Project Vision and Scope: UW Alumni System

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# 1. Executive Summary

1.1 Background
The importance of networking will always be relevant as it provides people opportunities for their future industry experiences and careers. The usage of digital or online networking has also been trending as it quickly establishes connections everywhere, being a convenient tool for career fairs, recruiting, and internships. For many college and university students, it is a pivotal time where they consider their next step in their educational and/or career goals. Because of this, colleges and universities are providing resources and platforms to get students engaged with alumni members and industry professionals to be prepared for employment.

1.2 Problem Statement
The current alumni system for the University of Washington, UW Husky Landing, is underwhelming for the purpose it is trying to fulfill. Serving as a networking tool for those in the UW community, it gets overshadowed by other networking platforms such as LinkedIn and Handshake that are heavily emphasized within the university and industry workforce. Some of the many lacking aspects of UW Husky Landing include:
- Lack of engagement from the alumni updating the service or using the service itself
- Minimal exposure from being hidden within the Communities tab on the UW Alumni Association website
- Hard to gauge the numerous user types and their respective purposes within the networking process
- Not clear how much budget can be allocated towards the alumni networking system as it is a sponsored project
- Difficult to initiate connections that cater to one's user experience and needs
- The interface is hard to navigate through and is not configured at times

Beyond the state of the alumni system, the COVID-19 pandemic has created a layer of difficulty for networking for many people. Because of this, businesses and services alike have incorporated digital technology into their models to remain active despite self-quarantine and social distancing (Soco-Acosta, 2020, p. 260). UW Husky Landing was made to be a "powerful professional networking tool for the UW community" (UW Alumni Association, 2022) that enables building connections with members from UW, but there is a lack of attention and development being put on this platform. Its features and updates have been unvarying as of recent, so there needs to be a push for a change to promote new and active users.
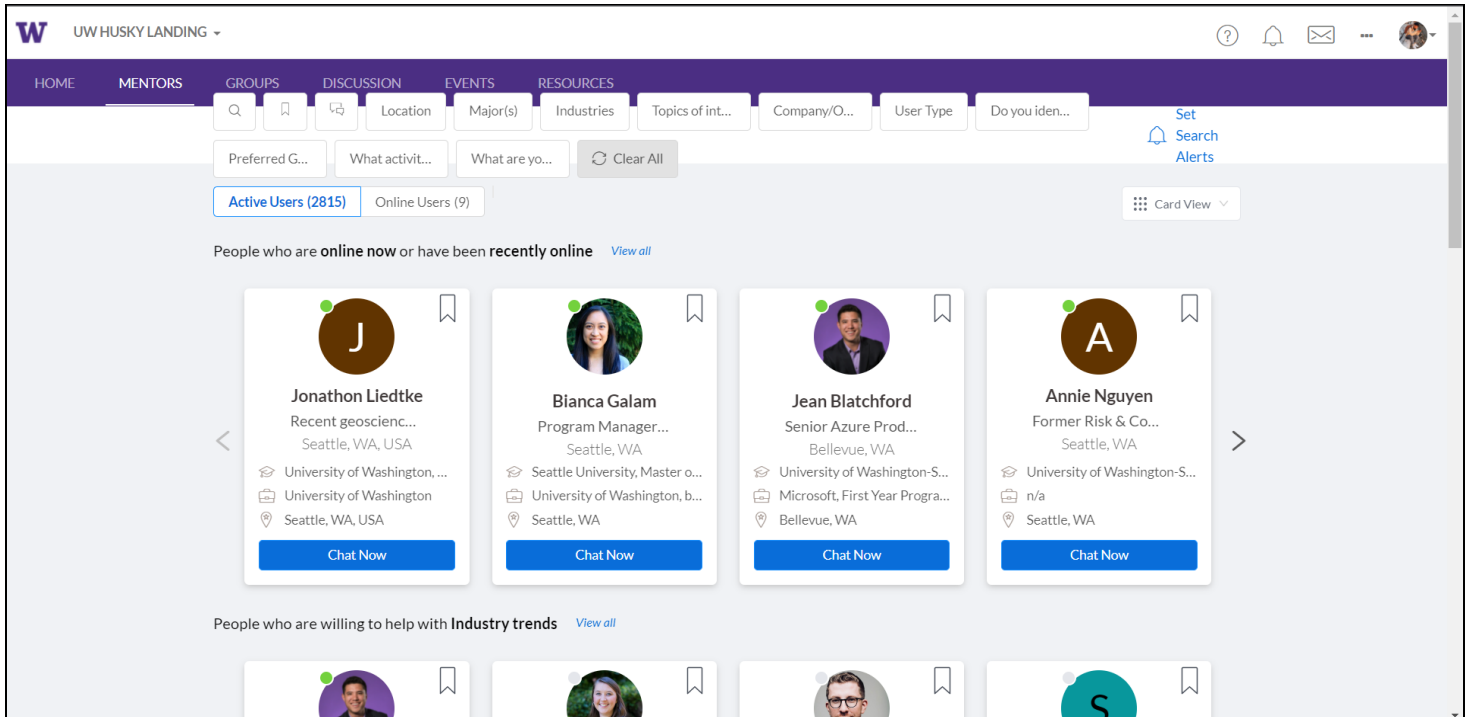
UW Husky Landing interface unaligned on "Mentors" page being partially on navigation bar

