

CptS 443/543 Early Data Gathering Report

Team Members

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Abstract

We intend to design an application for students that aids them in searching and connecting with their mentors/mentees. We carried out five contextual inquiries to learn more about the mentoring process in the mentor program centers, a naturalistic setting possible. As a result, the findings show that there currently is no option to choose mentors, and providing a way to enable it would enhance the mentoring system. The empirical finding suggests that there is currently a need for an efficient solution that can help mentors carry out their daily tasks. We also found that the participants use a mix of messaging platforms to communicate with their mentors/mentees, such as discord, slack, text messaging, etc. Thus, having an in-app messaging where the users can communicate can be beneficial.

Design project focus and research questions

a. The problem the software aims to address

We aim to provide a tech solution for WSU students that allows them to find and connect with their mentors/mentees. The app's primary features include(not limited to) finding mentors based on personal interest, setting goals, tracking progress, and planning meetups.

b. Proposed software solution description

- ***Finding mentors***

Currently, the mentorship programs in WSU do not allow students to choose their mentors; instead, they are assigned a mentor based on some criteria. Often, the mentors and mentees do not share common interests, and there is no easy way to request a different mentor. We aim at providing a way where students can choose their mentors based on their interests. Similarly, Mentors can choose to accept or reject the mentorship request.

- ***Tracking and Logging progress***

Currently, there is no common platform where mentors can record the progress of the set goals. We want to provide the mentors to document the progress, and at the same time, the mentees can see their progress.

- ***Planning Meetups***

Since the app will be a community-building platform, one aspect of it is to organize meetups. We intend to provide a way where the mentors can schedule a meetup for all their mentees.

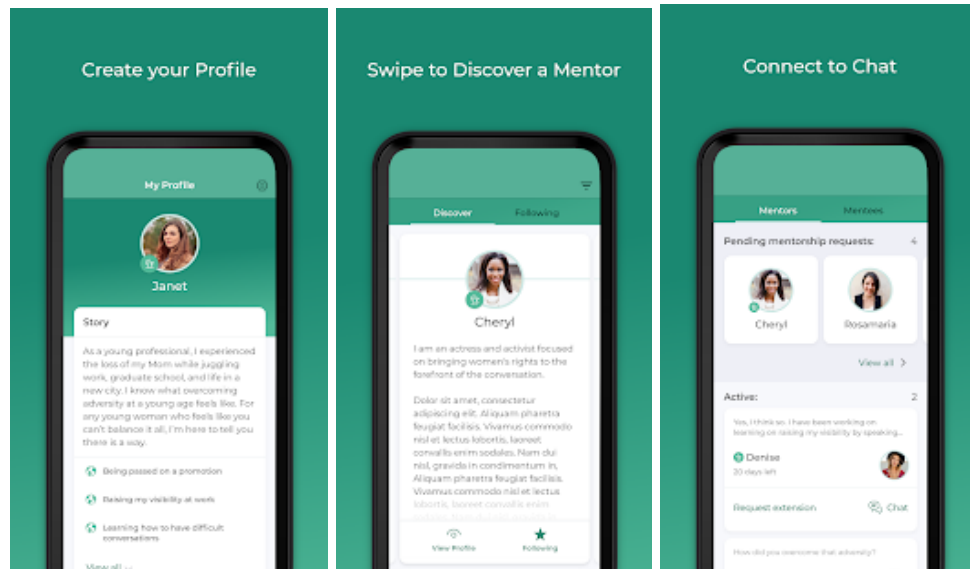
- ***Connecting with Mentor***

Currently, the mentors and their mentees connect on different platforms, for example, slack, discord, Email, text messaging, etc. Through this app, we intend to bridge the gap and give an in-app messaging where they can connect and track the conversation.

c. Related products that address similar problems

While researching similar products, we came across a few enterprise solutions that cater to the needs of large organizations. These apps enable organizations to set up peer-to-peer mentorship programs for their employees.

1. *Tribute*: This peer-to-peer mentorship app allows users to discover a mentor, build a network, and see real-time insights, among other use cases. Does not have the option to have multiple mentors or calendar integration.



2. *Guider*: This enterprise mentoring software provides mentor matching wherein, using a matching algorithm, the mentors are matched to the users. It also provides real-time metrics to track the mentees' progress and calendar integration. Do not allow multiple mentors or sign up as a mentor.

d. Proposed software's prospective users

Our prospective users are students of Washington State University. The app will support all the students irrespective of their majors and level of study. The app has two user roles: users can sign up as mentors, mentees, or both. The students who sign up to be mentors need to have been a student on campus for at least one semester, must maintain a CGPA of at least 2.5/4, and take mandatory Mentoring training that will equip them with resources and beyond to be good mentors. Any student, irrespective of their background, major, nationality, can apply to be a mentee.

e. The key research questions that the contextual inquiry set out to answer:

RQ1: Are users part of or have been part of any mentorship programs at Washington State University?

