



Imperium

Product Backlog

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Problem Statement

The job searching process is often very complicated and lengthy. Employers aren't always given the opportunity to meet with interested students, and can't always get to know the candidates as well as they would like to. To solve this, Imperium aims to create a much smoother initial connection between companies and students by creating a platform where companies (or students) can browse students (or companies) and choose which ones they find preferable. Companies and students that connect will be given the opportunity to chat and talk with each other, as well as organize further meetings. Our product will be different from other job searching applications, as Imperium is a platform for college students only and will give employers and students a convenient way to learn and get in contact with each other.

Background Info:

Audience

Imperium aims to help connect students searching for jobs, as well as those looking to hire new employees. As a result, this website will have a large audience of students looking to join the working force. Imperium allows its users to sign up as either job recruiters or job-hunters. Primarily, Imperium will be aimed towards college students looking to overcome the initial boundary of getting that first job. The website will provide a new way for those in the job force to connect amongst each other in search of available positions. Ultimately, recruiters and recently graduated students will be the main user base.

Similar Platforms

There are a few similar job recruiting services that exist, such as Glassdoor, Indeed, LinkedIn, and Purdue's myCCO. These websites allow users to search for and apply to jobs based on their preferences. MyCCO is mainly informational, allowing for job searching and then redirecting to the companies website. LinkedIn focuses on networking and connecting with other people and potential employers. Indeed uses certain preferences in order to help users find compatible jobs. Glassdoor also allows for job searching, as well as containing information on average salaries and reviews.

Limitations

These platforms all offer various ways to find a potential job, however their main limitation is their difficulty to use and lack of two-way communication. It is difficult for many students to find an internship or job, not only because they need to put in a lot of work to create a resume and prepare for interviews, but also because the resources available for job searching can be difficult to use.

We aim to fix this by creating a simple to use user interface that falls more in line with modern social media apps. We also plan to have a messaging system to talk to employers and share documents which will also allow students and employers to move past the initial connection.

Functional Requirements:

1. As a user, I would like to be able to create an account for Imperium so that I can find a job or so that I can recruit.
2. As a user, I would like to be able to login and manage my Imperium account so that I can use Imperium as effectively as possible.
3. As a user, I would like to be able to reset my password if I forget it so that I won't be locked out of my Imperium account.
4. As a user, I would like to be able to easily navigate through the website so that I can efficiently find jobs or potential employees.

5. As a user, I would like to upload a photo of myself/my company so that companies can see more about me.
6. As a user, I would like to logout of my account so that others cannot potentially hijack my account.
7. As a user, I would like to delete my account so that I can no longer be associated with the service.
8. As a user, I would like to access Imperium on any device regardless of size or resolution so that I don't need a desktop to use our product.
9. As a user, I would like to have phone notifications when I get matched or have new messages if time allows
10. As a user, I would like to get desktop notifications when i get matched or have new messages if time allows
11. As a user, I would like to receive email notifications that can give me updates about my profile if time allows
12. As a user, I would like to disable certain notifications as I please if time allows
13. As a student, I would like to upload my resume so that companies can learn more about me.
14. As a student, I would like to create a bio about myself so that companies can quickly understand who I am.
15. As a student, I would like to create job specific preferences about what I want so that companies can more effectively find me.
16. As a student, I would like to specify a radius of where I am interested in having a job
17. As a student, I would like to be able to view employer profiles so that I can see what companies are hiring.
18. As a student, I would like to be able to like employers that I'm interested in so that I can show interest in those employers.
19. As a student, I would like to chat with employers who I have matched with so that I can talk to companies where there is a mutual interest.
20. As a student, I would like to 'star' up to 3 companies to show that I am extra interested
21. As a student, I would like to unmatched with an employer so that I can adjust my interests over time.
22. As a student, I would like to hide my profile from employers when I am no longer looking for a job
23. As a student, I would like to view a history of past matches of employers
24. As a student, I would like to specify whether I want a job, internship, or co-op
25. As a student, I would like to "match" with an employer who has viewed my profile
26. As an employer, I would like to verify that I am an employer from the company I am representing to avoid fake people from creating employer accounts
27. As an employer, I would like to have a main page for my company
28. As an employer, I would like to create sub groups for specific majors that I am interested in so that I can more effectively find potential employees

29. As an employer, I would only want to give certain people access to certain sub groups that they are in charge of if time allows
30. As an employer, I would like to create a bio for the specific job/internship
31. As an employer, I would like to be able to navigate between subgroups
32. As an employer, I would like to search through students in specified subgroups
33. As an employer, I would like to “match” with a student who has viewed my profile
34. As an employer, I would like to view student profiles so that I can get a better understanding of a student
35. As an employer, I would like to be able to like students that I’m interested so that we can begin to build a professional relationship
36. As an employer, I would like to chat with students I’ve matched with so that I can find employees to hire
37. As an employer, I would like a history of past students I matched with
38. As an employer, I would like to easily schedule interviews with matched students so that I can continue the relationship past our initial meeting.
39. As an employer, I would like to unmatched with a student so that I can better keep track of students I’m interested in
40. As an employer, I would like to hide my profile from students for when positions are full for a specified sub group

Non-Functional Requirements:

Architecture and Performance

Our frontend and backend will be separated from each other in order to ensure effective development and coordination between those specifying in those two domains. Our backend will be written using Node.js and Express which takes advantage of asynchronous I/O operations to create performant web servers. Node.js also comes with the node package manager (npm) so we can take advantage of the thousands of packages available through that to enable DRY principles. Our frontend will be written using React and will be packed and minified on deployment in order to speed up load times. It will use the API endpoints exposed in our backend to query our database.

We aim to achieve 99.9% uptime, only going down to update our underlying web servers. As our database will be hosted using Firebase, we can generally expect an even higher uptime from that service. We also aim to make requests take no longer than 500ms so there is less friction for those using our product.

Security

All of our API endpoints that could return or effect user information will require authentication to prevent unauthorized access. In order to ensure security we will also sanitize user input and employ strategies to prevent CSRF (cross-site request forgery) to further prevent potential unauthorized data access. Finally, all user password will only be

stored in a salted, hashed state so we will never be storing the users text passwords ourselves.

Usability

Our product should be easy to use and intuitive for both potential employees and recruiters. The frontend should conform to accessibility standards (for example, images should have alt attributes where applicable). Our frontend should also be functional on devices of varying size and resolution so that our product is useable on any internet connected devices.

Hosting/Development

We will be using Firebase on the backend that will be disjoined from the front end and can be controlled and updated separately. After we have a functional prototype of our application, we will be able to deploy the backend to a Google Cloud instance for testing. Because both Firebase and Google Cloud are run through Google, there is easy interfacing between the two platforms.