

PRD: Go Huskies!

Date last updated: 14th April 2023

Vision

Go Huskies! - One stop place for all Northeastern Students

For the thousands of Graduate and Undergraduate students who enter Northeastern University every year, Go Huskies, will help them navigate seamlessly during their onboarding process into the University and help them to be informed with the plethora of information around them.

Using Geoffrey Moore's positioning statement from Crossing the Chasm: "For the Faculty, Staff and Students of Northeastern University across all campuses who are finding it laborious to maneuver through the various resources and opportunities in the University, our product would be a one-stop aggregator of all the resources and knowledge one would need to be aware of as part of the official onboarding process to Northeastern University. Unlike the various resources available on the Web only platform in a scattered format, we offer a streamlined mobile application that will redirect the users to the right resources."

Motivation

Customer Segments

1. Northeastern Students: Undergraduate and Graduate Students can use this application as part of their official onboarding process.
2. Northeastern Faculty and Staff: Would be the end users and would put out information on the application in terms of announcements etc.
3. Northeastern Alumni: Alumni can have access to respective resources and information and continue to be associated with Northeastern University.
4. Parents & Guardians of Enrolled Students: Can access the application to get hold of the right portal to make payments etc.

Unmet Needs

1. Northeastern Students: Currently, the onboarding process for students is with respect to their respective departments one belongs to and more focused on the academics of the courses. For students to gain information about the various activities happening on campus, the privileges of being a student at Northeastern University, the various tasks to be done by new students for legal purposes etc. are not readily available in one single easily accessible mode. Since most of these user segments rely on Mobile apps, there is a lack of mobile apps to access the respective information.
2. Northeastern Faculty and Staff: The provision to have quick access to information and be easily available at their fingertips is currently not available.
3. Northeastern Alumni: Being an Alumni, one would expect to be well informed about the events and new developments of the University at their fingertips and to be notified at a timely manner, rather than receiving emails and newsletters which fall under most of the time.
4. Parents & Guardians of Enrolled Students: For the respective parents and Guardians of the enrolled students, one would need to login to a portal to access billing information and is not currently available at their fingertips via a mobile app and to help them keep track of the timely payments and must be relied on the emails which go unnoticed most of the time.

Existing Solutions

Students at Northeastern have access to Student Hub, which contains all the information, but one must explore the tool instead of the tool helping the students as part of their onboarding process to be well informed and make the most of the resources available within campus and outside of the campus.

Currently, Student Hub is purely a web-based solution and not accessible via a mobile app, where a major sector of the customers (Students) are on their phones most of the time. Spring 2023

Why Now?

To improve the process and to provide a seamless experience for the future incoming students at Northeastern University and maintain the reputation and provide a world class branding.

Verbal/Visual Walkthrough of Use Cases

Verbal Walkthrough

Adam: Newly Admitted Graduate Student

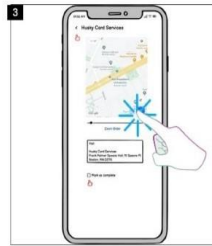


Adam has just landed in Boston and visits NU for the first time



He goes to the student center and downloads GoHuskies to begin his OnBoarding Process.

Adam sees an onboarding checklist with various tasks he needs to complete to officially onboard at Northeastern University.



He clicks on the first and the primary task which is to collect his Husky Card.

Clicking on which, he is directed to a detailed page with directions to collect his Husky Card.



He navigates to the Husky Card building using the map directions.

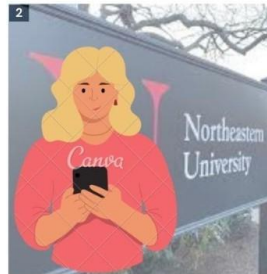


He gets his Husky Card and poses for a Happy picture!

Linda: Northeastern Alumna

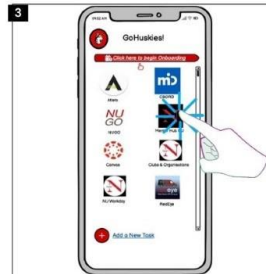


Linda, a Northeastern University alumna, needs to request her transcript for her new employer who requires it to verify her educational background for a project.



