

Portfolio Presentation

Crafting Meaningful Remote Mentorship Relationships at Microsoft

Connie Yang



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Our Team



Kelsey Yeh | UX Researcher

Kelsey has 3 years of research experience applying mixed methods. She most recently worked at Weight Watchers as a UX Research Intern. She is passionate about researching online harassment and social media addiction.



Gabi Cronk | UX Designer

Gabi has 3 years of business analytics experience before pivoting into the world of UX Design. She is passionate about making sense of the world and translating insights into the equitable design experiences of the future.



Connie Yang | UX Researcher

Connie has 3 years of research experience and currently works as a User Researcher for AR/VR products. She is passionate about exploring ways to leverage technology to foster deeper human connections.



Sophie Park | UX Designer

Sophie has 2+ years of experience in UX Design and has a strong visual and graphic design background. She is passionate about designing platforms that create communities and meaningful human connections.

Project Overview

Project Context, Stakeholders, and Target Users

Project Overview

Context

Our team partnered with Microsoft to conduct a 6-month study as part of our coursework for HCDE 592 and 593. In early January, our sponsor team at Microsoft proposed the initial project prompt to be about **fostering better coaching connections and delivery in a remote setting**, which was inspired by their own struggles with building more meaningful connections in their remote workplace. While remote work conditions have offered the freedom to connect globally-distributed and inclusive workplaces, our sponsor team described the overall experience to be socially isolating. Notably, a member of their team recalls,

“When I first joined [Microsoft], especially since it was during Covid, I struggled to find a good mentor while working remotely.”

These struggles are not unique to our sponsors. Our team resonated closely with this struggle as we have all faced similar challenges with navigating remote learning environments, particularly when it comes to building meaningful human connections. These experiences deepen our team’s empathy for the struggles remote mentorship and drives our intrinsic motivation to address these challenges.

For this project, our sponsor team clarified that the problem space was **not informed by any existing business need nor tied to a specific Microsoft product**, and it was our team’s responsibility to define a more specific project focus and intended outcomes.