1.3 Limitations of Existing Solutions

The two networking platforms LinkedIn and Handshake cultivate an environment that is solely based on presenting your best industry professional self to be "more productive and successful" (LinkedIn, 2022), which can feel artificial and pressuring to some. Although its user base is vast and active, it can be difficult finding the right person to work with as skills and goals are not clearly defined. The connections on LinkedIn itself can also feel superficial without the context of knowing users in-person, with not promoting engagement between other users as it only features sending a message.

1.4 Solution Benefits

The alumni system will have a more active user base and frequent updates on the contents/resources available for its users. It will add clarity to users' needs, goals, and wants with concise profiles and cataloging. Users of the alumni system will be able to network effectively with meaningful connections and be engaged in the university's community and events. It will become a platform supported on various web browsers and devices, available for service 24/7. The alumni system will be scalable to support the increasing number of alumni and general users, reliably storing data transmitted through its users engaging in posting, messaging, sharing, and accessing files.

2. Current State

UW Husky Landing attempts to imitate a LinkedIn-like platform that is catered for UW students and alumni to be mentored by experienced industry workers. While the filter and search features are adequate to find many mentors to the user, it does not personalize user experience on top of covering many of its networking features. Our rework of the alumni system will make networking slightly easier and quicker with refined searching capabilities and forming a constructive environment.

At the time of February 18th, 2022, UW Husky Landing currently has 2819 active users registered on the platform. Compared to the "more than 56,000 members" in the UW Alumni Association, this showcases a small percentage that is involved in the alumni networking platform *meant* for UW alumni (*About the UWAA*, 2022). In the discussion forum under the "Discussion" tab, there is little active engagement in replies and comments towards listed posts and questions, with 39 total posts dating back to July 17th, 2020 (which you cannot quickly access by sorting the date of posts). Looking at the resources page, it appears to be full of placeholder images and poorly formatted articles that have not been updated as well.

The main stakeholders of the alumni system are the current students and alumni who have graduated from UW. Seeing that these two user types make up most of the alumni system user population, our version of the alumni system will highly prioritize personal networking and connections within these student-alumni relationships, on top of mentor-mentee relationships. Student advisors will also have access to student and alumni information to identify trends and potential employers for businesses to consider supporting. UW staff and faculty will also be involved in identifying alumni associated with their respective majors and/or fields. Alongside university Department Chairs and Deans, they can facilitate and track the alumni and students' careers and mobility once they graduate from the university. Lastly, UW sponsors and organizations should be able to easily promote their businesses and programs for users interested in working.