RQ2: What application do they/would they use to connect with their mentors/mentees?

RQ3: Do they have any current system where they can track the progress of the set goals?

RQ4: Given a choice, would they rather have the freedom to choose their mentors or have one assigned to them?

RQ5: How frequently do they meet with their current mentors/mentees?

RQ6: What other areas they'd want help with through the mentorship program besides the campus resources and events?

RQ7: Are they familiar with using apps that allow them to meet new people and what is their opinion on such apps?

RQ8: What are some of their goals when it comes to mentorship?

Participants

We conducted an online survey targeting potential users in which there were 20 participants. Furthermore, we conducted in person contextual inquiries with seven people. However, we have highlighted only 5 participants in this section, each of whom has a very distinct persona with respect to how the iMentor app will benefit them.

Participant-1 was an undergraduate junior majoring in chemical engineering. They are a mentor in the Team Mentoring Program offered by the WSU system. The position has a financial benefit of 2700\$. The program focuses on pairing junior and senior students with first and second-year students majoring in STEM programs. The participant has mentored for one year and has experience in mentoring students.

Participant 2 is an international graduate student majoring in Computer Science doing their second semester in their program. They are new and have no mentoring experience nor have a mentor.

Participant 3 is an international graduate student majoring in Computer Science doing their third semester in their master's program. They are mentors in the International Peer Mentor Program offered by the WSU system. This position has no financial benefit and is a pure volunteer position.

Participant 4 is an undergraduate political science major who has a student mentor working with the Chicana Latinx center. The participant was paired with another Latinx student who is also a political science major. The student has no mentoring experience but has had an enjoyable experience being the mentee.

Participant 5 is an international graduate student in their second semester majoring in educational psychology. They are a mentee in the peer mentor program of the International Programs. They were assigned a mentor who was a graduate student in the same college (College of Education) and had completed one semester ahead of them. The participant has no mentoring experience.

Contextual Inquiry Sessions

- ***Process and Environment:***

We conducted factual inquiries over two days at various workplaces, such as the WSU mentoring offices for various organizations for international and domestic students and undergraduate and graduate students. The office has a variety of amenities, such as not only various mentoring aids but also accessories such as printers, snacks, and various computers for students to finish their work/catch up on emails, among other things. The interview took place on the first day, during the mentoring office's working hours and students' free time. Multiple students in the office asked and answered questions because it was more of a group discussion than a one-on-one meeting. The interview was highly beneficial because it provided us with ideas for developing the app. Still, it

also aided in improving the student's overall experience and positively affecting their day-to-day life.

We interviewed the International Programs officer on the second day, who was not a student but an advisor and an authorized representative of the International Programs at WSU-Pullman. It became a focal point of our contextual inquiry because we gained insight into how we could improve and how we, as students, could enhance the overall experience of the students who participated.

- ***Common tasks and themes:***

An ordinary day in the mentoring program center would follow a pattern. Mentees come in to attend the weekly/monthly meeting or set up an appointment with mentors to talk about something in a private space. While the mentors may engage themselves in planning events or office hours for the mentees, generating a feedback report on the previous meetings to send it to higher officials, and making arrangements to meet the mentee's specific needs.

When a student comes to sign up as a mentor, the available mentor/administrative staff brief them about the procedures through the website or papers. The supervisor- in charge gives them a detailed description of how the process works (applications and interviews) and the tentative timelines.

On the whole, the center remains busy, having many people coming in for various tasks.

- ***Unique features of individual CI sessions***

Focus on Academic and Career Development:

Participant 1 believed that the critical responsibility of a mentor should be to guide their mentees towards academic progress and career development.

Smoother Transition:

Participant 2, who never got a chance to experience any mentorship program, wishes to support and mentor the new students for a much smoother transition into university life.

Pairing Criterion:

Participant 3 stressed the importance of considering other factors such as home country, shared interests, courses, and the major for pairing mentees with a mentor.

Inactive Students:

Participant 4 raised an important issue on the inactiveness of the mentees. According to her, it should be ensured that a maximum number of mentees should leverage the benefits of mentoring programs.

Provision of more than one mentor:

Participant 5 acknowledged that her experience of being a mentee under the assigned mentor was wonderful. However, she also wished to have another mentor belonging to her hometown with whom she could connect on food and festivals.

