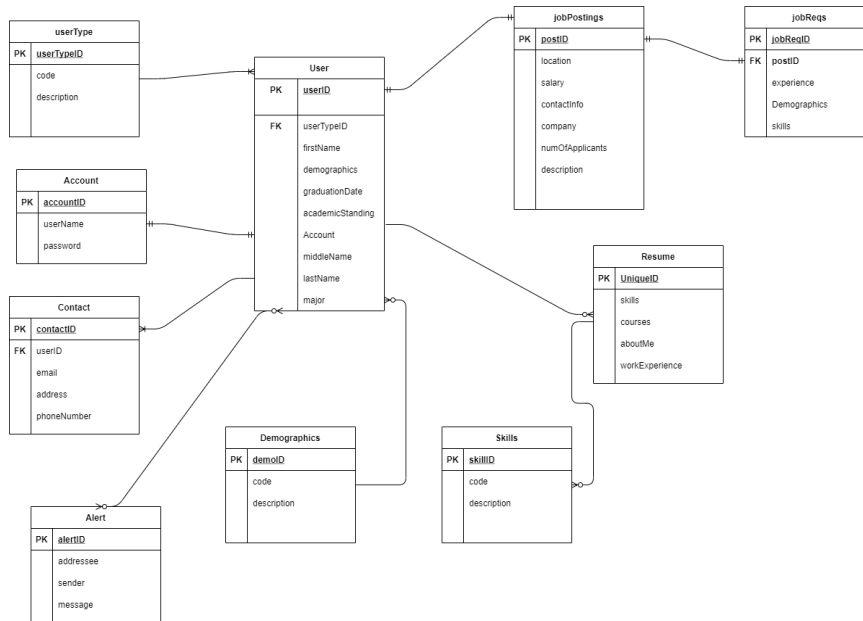


After verification, the headhunters posts are now visible.