Linda opens the GoHuskies app and logs in with her alumni credentials and updates her profile by adding her latest job title.

After updating her profile, Linda is directed to the homepage where she sees an option for "Alumni Resources."



She clicks on the option and sees a list of resources available to alumni, including "Request a Transcript."

Linda clicks on "Request a Transcript" and is directed to a detailed page with information on how to request her transcript.



Linda follows the steps provided and submits her transcript request.

She receives a notification confirming that her transcript request has been received and will be processed soon.

Dr. Smith: Northeastern Faculty



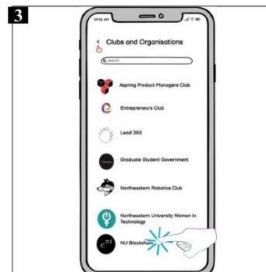
Dr. Smith, a faculty member at Northeastern University, wants to learn more about blockchain technology and sign up for a seminar through GoHuskies.

Dr. Smith opens the GoHuskies app and logs in with his faculty credentials.



After logging in, Dr. Smith is directed to the homepage where he sees an option for NEU Blockchain community.

He clicks on the option and sees a list of upcoming events available to faculty, including "Intro to Blockchain Seminar."



Dr. Smith clicks on "Blockchain Seminar" and is directed to a detailed page with information on the seminar, including the date, time, location, and how to register.

Dr. Smith follows the steps provided and registers for the seminar.



He receives a notification confirming his registration and additional details and also gets added to his personal calendar.

He gets excited to learn about the new field!

Sarah: A Husky Mom



Sarah, a parent of a Northeastern student, needs to make a payment towards her child's tuition fees.

She opens the GoHuskies app and logs in with her parent credentials.



After logging in, Sarah is directed to the homepage where she sees an option for "Billing and Payment".

She clicks on the option and sees a list of resources available to parents, including "Make a Payment".



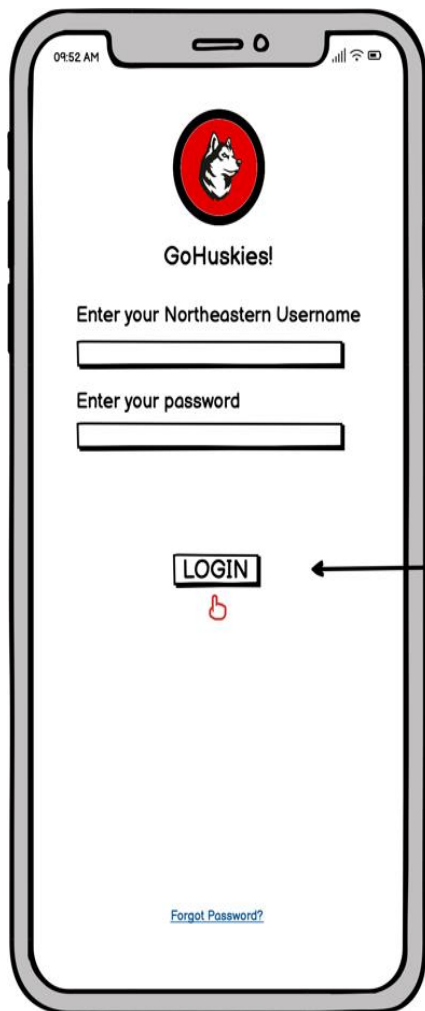
Sarah clicks on "Make a Payment" and is directed to a detailed page with information on how to make a payment.

She follows the steps provided, including entering her payment information and selecting the amount she wants to pay.



Sarah receives a notification confirming that her payment has been received and processed.

Visual Walkthrough



Adam Mitchel has been recently admitted into the Graduate Program of Artificial Intelligence for the Batch of 2024' at Northeastern University.


Using his first onboarding seminar, he along with other students are requested to download Go Huskies! to begin their official onboarding process.

Adam logs in to the app using his Northeastern credentials.