Synthesis of findings

- **Requirements**

Functional Requirement	Associated Usability Target(s)	Empirical Source/Rationale
Users must be able to fill out primary information (name/email/phone number/nationality).	Users should be able to fill out this information in under 2-3 minutes.	100% of the participants were open to sharing their Ethnicity, nationality, and background.
Users must be able to edit their basic information (name/email/phone number/nationality).	Users should be able to edit the pre-filled information in under 10 seconds.	It's a prevalent need to be able to update personal information.
User must be able to enter academic information - major/college/year/semester in the school/courses taken.	Users should be able to fill out this information in 2-3 minutes.	100% of the participants were open to sharing their academic information
Users must be able to upload their resumes.	Users should be able to upload their resumes with a single click or drag and drop file type input. The upload should be successful within 20 seconds.	Most file uploads now support both these options as they are quick and convenient.
Users must be able to upload a profile picture	Users should be able to upload a picture from their photo app or device storage and scale or adjust the picture's visibility.	Although this feature is optional, it adds credibility to the user's profile. 100% of the participants were open to sharing their profile pictures.
Users must be able to add their bio.	Users should be able to fill out a 500-word bio and save the same. The bio editing depends on user typing speed. Further, the app should allow saving this information within 10 seconds.	100% of the users were enthused by the idea of sharing their likes and dislikes.
Users must be able to check the Open to the mentoring checkbox if the User is qualified to be a mentor	User should be able to check the box in less than a second.	All participants who were mentors shared that it would be beneficial if they got to choose the capacity at which

		they mentored.
Users must be able to edit their Open to mentoring status.	Users should be able to check the box in less than a second	All participants who were mentors before shared that they were at some point overwhelmed by the number of students they mentor or the mentoring workload.
Users must be able to enter their mentoring experience (what program / WSU / how many years or months).	Users simply need to choose from a list of options, and it should take less than 2-3 seconds.	Users will find it easier to choose from options like “Less than a year,” “Less than 2 years” rather than choosing the number of months and years.
Users should be able to enter languages-known/race/ethnicity/gender.	Users may choose to reveal their race, ethnicity, and other information either by typing in or choosing among the options that should take about 30 seconds.	While each question is optional, this information will help the recommendation system better pair the mentors with mentees. 100% of the participants agreed to share this information.
Users can change the visibility of their ethnicity /race/gender to only the users they choose.	Users are given the option to change the visibility of their race/ethnicity details by choosing the visible option for the users they want to share, which should take about 10-20 seconds.	All the participants suggested that it is up to the users to whom they want to share their information, thus protecting their privacy.
Users must be able to choose if they want to be mentors or mentees, or both	Users simply need to choose an option from the three, which would take less than 2 seconds.	Some of the participants showed interest in being both mentors and mentees.
Users must be able to choose the program in which they are interested in being a mentor.	Users have to choose the program from the list provided to them, which would take less than 5 seconds.	All participants preferred to have a mentor/mentee from the same program as they would be able to discuss/solve the issue more efficiently.
Users must be able to view the progress of the training	Users can view their percent of completion by tapping on the progress option, which would take less than 10 seconds.	Tracking the progress, which will allow them to see how much they have done, motivates the users to go forward and finish their remaining tasks.

Users should be able to view the current status of their process after selecting the status as a mentor.	Users can view their status by clicking on the status icon, which will tell them what is their current status, and this would take less than 5 seconds.	Notifying users about their current status. It will make the process more transparent and open, which will make a good impression on the prospective mentors.
Users must be able to view the mentee requests.	Users can view the number of mentees who have asked for them by tapping on the request section, which takes less than 5 seconds.	All the participants preferred the request and accepted system rather than the randomized inclusion of mentees.
Users must be able to view the profile of the mentees who initiated the request.	Users can view the detailed information of the mentee who has sent a request by tapping on each mentee's ID, which would take about 1 minute to go through each person's information. It should take less than 10 seconds.	All participants shared that it would be beneficial to know their prospective mentees well in advance.
Users must be able to view messages from the mentees who have sent requests.	Users can view the messages received from prospective mentees by navigating to the chat icon. It should take less than 20 seconds.	Promoting interaction between mentors and mentees is vital for the success of our application.
Users must be able to accept requests from the mentees	User can view the incoming requests by clicking/touching the requests tab or icon, which should take a time between 10s and 20s.	All the participants appreciated the idea of being able to choose their mentee or mentor.
Users must be able to view the top 3 recommended mentors best suited for them based on the information provided.	Once the user has updated their profile and validated their choice of being a mentee. They should be able to view the recommended mentors on the top once they click/touch the search icon, which should be done in under 20 seconds.	There can be many mentors and mentees who might not be able to find their best fit if they don't explore fully. Our recommendation system can give them an insight into the mentors they can choose.
Users must be able to randomly pair themselves with a mentor	User has the provision to request for the random assignment of the mentors. It just requires them to click on the button "auto-pair". This process should not take more	One of the participants highlighted that they would instead get a mentor assigned to them than go through the hassle of searching for them.