3. Opportunity and Objectives

One of the key pain points of the current alumni system is that some of its features were added without thinking about its usability. Having user profiles be close to identical to LinkedIn profiles is great in a globalized context where the user base is much more populated and scattered across the world. However, the UW alumni system should give a sense of home and community across users as they all come from the same university. There should be a slight notion towards "informal networking" with a feeling of familiarity to pick out genuine interests and connections across user interactions. In other words, the alumni system should encapsulate having a low-stress environment when reaching out to students, mentors, industry professionals, and organizations. Having the alumni system be based on voluntary input also requires incentives for alumni to stay involved as active users.

There is a need to better format and structure profiles to display important information for other users to see. This will make networking less time-consuming, not needing to spend more time evaluating if this mentor is the right mentor for you. The data from users' profiles should be better used to understand their needs right away and make the right suggestions, not ones that are *good enough*. When connecting with mentors and other users, there are templates offered to introduce yourself depending on a topic such as networking advice or career exploration. The system takes information from the recipient's account and adds it into the constructed template, though sometimes you would have to trim down the contents to make the message concise. With users looking for suitable people to network and discuss with, we want a focus on learning and/or teaching from one another instead of shallow connections.
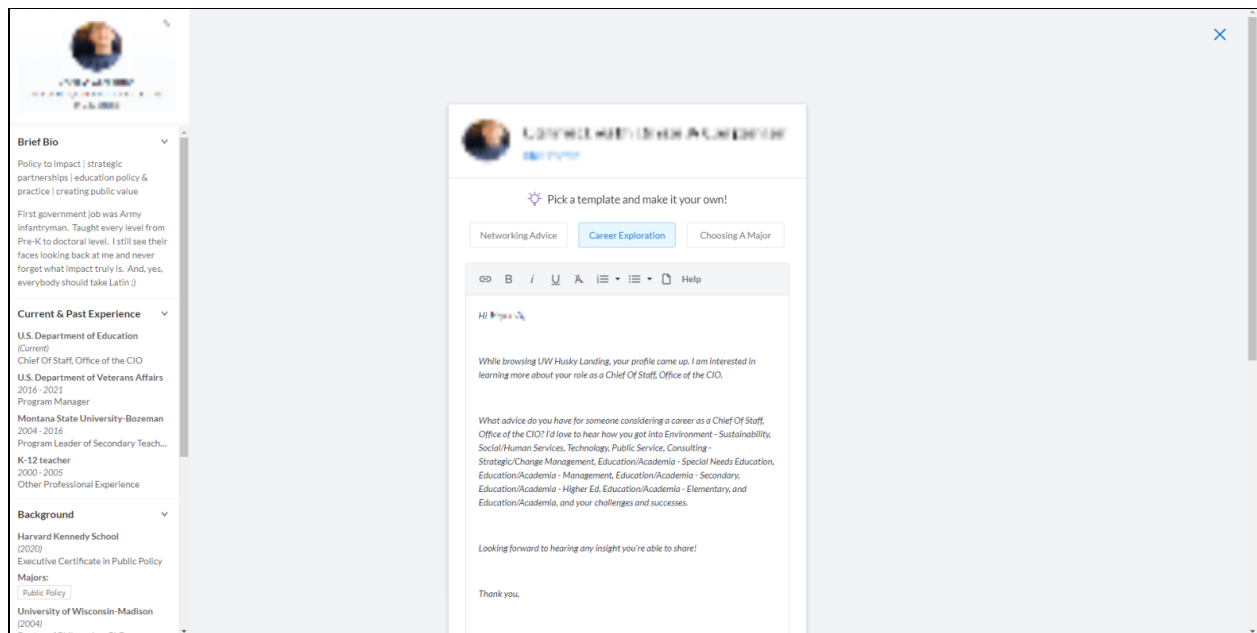
A premade template can sometimes be too much. . .text.