Users are validated using SSO

09:52 AM


My Profile [Skip](#)





First Name*

Last Name*

Northeastern Email ID

Date of Birth
 

Department 

Course 

NUID

Bio

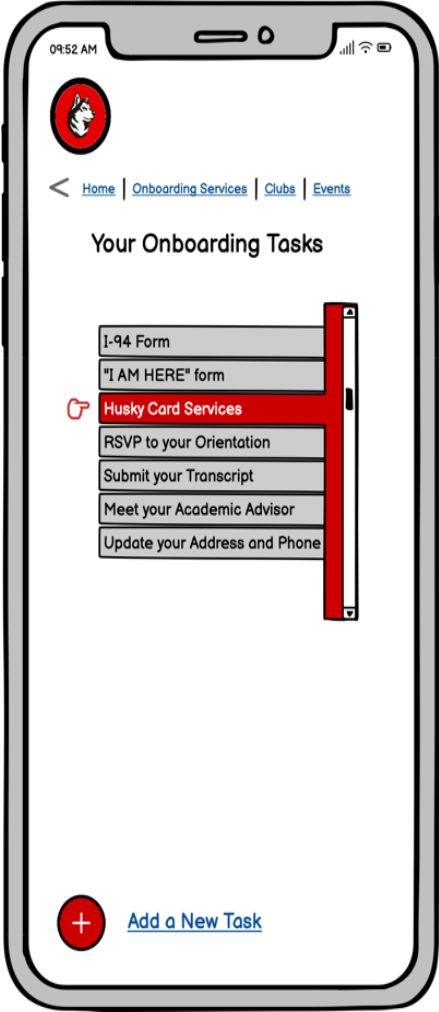
Once Adam logs in, his Profile page pops up for him to update his profile. He can update his profile later by clicking on Skip.

By doing either of the actions, Adam is directed to the homepage.



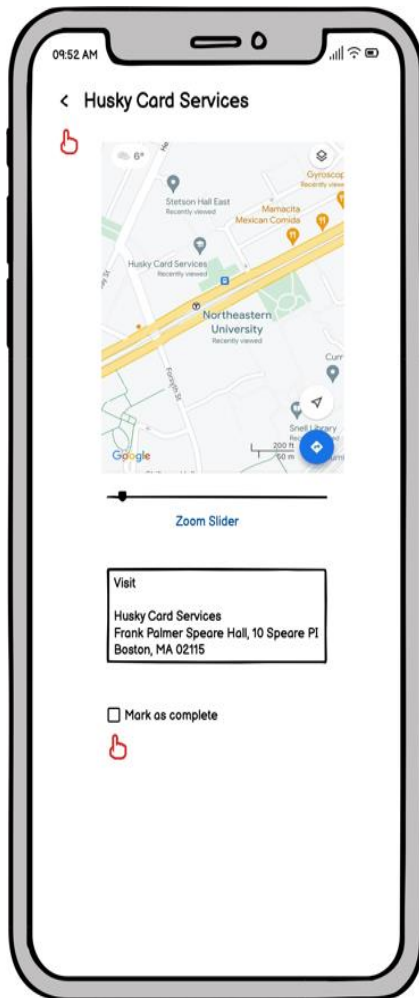
Adam is provided an onboarding checklist, which he needs to complete to be officially onboarded to Northeastern University.

All the various portals used at the University are listed as shown on the homepage.



Adam needs to go collect his husky card which is a primary task needed for any student at Northeastern University.

He clicks on the task mentioned



On clicking the task, a detailed page is populated with information to help Adam complete the task.

Once he's completed the task, he can check box against " Mark as completed" to mark the task as completed.

He clicks on the back navigation button to land on the homepage



Adam can also track his personal task, by clicking on " Add a new task " option

09:52 AM

< Add a New Task

Task Name

Setting up bank account

Task Description

Go to Bank of America on
Huntington Avenue with
Passport and relevant
documents to set up a
bank account and get
debit card