	than 15 seconds.	
Users must be able to view additional mentor profiles.	In addition to the recommended mentors; the users should be able to view different profiles and set up filters to refine their searches. Since this operation requires the user to go to the search, icon, it should not take more than 20 seconds.	The ability to view profiles is crucial for the mentees to make an informed decision.
Users must be able to send requests to prospective mentors until the maximum capacity of 3 mentors or active requests is reached.	The user can keep viewing the profiles of mentors by sliding right on the screen. Requests can be sent by swiping up for a given profile. This should not take more than 10 seconds.	All the participants acknowledged the concept of being able to send requests to the mentors who can accept requests based on common interests and capacity. Setting a limit on the mentors or requests prevents over-burdening of the mentors.
Users must be able to leverage the chat functionality to connect with their mentors.	Users can send messages to the mentors by navigating to the chat icon. This should take less than 20 seconds.	Promoting interaction between mentors and mentees is vital for the success of our application.
Users must be able to view all requests sent to the mentors.	Users can view the requests that they have sent to the mentors they think are best suited for them. This can be done by navigating to the view requests icon/section, which should not take more than 20 seconds.	Being able to view the current requests is an important functionality that enhances visibility and transparency for the mentees.
Users must be able to view the guidelines they must adhere to while using the application	Users should be able to view the guidelines when they sign in for the first time and also by navigating to the settings/help screen. This should not take more than 45 seconds for navigation.	Setting up ground rules is necessary in order to safeguard the interests of the student community.
Users must have access to various group chats in the application.	Users should have the ability to access and convey information to & from multiple sources, navigating to the group chats should not	This again aids in information accessibility and sharing information to gain insight from various platforms/sources.

	take more than 20 seconds.	
Users should have the ability to Schedule a meeting (in person or zoom redirect)	Users should easily have the flexibility to set up zoom meetings or in-person meetings via the application.	This enables the mentor to meet with their mentees and aid in helping the mentee.
Users must have the accessibility to view and read bulk notifications regarding events and resources.	Users must have access to view notifications regarding changes in events/ updates on resource sharing. This should take not more than 20 seconds.	This will ensure all the activities being held by the program is shared with the mentees to ensure active participation.
Users should have the ability to access information regarding Office hour schedules.	Users must have access to this information to easily share the specific timings to go about the mentoring activities. The navigation to the information should not take more than 30 seconds.	This is extremely important since it gives insight and accessibility to obtain a meeting, etc.
Users must have the ability to log the various activities of the student.	Users should be able to log all the activities/notes/synopsis of the meetings with their mentees to ensure accurate information is being delivered and shared. Accessing the logs should be a click or touch away and hence, should take a maximum of 20 seconds.	This will ensure accurate information is being stored, utilized, and provided and that no mishap would occur, which could lead to any sort of confusion.
Users must have the ability to delete their account.	Users should have access to delete their profile if they do not wish to be a part of the mentorship program any longer. This should take a maximum of 20 seconds.	This is important since the user should have the freedom to opt out of the program.
Users must have the ability to remove/change their mentor.	Users should have access to remove or change their mentors if matched with a mentor who is inactive/non-responsive.	This again enables efficient time management and boosts overall productivity.
Users should be able to ask for approval if they wish to handle more than 20 mentees	When a mentor wants to add more than 20 mentors under them; they would require approval from the program	Although we have limited the maximum number of mentees; the mentors should have the option to add more.

	they are a part of; this should not take more than 10 seconds.	
Users should be able to provide feedback to their mentors.	Mentees can provide feedback to their mentors by filling out a basic questionnaire, which should not take more than 1-2 minutes.	In order to provide a smooth interaction, the feedback can be used to put quality checks.