The UW alumni system does not address the various user types that come from UW. The "Mentors" tab is a great example, it is great for current students and alumni to find mentors and industry professionals to ask for advice but leaves out alumni who want to network with UW students. Having identifiers and account types across users (such as students, alumni, and industry professionals) will help users recognize other users' needs and goals when using the alumni system.

Quality of life changes can be made on the alumni website as well. The resources and discussion page should be adjusted to be able to share on other platforms, as it currently lacks features that let the user easily share its contents with other UW alumni system users. System requests to send notifications and emails should have more than just an "Allow" option to have user freedom and control of their account. Accessibility changes should also be easily visible for visually-impaired users, as well as supporting different languages to engage international or nonnative English users.
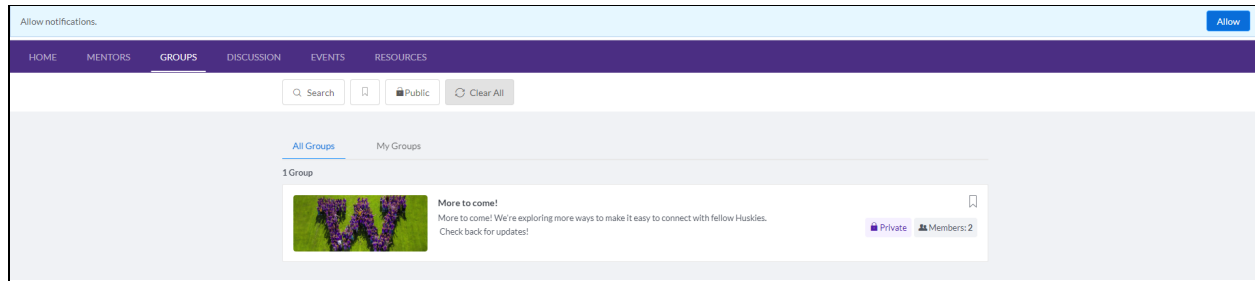
"Allow notifications" bar with the only option being "Allow"

4. Solution Vision Statement

Through revamping the current condition of UW Husky Landing, we hope it provides many more job opportunities for its users and a stronger community within its university members. We strive for the genuineness and personalized experiences where people can learn, connect, and be inspired by the opportunities and people they will encounter.

5. Feasibility

Considering that UW already has an alumni system, it is very feasible to use the current UW Husky Landing as a basis for its revision. As our solution is a redesign of the Husky Landing, it is very technically feasible to revise the information system and structure at hand. Our solution plans to build upon the current system, adding new features while at the same time improving on the existing platform to allow for a better user experience. For example, one of the things that our solution plans to fix is the load in times during account creation and login. While researching the current system, we found this to be a big issue for many users so being able to improve upon the current structure of the system will help immensely with this process. Regarding the organizational feasibility, since the current system and our proposed solution both integrate the current UW information system, transferring data and merging into the new system will be smooth. Using the UW NetID in both the current and proposed system will allow for a smooth transition between all parties involved within UW.

6. Scope

The users of the alumni system can expect a better experience with more personalized experiences from the ease of finding commonalities of other users and searching for communities that matter to them. The UW Alumni Association states that they are "committed to diversity, equity and inclusion," with advancing higher education and support from UW (2022). Because of this, we are reworking the alumni system to focus on these values in networking with pages that focus on building community such as large affinity groups, clubs, and established public organizations.