Task Due Date

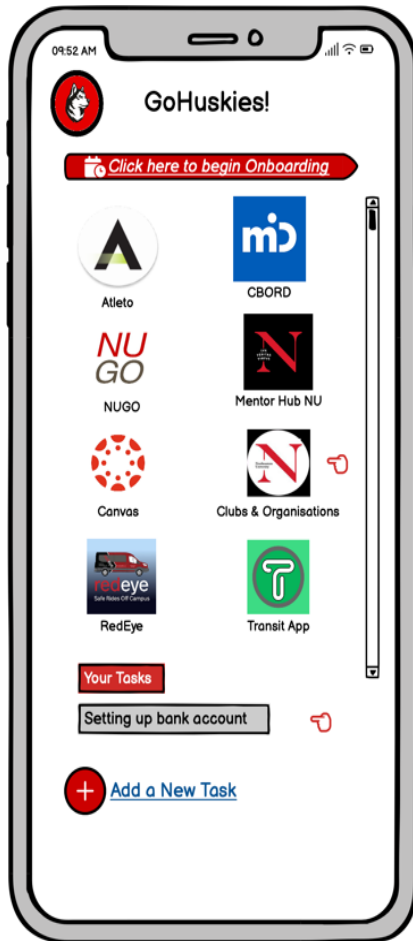
05/01/2023 📅

Add Task

👍

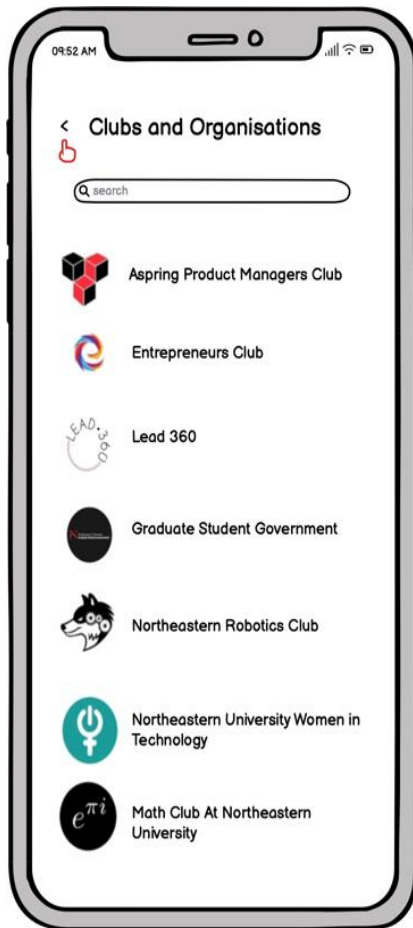
Adam can fill in the details of the task and set a deadline and click on "Add Task"

The app would send regular reminders to Adam to complete the task.



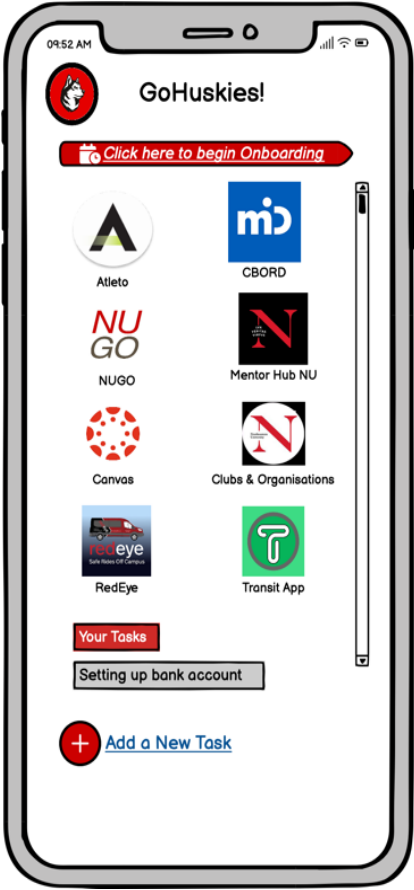
The tasks added by Adam are listed on the homepage.

Adam also wants to explore the various clubs and organisations at Northeastern, he clicks on the icon for clubs & organisations.



The various clubs & organisations are listed as shown. Adam can search for a particular club.

He clicks on the back navigation button, to go back to the homepage.