Table 1. Functional Requirements and Associated Usability Targets

User Experience Requirement	Empirical Source/Rationale
The user must rate the signup process where they enter the basic, required information (profile and academic details) and other options (demographic information) including the edit option, as 7 or higher on a scale of 1-10.	The process of creating a new profile can be a bit tedious as the user has to type in all the details with accuracy, which requires additional concentration and makes them feel tired. Efforts are taken to reduce the manual work, which includes import of resume, which auto-fills the relevant information in the profile, having dropdowns and radio buttons for options, file uploads for additional documents rather than typing them, thus saving a lot of their time.
The user must rate the feature of selecting the mentor on their own as 9 or higher in terms of satisfaction on a scale of 1-10.	From the survey, about 14 people chose that they are open to selecting or being assigned with the mentors, three people to choose their mentors, and two people to the option of being assigned to one. Interestingly, all the seven in-person interviewees, who were in the naturalistic setting, chose to select their mentors. Thus making the feature needful.
The users must rate the recommendation system created for assigning mentors to the mentees as 9 or higher in terms of satisfaction on a scale from 1 to 10.	The recommendation system has been designed by considering a vast range of factors such as nationality, major, subjects taken, shared interests, etc., for the assignment of the mentors and is not restricted to major or race. A rigorous effort has been put in determining all these factors and the contextual inquiries conducted also show that assignments based on a single criterion may not be that helpful. This system will provide the mentees with the top three mentors who would be best suited for them based on the profile information entered by them and the capacity of the mentors. It can save a lot of their time if they are satisfied

	with the recommended mentors; they don't need to search profiles and refine filters to explore more.
The users must rate the accessibility of communication channels such as messaging/chat and group meetings under a single roof as 9 or higher in terms of ease on a scale from 1 to 10.	Participant 4, a mentor, communication across different channels such as Google-meet or Zoom for meetings, Discord or Whatsapp for individual and group messaging, can become cumbersome and unmanageable. It becomes challenging to keep track of everything. Our application acts as a one-stop portal providing all these facilities integrated into a single platform. This seamless communication provides comfort and ease and enhances the productivity of the mentors.
The user must rate the process of providing feedback as 7 or higher in terms of ease of use on a scale of 1 to 10.	The app provides the mentees with a way to provide feedback for their mentors. This feedback is optional, and users should be able to proceed with using the application even if they choose not to complete this feedback. Further, the feedback form should not take more than 2-3 minutes of their time and should be interactive.
The user must rate the mentor-specific processes such as tracking and logging, communicating with the mentees, scheduling meetups as 9 or higher in terms of satisfaction on a scale of 1 to 10.	All the mentorship experience participants mentioned that there is no centralized system where they could track their mentees' progress, schedule meetings, connect with them, or log the statuses. The app should allow mentors to help in their daily activities and reduce their overall effort by integrating these features. Further, these features should be easy to navigate and learn.
Users should rate the likeliness of recommending the app to others as 9 or higher in terms of credibility on a scale of 1 to 10.	The app should reduce the efforts and provide an excellent user experience to meet and connect with mentors. Mentees should find it useful to have a one-app solution to carry out their basic tasks.

Table 2. User Experience Requirements

Personas

Persona 1: Student with 2 years mentoring experience

Persona 2: Student with no mentor and no mentoring experience

Persona 3: Student who has had a mentor in the past and is looking for a mentor



Gisselle Salazar

Bachelors in Political Sciences

BIO

Gisselle is an undergraduate junior majoring in political science. She is a mentor at the Chicana/Latina center under the Community, Equity and Social Justice initiative. She has been given 17 students to mentor and has been a mentor for almost 2 years now. She is looking to become a better mentor and develop her leadership skills through mentoring.

EXPERIENCE WITH TECHNOLOGY

Gisselle uses a messaging app, google forms, email text messaging app, logging website and a note taking app all for mentoring.

Goals

- Building network
- Professional Development
- Hone leadership skills
- Give back to community
- Build mentoring skills
- Get regular feedback

Pain Points

- So many different apps to serve one purpose - mentoring
- Mentees often don't belong to my major although they are from the same ethnic group.
- Tracking mentee progress has no system in place

"I have some mentees from the Pasco and Sunnyside area but they are not in my department so I can't offer any academic help. I wish there is a way to also pair them with another student who is in their major."



Sanjita Bhavirisetty

Masters in Computer Science

BIO

Sanjita is a graduate international student pursuing her masters in Computer Science. She is looking for means to connect with senior students who have completed a fair share of courses in major, find a community of students who belong to her ethnicity or home country.

EXPERIENCE WITH TECHNOLOGY

Sanjita is tech savvy and has used social media apps and meet up apps that offer features similar to iMentor


Goals

- Building network
- Professional Development
- Academic help
- Understand the US Culture
- Understand the US Culture

Pain Points

- No means to reach out for academic help
- Culture shock
- Can't find students to get a review about a course.

"A student must have adequate choices to choose a mentor from. It would be so much easier if I can connect with a student who has gone through a similar experience prior to my arrival"



Portia Amoa-Danquah
PhD in Educational Psychology

BIO
Portia is a PhD Student working on her dissertation in educational psychology. She is an international student from Ghana. She has had a mentor in the past and finds the idea of mentorship very beneficial. She is looking for a mentor from her educational and ethnic background.