3. High-Level Architecture, Database Organization

Database Organization



Media Storage: File System

Search Filter Architecture & Implementation

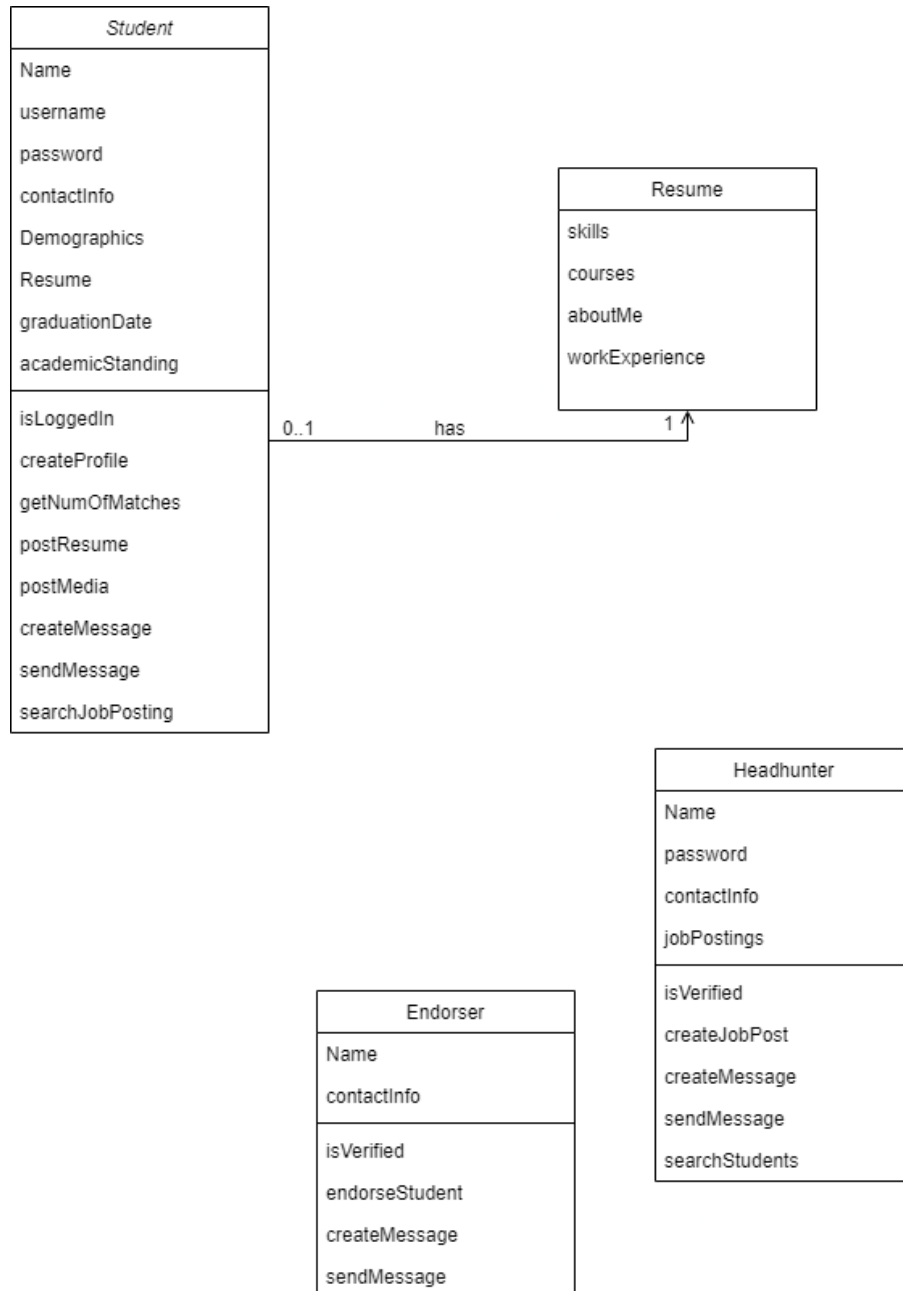
Organize Search Items: Database Tables

Searchable Database Terms:

- Name
- Company Name
- Major
- Demographics
- Skills
- Job Posting Descriptions
- Job Posting Requirements

Non-Trivial Algorithm: Ranking

4. High Level UML Diagrams



5. Key Risks

Immediate Risks

The team is devoted and dedicated but have skill gaps that make the curve quite steep. None of the team members has extensive experience (we are beginners at best) with the technology stack that we have chosen. This is not particular to the choice of stack it would be the same even if another stack was the choice. We are generally not experienced in web development.

- Skill - the team has committed to doing what it takes to close our skills gap through individual reading/research and generally improve our familiarity and abilities with the technologies we have chosen.
- Schedule - the schedule is tight and for this, we have committed to meeting twice a week outside of normal class to ensure we meet our deliverables.
- Technical - we have not run into major technical issues yet and we hope to keep it that way.
- Teamwork - our meetings are scheduled to be at a time that is suitable to all team members considering that we are on different continents.
- Legal/Content - we plan on using only free content to avoid any legal entanglement.

6. Project Management

Task Distribution

- Create Database tables - Jeffrey
- Create controller module - Peter
- Create connection module - Peter/Jeffrey
- Create page prototypes - Bera/Maria
- Configure deployment - Jooyoung

Management

Our team meets weekly regardless of Milestone deadlines. We have been using a Google Doc to stay organized, but recently shifted to a Trello board to split up our tasks. Within the past week our team has been focusing on learning the technologies of our software architecture. We started implementing the Vertical Prototype for our application and learned the complexities and learning curve that will determine our scheduling. We work within our respective teams: back end and front end, and ensure to consolidate our ideas together as a team. We also remain organized through our Slack group chat where we provide each other updates on our current tasks, as well as inform each other of resources that we think may be useful for each other. For future tasks we will ensure to continue using Trello and use checkpoints between milestones to ensure we meet deadlines.