Detailed Design & Features Description

Design Principles

- Intuitive to all users
- To adhere to the basic law of navigation
- Theme / Color palette to be followed throughout the app
- Optimize of various mobile devices
- Accessibility

Features/information architecture

Feature	Description	User Persona	Priority
SSO	Implementation of SSO for ease of login process. The northeastern University credentials will be the primary source of validation	All user personas	P0
User Profile	Pre-creation of user profiles.	All user personas	P0
Updating of User Profile	Users to update their respective profiles	All user personas	P0
Integration with Northeastern resources 1. Events, Clubs & Organizations 2. Billing System 3. Canvas 4. RedEye 5. Robin	Provision of these resources within the app for ease of access and one stop place for resources.	Student	P0
RSVP for Events	Provision for users to RSVP and Buy tickets for the events.	All user personas	P0
Checklist	Provision for pre-filled onboarding checklists along with the provision for users to add tasks.	Students, Faculty	P0
Integration of Maps	Implementation of Maps for navigations	All User personas	P0
Emergency Information	Provision to have information related to Emergency contacts and resources	Students, Faculty	P0
Health and Wellness	Provision to have resources related to Health Insurance and resources related to UHCS.	Students, Faculty	P0
Chatbot - Help	Provision to provide help via chatbot for any queries users would have.	All user personas	P1

Integration with Calendars	Provision to integrate with various personal calendars (Outlook, iCal, Google Calendar etc)	All user personas	P1
Messenger/ Inbox	Provision to send personal messages to other users within the app to connect. (Certain restrictions would be implemented based on the user persona)	All user personas	P1
Locker Booking	Provision to book locker in few easy steps	Students	P1
Booking Slots with Faculty	Provision to book slots with Academic Advisors, Faculty in few easy steps	Students	P1
Petitions/ Request Filling	Provision for students to send in their petitions/ requests across various offices and departments of Northeastern University and easily track the status of the requests.	Students	P1
Integration of other Northeastern Resources in phases (5 resources per phase)	Provision of these resources within the app for ease of access and one stop place for resources.	Student	P1, P2
Showcase of Ads	Partner with Company to put up Ads on the apps which will benefit the students and to take advantage of student provisions.	Students	P2
Wallet – Husky Dollar	Provision of a wallet system for Students and track their transactions	Students	P2

v1 aka Minimum Viable Product (MVP)

MVP would include all the features under P0.

vNext

- Implementation of P1 & P2 features
- Implementation of feedback received from the end users

v longterm

In the long run, Go Huskies! would be implemented in various other campuses of Northeastern across the globe.

The Product members would be subject matter experts and provide consultation to implement similar solutions for other universities across the country and later expand it globally.

Roadmap / Timing

Alpha Launch: After 2.5 months of development time, we anticipate having the product ready for internal use with basic functionality required to perform basics user actions mainly concentrated for Students user persona. This launch should include pre-created profile, update profile, and execute the onboarding checklist. We will provide our internal team and friends with one week to test the system from every angle, each user type, and log bugs into our bug tracking system. After this testing has occurred, we will take an additional 3 weeks to fix all of the bugs found during Alpha.

Beta Launch: Once the Alpha bugs have been fixed, we will launch our product Beta – this is our MVP which will include all P0 features mentioned earlier. This will be initially sent to individuals that have signed up via our splash page. We will not widely promote our product during beta but allow anybody to sign up for Beta. We will send active email communications during Beta soliciting feedback from our users and measuring their usage with mixed panel to judge where they're running into challenges, and where they spend the most time. Once we have gathered statistically significant usage data from these users, which we anticipate will take one month's time, we will set our product roadmap for version 2 of the application.

Quarter 1	Quarter 2	Quarter 3	Quarter 4
The focus is on launching the app with integration with Student Hub and making it available on all platforms.	The focus shifts to integrating University resources and incorporating ads for revenue generation.	The focus of this quarter is on integrating Career Services, including Workday and availability of applying for jobs via the app.	The focus is on developing and launching a reward-based user loyalty program for students, with the aim of increasing user retention by 20%. This will require a high effort in terms of development and execution.
Another key goal is to acquire a user base of at least 5,000 active users by the end of Q1.	The aim is to have all resources available on the app, and to initiate	Another key goal is the implementation of ITS services and service requests, with	

This will require a large effort in terms of app awareness and marketing	revenue generation through ad incorporation.	the aim of providing a provision to send out all IT-related queries.	
	Another key goal for this quarter is the implementation of a chatbot for student inquiries, with the aim of addressing queries and increasing user engagement by 10%.	Enhancing the app security is also a key goal for this quarter	

Scenarios for Service Introduction

Natural points for reassessment:

At the end of each quarter, there will be a reassessment of progress made towards achieving the goals set for that quarter. This will help to identify areas where there has been success, as well as areas that need improvement. Additionally, reassessment should be done in response to any changes in the competitive landscape or any new developments that may impact the project timeline.