EXPERIENCE WITH TECHNOLOGY
Portia is not very tech savvy but uses one or two social media apps that offer features similar to iMentor

Expectations

- Building network
- Professional Development
- Academic help
- Understand the US Culture
- Get to know Pullman
- Find people who love travel

Pain Points

- Cannot find a mentor who shares similar interest
- No help with campus resources
- No means to find specific resources like African Grocery store etc.

“ I was assigned a mentor from the college of education but they had nothing in common with me. It would have been beneficial if I was given a choice or taken my opinion before the assignment **”**

Scenarios

Scenario 1: How iMentor helps manage Gisselle's Sunday mornings

Gisselle, a junior at WSU studying Political Sciences, has a busy week and recognizes that Sundays are the only day she has some free time. She is not only involved and excelling in her academics, but she also makes time in her busy schedule to assist and guide other students who seek her mentorship.

Her Sunday morning begins with accessing her daily messages from the students on iMentor. She is currently using the iMentor app for all her mentoring-related activities. She then goes through the *request* section of the app, where she finds new requests from anyone who seeks her mentorship. She can see their profiles and chooses to accept the request if she thinks they have matching interests. A student from a Chicana/Latina background who has Spanish as their first language and is in the same major as Gisselle has sent a mentoring request. She believes it is a good fit and accepts the request.

She then responds to the individual messages, any queries that her mentees have. She also shares resources and events on campus with her mentees through group messaging. This feature of iMentor aids in collaboration and provides information about various activities. Gisselle is in the process of setting up a study table, so by utilizing this feature, students can coordinate and set up a date and time for the study session. They also figure out a location, find a study room, and efficiently come together as a group to accomplish their task of performing a group study. After the study time, Gisselle logged all the details

using the iMentor logging feature. She has presented with a list of all students she mentors and a set of multiple-choice type questions.

According to Giselle, this application has made the entire mentoring process easier, faster, and more efficient. She connects with mentees who are more likely be benefited by having her as a mentor and ends up saving a lot of time.

Scenario 2: How this application aids in helping Sanjita.

Sanjita, a current second-year graduate student at WSU, is a computer science major. Being an international student from India, she read a lot of blogs and influential articles that will prepare her for the new culture and graduate student life. She believed she was fully equipped and ready to take on the new challenge. To her dismay, this was not the case when she arrived at the Pullman airport at midnight. She was that her baggage had been misplaced during the journey and would arrive only after 48 hours. Being in a new place at such a time of day is potentially a cause for worry.

However, she is not deterred. She quickly opens the iMentor app on her phone and reaches out to her mentor, whom she met through the app before her arrival. The mentor immediately calls her, and she can explain her situation. After hearing about the issue, her mentor Martin drives at the airport to pick her up, and she reaches home safely. They then use the app to schedule a time to meet the next day. They use this time to grocery shop in Pullman.

While she's getting to know the country and lifestyle, she finds that her mentor is not a Computer Science major and needs help choosing courses for the first semester. She opens the iMentor app and goes to the "match me" page. She sees the top 3 recommendations and finds a computer science student. However, she wants a student interested in software engineering explicitly. So she clicks the View More profiles button and is presented with a list of potential mentors. She swipes left to load view each profile and finds a student, Deep, who is pursuing Software Engineering. She swipes up and requests their mentorship.

The next day she is notified that Deep has accepted the request, and the mentor starts a conversation with her using the app's messaging feature. She explains that she needs help with choosing suitable courses.

The two decide to meet up and discuss the same. Thus her transition into graduate life happens seamlessly with very minimum hassles.

Scenario 3: How this application aids in benefitting Portia?

Portia is pursuing a Ph.D. in Education Psychology at Washington State University. During her first semester, she was assigned a mentor to help her with the university resources, academics, and events. However, she couldn't connect with her mentor and hence was inactive or not responsive in most of the meetings. She wishes that she could have had the option of choosing a mentor. Then, she could have had a more eventful and less stressful first semester.

It is Monday morning, and she is working in Owen's library, alongside a peer mentor Christine who is logging the progress of her mentees in the iMentor app. This mentor, being a social person, strikes a conversation with her. Christine explains to her how the iMentor application has transformed the process of mentor assignment and that she should sign up for the app. She clarified how the mentees can now choose their mentors by looking at their profiles and searching based on a broader range of filters not limited to major and nationality. Portia was impressed and thought to give it a try as she had always wanted someone to guide her on the courses and had similar interests.

She installed the iMentor app and was amazed to see how both mentee and mentor can benefit from the application. After filling up the information, the recommender system provided her with the top three mentors best suited to her interests and priorities. She was able to find a mentor interested in hosting hiking expeditions and was of the same major as her. She immediately sent him a request and texted him to ask if he had any upcoming hiking events planned for his mentees. She also plans to become a mentor for the first-semester students and help them in every possible way.