6.1 In-scope deliverables and activities:

- A platform that prioritizes ease of connecting users with commonalities for quicker and meaningful networks
  - To establish rapport, there will be opportunities to give feedback and describe networking experiences with other users
  - Reconnecting with past users within your network for check-ins will be an option as well
- Updating and adding features on alumni systems to address various user types and needs
  - For students, this includes keeping the "Mentors" page but with better recommendations based on previous experiences and set goals
  - For alumni, this includes a page to find students to network with through the student's goals, background, and interests
  - A designated page for job posting, job opportunities, and internships for users to look out for
  - An events page that is more informative with users registered, better tags, and larger reach beyond the alumni system
  - Categorized
- Updated resources page that has more than one source of information (not only from LinkedIn and a select mentee for every article)
- Incentives for alumni members that are heavily engaged with the university
  - Being able to organize events alongside industry professionals and organizations
  - Build reputation and a flair for their account to be highlighted as an active contributor
  - Rewards from sponsors and companies that network with alumni members
- Interface with a fresh look that presents users the available networking features depending on the page

6.2 Out-of-scope deliverables and activities:

- Mobile application that can let users utilize the same features as its website counterpart. While the current system and our proposed solution are based around the website application, having a mobile application would allow for more accessibility outside of a website. It would have the same functionality as the website, but with a smaller, mobile format.
- Formulating thorough reports on alumni system users for career trends as it requires definite and accurate information to base off of.
  - Data can be collected by using account data or a survey sent to the UW alumni as a report used to track career mobility.

7. Stakeholders Needs

Stakeholder	Benefits	Measured by
Students	building a professional network, mentorship opportunities, improved job placements, scholarships and grants, access to resources	graduation rates, enrolling and employment rates, time active on system, registered user population to total student population, support on different web browsers and applications, user interaction metrics
Alumni	developing broader network, engagement with university and its members, involvement with UW events, promoting their brand and associated programs, exclusive	donations and funding from alumni, number of interactions and experiences involving alumni, enrolling and employment rates, user interaction metrics
Industry professionals	recruitment and publicity of job opportunities, network with invested workers and mentees, distribution of resources and information, ease of access, supporting the community	employment rates and recruitment numbers, user interaction metrics, larger market and businesses, higher proficiency in workers, increased revenue
UW partners and sponsors	community involvement, shared values in education, leadership, diversity, exposure	diversity in workforces across companies and partners, community events and organizations, general wellness of students and members, sustainability of companies and businesses
University of Washington	engagement with alumni members, exposure to companies and organizations, funding from donations, supported programs, better education and upbringing of students, centralized data management	alumni engagement rates and time spent on alumni system, number of registered and active users, money received from financial sources, traceability of alumni and student mobility, number of partnerships and sponsors

8. User Needs

User type	Goals	Outcome
Students	- Ease in networking and job opportunities - Transitioning into workforce - Access to resources and mentors for guidance	- Established usage in alumni system - Higher proficiency and preparation for jobs - Easy navigation on alumni system
Alumni	- Developing (UW) programs - Forming and keeping connections with UW members - Mentoring students - Supporting affinity groups and communities - Engagement with the university and its events	- Higher usage in alumni system - Higher proficiency and preparation for jobs - Higher funding towards associated programs - Improved user experience from previous alumni system
Recruiters and employers	- Keeping connections from networking events - Opening job opportunities within community members - Bridge companies and potential workers	- Low-risk investments in potential recruits - Thorough preparation materials for recruits - Job positions and roles are occupied
Organizations and companies	- More invested and proficient workers - Diversity in workforce - Financially support UW's programs - Grant opportunities for fitting students	- Higher productivity in work environment - Trained and educated students/alumni
Alumni system administrators	- Organized data management and information - Tracking student mobility past graduation - Have alumni system be safe and secure to use	- Reliable usability and functionality of alumni system - Transferable data from alumni system accounts - Sustained usage of alumni system

9. Example Use Cases

Use Case #1: Making a New Account on the Alumni System
This is the initial process of creating a brand new account on the UW Alumni System to start networking with other users and have access to its services.

Actor(s):
- Sophie, a junior student at UW studying Health Informatics who is involved in WINFO and IUGA. She has participated in their member meetups and hackathons, with making friends in each group along the way.

Trigger: Sophie was in a WINFO meeting with one of their representatives, talking about the updated alumni system that has been publicized by UW. The officers mentioned that the platform would be a great place to promote the organization and get people interested in Informatics. Knowing nothing about the alumni system, she was curious about the networking aspect of the platform and was looking to explore the new system.