Scenarios for Service Introduction:

For the introduction of the service to new populations, a phased approach will be taken. Alpha testing will be done with a small group of users, to identify any issues with the app and make necessary adjustments before a beta launch. Beta testing will be done with a larger group of users, to test the app's functionality and gather feedback from users. This feedback will be used to make further improvements to the app before the full launch. The proposed plan is the right one as it allows for a structured and iterative approach to the development and introduction of the app, which will help to ensure its success.

Metrics

The metrics are going to be divided into the following categories:

1. General App:

- **Daily/Monthly Active Users:** We'll collect the percentage of daily/monthly users compared to the total number of total users and aim for at least 10% daily active users and 40% total monthly active users.
- **Number of active bugs:** Bug close rate which is number of bugs closed per number of total bugs found will be calculated. The aim will be to aim for a bug close rate of at least 95%.
- **Drop Rate:** We will calculate the percentage of users who will drop out of the application. The aim will be to keep it to below 10%.

2. User action metrics:

- **No. Of tasks being completed:** We calculate number of tasks being completed against initially planned to do tasks. The aim will be to see if they complete at least 70% of the tasks
- **No. Of features and features prioritization:** Maximum number of features used will be used to calculate priority among others.
- **Time Tracking:** The number of hours spent on each task or a given feature will be noted. Metric can be compared among customers to feature targeted ads or give personalized recommendations.

3. Northeastern Clubs & Organizations/Resources:

- **Clubs/organizations sign up:** We calculate the number of students who sign up for clubs or organizations using our platform to navigate to Campus Labs
- **RSVP rate:** The number of users booking tickets to an event or RSVP via our platform to navigate to the right page. The aim will be to keep the rate above 50% initially.
- **External Link Tracking:** This metric can help the number of times a user clicks on an external link and can potentially provide a lot of insights into user behavior and engagement.

International

In the initial few years, with the contract with Northeastern, Go Huskies! will have potential to expand into Northeastern's global campuses including Toronto, Vancouver, and London. With expansion and beyond Northeastern, the team can work with different universities and provide services and consultation to universities outside the United States.

Challenges:

Some of the challenges that could be present when our product can go into international expansion could be:

- Data formats, networks and security standards will differ based on country.
- Local regulations and laws in different countries.
- Payment Gateways are different in every country.
- User preferences, expectations and cultures might differ internationally.

Projected Costs

How many engineers * months will the project take to complete? How many machines will be needed/used?

GoHuskies! Will act as a subject matter expert who will be hired and provide resources by the entity of Northeastern University. The resources provided by the university can include access to the university's already existing infrastructure where a lot of their applications and websites are stored, access to employees through student employment and full support through integration into pre-existing university's high visibility applications and platforms.

SL No.	Cost	Number	Cost/hr.	Total hours	Total*
1	Licensing Costs	1	-	-	\$20,000
2	Customer Support	4	\$15	\$1440	\$86,400
3	Design Team	2	\$17	\$1440	\$49,960
4	Backend Team	4	\$20	\$1440	\$115,200
5	Front End Team	4	\$20	\$1440	\$115,200
6	Quality Assurance	2	\$16	\$1440	\$46,080
7	Overhead Costs	1	-	-	\$20,000
Total					\$452,840

*The time is estimated as 6 months for alpha and beta testing and around 12 months for product development.

*Cost is calculated at 20hrs/week for student employment at Northeastern.

*The worst-case scenario with delays in product development and other reasons will have a cost between \$452,840 and \$600,000.