In conclusion, through its robust recommendation system and provision of choosing a mentor, the iMentor application has made her an active mentee who can now leverage the benefits of the mentorship programs.

Appendix A: Informed Consent

Participant: Gisselle Salazar

**Informed Consent Agreement to Participate In
Contextual Inquiry**

[Aishwarya Sharma, Akshaya Venkatesh, Madhumitha Sivakumaran, Pallavi Sharma, Kulpreet Singh]

School of Electrical Engineering and Computer Science
Washington State University

Description of Study: I understand that I, Gisselle Salazar have been asked to participate in a contextual inquiry to inform the design of a new software application being created as part of the above persons' (hereafter, "the designers") course project for CptS 443/543 at Washington State University. My participation in this activity will help the designers better understand prospective software users' needs. I have been asked to spend about 30 minutes participating in this interview. This will involve my engaging in an interview to share views on the mentorship programs while the designers observe, ask questions, and take notes.

The designers will record the session on audiotape. My name will not be on the audiotape. When the researchers describe their work to other people in class (which may entail playing segments of the audiotape), they will not use my name.

Risks and Benefits Expected: The contextual inquiry will not do me any harm. It is not expected to help me directly. The results may help inform the design of the designers' software.

Confidentiality: I understand that any information about me that is obtained from this contextual inquiry, including what I say, will be confidential. My real name will be kept in a locked file and only the researchers will have access to it. Only my code name will be associated with data collected on me. Reports and presentations involving those data will not use my real name and will not present other data that could be used to identify me. Any recordings made within this contextual inquiry will be destroyed within two years.

Right to Refuse or End Participation: I understand that I may refuse to participate in this study or stop participating at any time.

Certification: I certify that I have read and that I understand the foregoing, that I have been given satisfactory answers to my inquiries concerning this contextual inquiry, and that I have been advised that I am free to withdraw my consent and to discontinue participation in the project or activity at any time.

I herewith give my consent to participate in this activity with the understanding that such consent does not waive any of my legal rights, nor does it release the researchers or any agent thereof from liability for negligence. I understand that I shall remain anonymous in all written and verbal reports of this study. If I am recorded, I agree to allow the designers to present to their instructor and classmates excerpts of any recordings taken during the study for educational purposes. I understand that I may request a copy of this form to keep.

GS

Signature of individual participant

03/22/2022

Date

(If you cannot obtain satisfactory answers to your questions or have comments or complaints about your treatment in this activity, please contact Professor Christopher Hundhausen, Washington State University, 509-335-4590 or hundhaus@wsu.edu.)

Participant: Deep Inamdar

Informed Consent Agreement to Participate In Contextual Inquiry

[Aishwarya Sharma, Akshaya Venkatesh, Madhumitha Sivakumaran, Pallavi Sharma, Kulpreet Singh]

School of Electrical Engineering and Computer Science

Washington State University

Description of Study: I understand that I, Deep Inamdar have been asked to participate in a contextual inquiry to inform the design of a new software application being created as part of the above persons' (hereafter, "the designers") course project for CptS 443/543 at Washington State University. My participation in this activity will help the designers better understand prospective software users' needs. I have been asked to spend about 30 minutes participating in this interview. This will involve my engaging in an interview to share views on the mentorship programs while the designers observe, ask questions, and take notes.

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DI

Signature of individual participant

03/22/2022

Date

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Participant: Sanjita Bhavirisetty

Informed Consent Agreement to Participate In Contextual Inquiry

[Aishwarya Sharma, Akshaya Venkatesh, Madhumitha Sivakumaran, Pallavi Sharma, Kulpreet Singh]

School of Electrical Engineering and Computer Science
Washington State University

Description of Study: I understand that I, Sanjita Bhavirisetty have been asked to participate in a contextual inquiry to inform the design of a new software application being created as part of the above persons' (hereafter, "the designers") course project for CptS 443/543 at Washington State University. My participation in this activity will help the designers better understand prospective software users' needs. I have been asked to spend about 30 minutes participating in this interview. This will involve my engaging in an interview to share views on the mentorship programs while the designers observe, ask questions, and take notes.

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SB

03/23/2022

Signature of individual participant

Date

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Participant: Portia Amoa-Danquah

Informed Consent Agreement to Participate In Contextual Inquiry

[Aishwarya Sharma, Akshaya Venkatesh, Madhumitha Sivakumaran, Pallavi Sharma, Kulpreet Singh]

School of Electrical Engineering and Computer Science
Washington State University

Description of Study: I understand that I, Portia Amoa-Danquah have been asked to participate in a contextual inquiry to inform the design of a new software application being created as part of the above persons' (hereafter, "the designers") course project for CptS 443/543 at Washington State University. My participation in this activity will help the designers better understand prospective software users' needs. I have been asked to spend about 30 minutes participating in this interview. This will involve my engaging in an interview to share views on the mentorship programs while the designers observe, ask questions, and take notes.