Stakeholders and Users

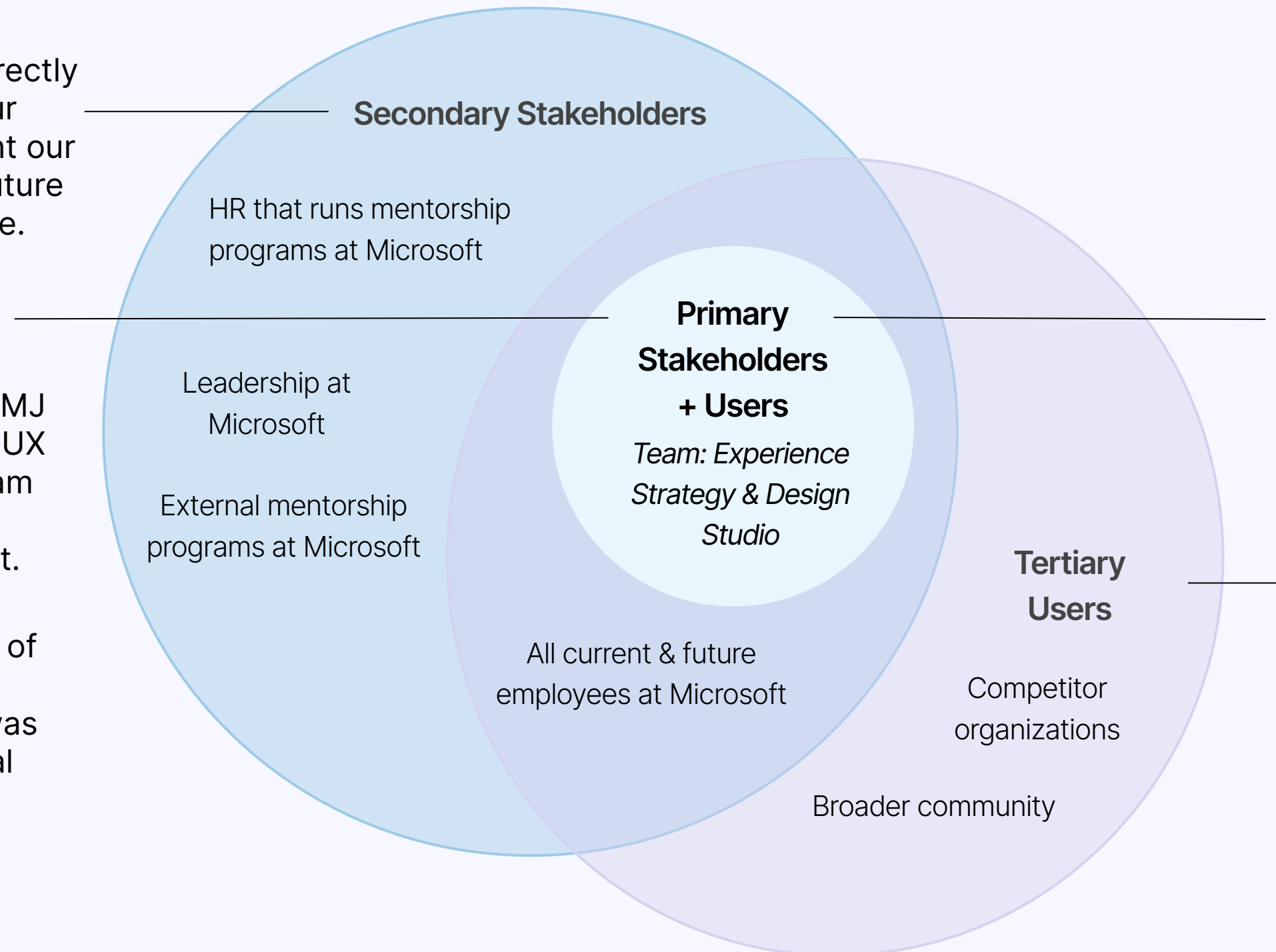
Secondary stakeholders

include those who are indirectly involved or impacted by our project. We hope to present our final product to them for future implementation and change.

Primary stakeholders

include our direct sponsor team: Brad (UX Designer), MJ (UX Strategist), and Keira (UX Researcher), whom our team collaborated most closely with throughout the project.

Notably, they are also part of our primary target users, since our problem space was inspired from their personal struggles at Microsoft.



Primary Users

include our direct sponsor team and all employees who are currently engaged in or plan to be involved in mentorship at Microsoft.