Preconditions:
- Sophie has to be either an attending student or alumni of UW to have access to a UW NetID email account
- Sophie has an available email address to create her account
- Sophie does not already have an existing or registered account on the alumni system
- Sophie has access to the Internet and online services

Minimal guarantee:
Sophie is able to register and create an account on the alumni system.
Success guarantee:
Sophie is able to log into the created account in a future visit on the alumni system.

Flow of events:
- Sophie navigates to the landing page of the alumni system (e.g. UW Husky Landing)
- Sophie chooses a log-in method for account creation
  - If Sophie uses her UW NetID account,
  - If Sophie is not using her UW NetID account, Sophie creates an account with a username and password, and provide an existing email address
- Sophie goes through account set-up process
  - Sophie inputs her name, graduation year, short biography, educational background, work experience, etc. to display on her account
- Sophie can log out of her recently made account

Extensions:
- If the provided email address does not exist, the user will be asked to recheck the email address if it was typed correctly

- If the account's password is not strong enough (i.e. not being longer than 8 characters, having an uppercase **and** lowercase letter, number, and symbol), the user would have to re-enter a new password for their account

Use Case #2: Student Connecting with an Alumni
This is a use case of a student using the alumni system as a way to find an alumni online through filtering for similar interests and background, and then initiating a connection with them to potentially keep in touch.

Actor(s):
- Joseph, a first-year undergraduate UW student studying Data Sciences who commutes to UW campus
- Nathan, a UW alumni who is currently an intern as a business analyst at Microsoft

Trigger: During an organized panel discussion, Joseph decided to ask Nathan a few questions about his preparation and internship itself. However, it was time for the panel to end and Joseph still wanted to learn more about the internship and ask for some advice for his resumé.

Preconditions:
- Joseph and Nathan each have an existing account in the alumni system
- Joseph and Nathan listed "Data Sciences" and "Business" as identifiers for their accounts
- Nathan is identified as an alumni
- The alumni system server is online

Minimal guarantee:
Joseph is able to reach out to Nathan through a connection in the alumni system.

Success guarantee:
Joseph is able to utilize the chat feature to send messages, files, and links to Nathan.

Flow of events:
- Joseph logs onto the alumni system
- Joseph navigates to the "Alumni" page, where he can see the catalog of all alumni users
- Joseph filters "Alumni" page through his interests "Data Sciences" and "Business"
  - Joseph can also search alumni by name, typing "Nathan" into the search bar
- Joseph clicks on Nathan's profile to make sure it was the same person he talked to from the discussion panel
- Joseph presses "Connect" and creates an introductory message to Nathan to introduce himself, sending the message to request the connection
- Nathan sees the connection from his notifications and his inbox
- Nathan clicks on Joseph's profile to see that he is a student interested in "Data Sciences" and "Business"
- Nathan accepts Joseph's connection and is able to message him back

Use Case #3: Student Searching for a Local Internship
This is the process of a student using the UW Alumni System to look for an internship in their field of interest to apply to.

Actor(s):
- Kevin, a junior majoring in computer science at the University of Washington looking for a summer SWE internship

Trigger: As summer internship postings start to happen, Kevin actively searches for internship roles. He logs into the UW Alumni System and finds internship posting from UW Alumni.

Preconditions:
- Kevin has an account for the alumni system
- Kevin has his interest as "Software Engineering" and "Computer Science" selected on his profile

Minimal guarantee:
Kevin is able to see a list of current SWE internship opportunities

Success guarantee:
Kevin is able to apply to SWE internships directly from the UW Alumni System, which

Flow of events:
- Kevin logs into the UW Alumni System using his account
- On his profile, Kevin selects "Software Engineering" and "Computer Science" as his interest
- Kevin navigates to the "Job/Internship Postings" page, open internship opportunities which have been already been aggregated using his selected interests
- Kevin selects an internship posting and applies directly on the alumni system

Use Case #4: Event Creation
This is the process of a UW staff member collaborating with a business worker to organize and promote an event on the UW Alumni System.