Operational Needs

The Go Huskies! project may require several types of support and operational assistance to ensure its success. Below are some areas that may need attention:

- **User Support:** Once the application is launched, it will be necessary to provide user support to ensure that students can navigate seamlessly during their onboarding process and to help them access information through the app. This will include the provision of a help desk, which will be staffed with knowledgeable personnel that can help students troubleshoot any issues that they may encounter. The help desk could be manned by a combination of staff members and student volunteers.
- **Hiring students to build the App:** The "Go Huskies" application is designed to help students navigate seamlessly during their onboarding process into the University, and as such, it would be beneficial to hire students to build the app. Students are likely to be more familiar with the onboarding process and can provide valuable insights that will help to create an app that is tailored to specific needs of students. This will also provide students with the opportunity to develop their skills and gain experience in app development. Additionally, it would enhance on-campus employment alternatives for students looking for ways to improve their financial situation.
- **Licensing costs:** The licensing fee is another key consideration for the "Go Huskies" application. To ensure that the application is functioning and safe, software and other technologies may need to be licensed. These licensing fees must be incorporated into the project budget, and depending on the duration of the licenses, they may need to be renewed on a regular basis. To guarantee that the application stays functioning and safe, it is critical to have a plan in place for the ongoing management and renewal of licensing charges.

Addressing Caveats/risks

Risk	Description	Possible Mitigants
Mobile-Based	Developing a mobile-based application can be a huge risk since NEU is already associated with Microsoft SharePoint, which is a web-based one-stop platform for all student activities.	Conduct thorough research on student preferences and habits. Determine whether students prefer using a mobile-based application or a web-based platform. If students prefer a mobile-based application, then focus on developing a seamless and user-friendly application that is easily accessible.
Adoption Rate	The success of Go Huskies! depends on its adoption rate among the student population. If students do not find the platform useful or easy to use compared to the already existing web-based platform, they may not use it, which would render it ineffective.	Conduct focus group discussions and surveys to determine what features and functionalities students want in the platform. Also, promote the platform among the student population to encourage adoption. Provide tutorials and support to make the platform easy to use.
Integration with existing systems	Go Huskies! needs to integrate with existing campus systems like DUO, Banner, student information system, library management system, and facility management system. This integration can be challenging and time-consuming.	Work with the relevant departments and IT staff to ensure that the integration is seamless. Test the integration thoroughly to ensure that it is working correctly.
Maintenance and updates	The platform must be regularly maintained and updated to keep up with the changing needs of the students and the campus facilities. This can be a significant cost and resource burden.	Develop a plan for regular maintenance and updates, including allocating resources and budget. Conduct regular testing to ensure that the platform is working correctly.

Funding	Developing and maintaining a platform of this nature can be expensive. It is important to ensure that adequate funding is available to support the platform's development, maintenance, and updates.	Develop a budget and funding plan for the platform. Explore funding opportunities, including grants and partnerships. Work with the relevant departments to secure funding.
Security	With a mobile-based application, security risks are always present. With Go Huskies, there may be issues such as data breaches and unauthorized access to sensitive information.	Ensure that the platform is designed with security in mind. Work with IT staff to implement appropriate security measures, such as two-factor authentication and encryption. Conduct regular security audits and testing to ensure that the platform is secure.
Technical issues	With any technology platform, there is always the risk of technical issues, such as system crashes and software bugs.	Develop a contingency plan for technical issues, including a response team that can quickly address any problems that arise. Regularly test the platform to identify and address any technical issues.
User experience	If the platform is difficult to use or has poor user experience, it may not be adopted by students.	Conduct user testing and focus groups to ensure that the platform is user-friendly and easy to use. Continuously solicit feedback from users to improve the user experience.
Privacy concerns	With a mobile-based application, there may be privacy concerns, such as the collection of personal data and tracking of user behavior.	Clearly communicate the platform's privacy policies to users. Implement appropriate privacy measures, such as anonymizing data and providing opt-out options for data collection. Work with IT staff to ensure that the platform complies with relevant privacy laws and regulations.

Group Members:

Arya Akre

Sunaina Ramalingappa

Harshita Mishra

Aditya Santosh Gopal

Arun Ashok Kadayam