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PA

03/23/2022

Signature of individual participant

Date

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Participant: Vishnu Priya Chimata

Informed Consent Agreement to Participate In Contextual Inquiry

[Aishwarya Sharma, Akshaya Venkatesh, Madhumitha Sivakumaran, Pallavi Sharma, Kulpreet Singh]

School of Electrical Engineering and Computer Science
Washington State University

Description of Study: I understand that I, Vishnu Priya Chimata have been asked to participate in a contextual inquiry to inform the design of a new software application being created as part of the above persons' (hereafter, "the designers") course project for CptS 443/543 at Washington State University. My participation in this activity will help the designers better understand prospective software users' needs. I have been asked to spend about 30 minutes participating in this interview. This will involve my engaging in an interview to share views on the mentorship programs while the designers observe, ask questions, and take notes.

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VC

03/23/2022

Signature of individual participant

Date

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Appendix B: Raw Data

Link to the Recordings:

<https://drive.google.com/drive/folders/1dhNfufWbn2vuLwTpuCqSY7dDpN8I7uTB?usp=sharing>

Notes:

For Participant 1:

International Peer Mentor

Organizing and assigning of mentees

Excel sheet - to maintain details

How they would like to be paired - social media - interests - both mentors and mentees - fill the form

Mentees less responsive

Options for pairing - major / interests / home country - in that order

Tries to honor all the mentees request - every 2 weeks

Reports of cancellation

2 weeks - mentees changes

If the mentee doesn't pref mentor pref is seen Ug to Ug and G to G

Application issued to be mentors

Every sem - april 1st to 13th - Handshake : Resume and Cover Letter

2 people Interviewers - just to make them use that skill

training - half a day - program itself - ferpa training and sexual harrassment - mental health and first aid training

Campus connect - suicide prevention

Volunteer position

First sem - only mentee - auto enrolled

walk ins - office in Kreugal Hall - ip.peermentors@wsu.edu

grad vs ug - no differences

mentors can be american

- not enough mentors - mentor office - website - office hours

re pair the student if a mentor step down

Duties of Mentors

Mentors:

1. Peer contact
2. Pre arrival contact
3. After school start arrival
4. Transition in to US and Pullman

5. Office hours holding - in the office

6. Ask who would like to continue

Issue to be faced

Students are hesitant to reach out - go to the resource

Interests and goals - mentors find out what these are

For the Participant 2

African American Student Center

Application issued for mentor position

Winter break - apply online

Class - on canvas - official class - 1 credit

interviews - class is common to all centers

Resources

resources - financial - rso - events - students centers

no center is exclusive - not aa background - office hours 3 a week

guiding them - check the grades

Issues faced

already 20 students - miscommunication between different mentors

-Steve Bischoff - retention counsellors and advisors

For Participant 3

Mentors -TMP

Application and Criteria

- mentee first - why do you wanna be a mentor - 12 students - 20 students based on how many Looking for mentors

- Interview process - group interviews - scenario questions - student looking for resources

Duties:

Weekly email - letting them know of events

- career development

Office hours - academic pairing within major so they can help

Events hosted with different companies Alaskan Air/Boeing

Trip to Portland to other universities

Login info of mentors

tmp website - logs how active the students - do it every weekend resume of the mentor

info about all mentor - hosting events is mandatory - way to give back mentee can change - boss will change

For Participant 4
Chic Lat

Applications

Course - how to socialize - how to get resources for the self

Interview with retention counselor - people who are mentors also take interviews

Recap class - performance of the current year - logs

Duties

First week of school

- group chat

- group me or cell phone numbers

google forms - likes and feedback

- academic help - 2.5 - pasco places also matter

out of state

it will be very beneficial to choose

- more than one mentor

- think about how to include inactive students

Issues faced

- mentee - stipend pay more roughly 90 a semester - parking no benefits - funding for study table snacks

interacting better - introverts - make a way to inclusive - meeting one on one is not often what are the weeks interactions - goes into the logs

Time line:

December apply

Spring - course - in person

Interview - april

Mentor retreat - on campus

Week before classes

For Participant 5
AAPI

Duties

20-30 - emails every week

resources - instagrams- group chats - each their own way

students walk in asking for mentors

timeline

Spring time applications close - class is in fall - group interview - end of march - april major - more than one mentor

at least 10 hours - stipend 2800

Open House - socialize - email them if they dont reach

Mentoring - leadership skill - communication and organisation