Actor(s):
- Steve, a worker at the Burke Museum of Natural History and Culture
- Aaron, a UW staff member with administrative access to the alumni system

Trigger: The Burke Museum has an event that Steve is working at. Steve then reaches out to Aaron about the event and requests the event to be posted on the alumni system.

Preconditions:
- Aaron has the administrative permissions to create an event on the alumni service

Minimal guarantee:
Event is created that when clicked on, leads to the Burke website that has information about the event.

Success guarantee:
Event posting is created and interactive for users, showing information about the event within the alumni system and has features to track user metrics and attendance.

Flow of events:
- Steve sends email to Aaron about the Burke Museum event
- Aaron reviews event information with colleagues
- Event is approved
- Aaron goes onto the UW alumni service and creates a event posting on the 'Events" page

Use Case #5: Industry Professional Promoting Job Opportunities
This is the use case of an industry professional looking to recruit students and alumni for a company role on the UW Alumni System.

Actor(s):
- Christine, a UW alumni, industry professional, and recruiter wants to create a job posting for alumni users

Trigger: Christine is in charge of posting their company's job opportunities. She then goes to the UW Alumni System to promote a recent job opening.

Preconditions:
- Christine already has made an account with the alumni system and has access to post on the "Job/Internship Postings" page

Minimal guarantee:
- Christine is able to create a job posting that has information about the job opening within the alumni system

Success guarantee:
- Christine's posting sends users to her company's website for more information
- Alumni can apply directly in the alumni system to the job position

Flow of events:
- Christine is told about a job opening at her company
- Christine goes to the UW Alumni System and logs in
- Christine navigates to the "Job/Internship Postings" page
- Christine creates a post about the job opening in her company, listing applicant requirements and details of the job

10.   Capabilities and Features

10.1 Networking Features
The hierarchy of information on user profiles will be configured to address user wants immediately, such as the "About" description along with reasons/goals why a user is using the alumni system (ex. looking for resumé feedback and interview preparation). Users can add identifiers (ex. I'm a student or I'm an alumni) to classify themselves among other users. Activity statuses will be displayed as well to show recent activity (or inactivity) on the platform. Students and alumni would be recommended and paired according to their profile and background information, such as interests and careers. Alumni members who are actively engaged with the alumni system can gain flairs for their profile to display on their page. Users are able to post in discussion forums where others can interact with comments and shares, and can be filtered by relevant to one's preferences. Likewise, community building will be supported on the "Groups" and "Resources" page where users can become a member.

10.2 Job-Related Features
Our proposed solution will include a designated page related to job and internship postings made by recruiters and alumni. Here, current students and alumni can see a list of opportunities where they can filter by their needs to have a more catered experience. Additionally, when a user finds an opportunity they want to apply for, they are able to directly apply from our solution, allowing for a smoother user experience.
We also plan to include job preparation services and events to help students and alumni with their career goals. These events will be hosted by either industry professionals, alumni, or UW staff. Events will include mock interviews, resumé and cover letter review, industry panels for information, and virtual or in-person career fairs.

10.3 Scalability Capabilities
As the number of users increases as students graduate every year, our solution plans to support a large number of users and scale as time goes on. The current system has approximately three thousand active users yet already has scalability issues around load in times. We hope to address this by having our system support a larger number of users without excessive load times or system performance issues.

11.   Security Needs

Main security roles would involve the UW IT staff. UW IT staff would grant different user types different access to the data. For example, current UW students, UW alumni, UW partners, and UW instructors can all create and delete their own accounts. They can also update their profile and account information. However, they should not be allowed access to other user accounts besides their own. Additionally, some data could only be accessed or stored by certain users. An example would be event information that could only be changed by UW instructors and faculty,

or information of job postings could only be manipulated by recruiters or alumni who post them for only current students to read them.

12.   System Constraints & Non-Functional Requirements

Accessibility/Usability: Active users need the user's interface to have a clear structure and minimalist design so that they could efficiently find students' and alumni's information, and ask them for help or give professional advice. Users should be able to find what they want quickly by having a user interface that is well-organized and supported on all web browsers, accessing the platform freely with sustained servers.

Availability: Active users need the system to be available for operation 24/7 so that they could utilize the alumni system's many features, such as asking mentors for professional advice and scheduling meetings. The services and resources should be always available to account for those in different time zones and countries, so users could get access to this information when they are needed.

Compliance/Privacy: Users need the system to protect their data and personal information so that their personal information is protected and safe. The personal information and data should be protected so users can trust the system and upload their information to our system to provide services to others. There will also be an established terms and conditions notice for the platform, so administrators can enforce the integrity and responsibilities of its users.

Integration/Interoperability: New users need the system to be able to integrate information from other platforms so that they could finish the account setup process quickly and avoid re-entering user information. New users must have a quick setup process so that they can be encouraged to remain active users on the alumni system. The networking feature using commonalities between two users also relies on integrated information from centralized databases, having fewer systems and databases to keep track of.

Scalability/Supportability: Developers, IT staff, and web administrators need the databases of the system to support increasing users so that it can provide services to more students and alumni. Users can then reliably use the platform with an adequate response and processing times when networking with others, without web traffic negatively affecting user experience.

13.   Assumptions and Dependencies

13.1 Assumptions

Our proposed solution is built on the current Husky Landing framework and system where we plan to revise and improve it. However, this is assuming that using the current system is the best course of action for creating a new alumni service. While it may be a good plan in terms of implementation into the UW system, it is unknown whether the current framework can handle the features and capabilities that we plan to offer. For example, the current system has issues around user experience through load times, which could interfere with supporting a larger user

base. We are assuming that the current system can support these capabilities with some revision/changes.

13.2 Dependencies

In our proposed solution, we plan to give incentives to alumni who have a heavy impact on the university and community. However, we are dependent on UW sponsors and connected companies to help provide these incentives. As our system tracks user participation and impact, we want to incentivize users to be active and helpful. While UW may participate in some of the incentives provided, many of the incentives we have in mind come from UW sponsors and connected companies. While this feature may work without help from third parties, the overall effectiveness comes from these outside organizations.

14. Research and Analysis Findings

There are many reasons why alumni remain affiliated with their alma mater post-graduation. The benefits of an engaging alumni system enable building a professional network that provides opportunities for jobs and internships while being connected with a diversity of students. Alumni relations are particularly important, as they are people who are looking for new opportunities in personal and industry life. According to Jim Chase, a Director of Business Applications at Microsoft, 85% of alumni agree that they would donate more often if they were aware that their money was used to fund organizations that they have been part of as a student (2021). Because of this, having alumni work with the students and programs they associate with can promote better education and network for the current and future generations of students. Under the same notion, alumni contribute to a large portion of voluntary support towards higher education, up to 26% in donations and philanthropy (Drezner & Pizmony-Levy, 2021). This is due to their sense of belonging towards the alma mater and wanting to give back to the school – this includes taking leadership roles to mentor students, attending events, volunteering, and being more invested in student services and extracurriculars in general.

There has been a 60% increase in Internet traffic from December 2019 to May 2020 (Soto-Acosta, 2020, p. 260) which can be attributed to the COVID pandemic restricting in-person interactions. This is supported by a Gartner article mentioning the importance of optimizing student experiences and engagement through virtual experiences, "One survey suggests over 40% of students are struggling with current absence of face-to-face engagement" (Morgan et al., 2021). Seeing the surge of online engagement through the Internet and other virtual experiences, there is an importance in having networking opportunities available both in-person and online using alumni systems, social media, and connections.

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