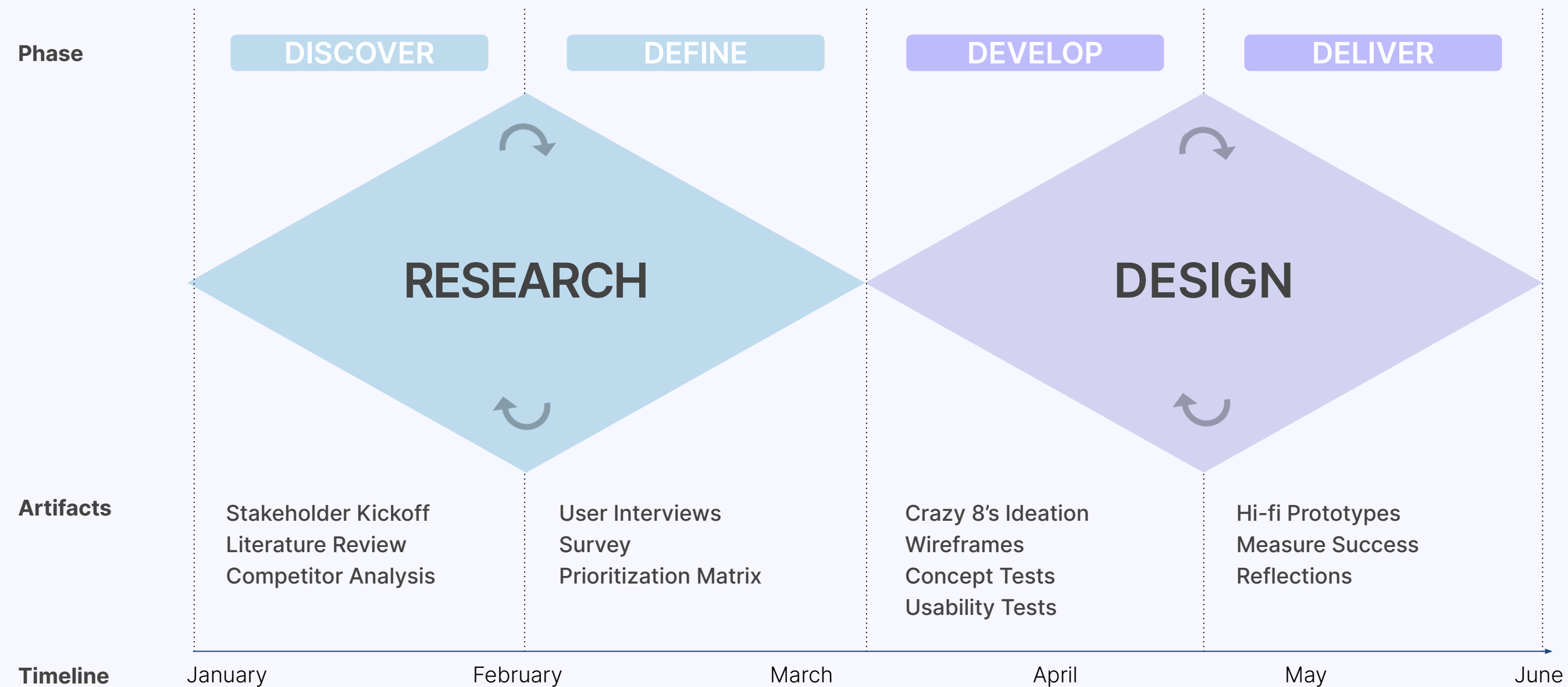
Tertiary Users

include non-Microsoft members that could benefit from mentorship, such as other organizations and the broader community (schools, NGOs, etc.).

Project Overview

Our Approach

We employed the Double Diamond Design framework to inform our end-to-end process.



Research Process

Discover & Define

Problem Space Discovery

The initial problem prompt from our sponsor team was:

“How might we better foster coaching connections and delivery in a remote environment?”

Due to the broad nature of this prompt, our team dedicated the first 3 weeks of the project (January 4-25) to exploring potential problem spaces and defining a narrower project scope that would be more feasible to complete within our time constraints.

We employed **3 research methods**:

1. Literature Review

Method Justification:

- Cost-effective as our project had limited financial funding
- Time-efficient compared to other methods such as subject matter interviews or field studies

Limitations/Gaps:

- Much of our reviewed articles were published +7 years ago, thus lowering their current relevance
- Scientific research does not always accurately reflect industry practice

2. Competitive Analysis

Method Justification:

- Cost-effective as we had limited funding
- Time-efficient compared to other methods
- Supplements literature findings by providing more context on industry practices and opportunities

Limitations/Gaps:

- We faced limitations with finding publicly available info on how competitor companies managed internal mentorship initiatives, and couldn't conduct a SWOT analysis as intended

3. Prioritization Mapping

Method Justification:

- Assessing stakeholders' priorities during discovery phase is needed to effectively align our project scope with their expectations from day 1 and encourage stronger buy-in on our final solution

Limitations/Gaps:

- Topics were prioritized based on their feasibility and *perceived* user value, but since we didn't do any user research yet, user value was subjective to our assumptions and biases

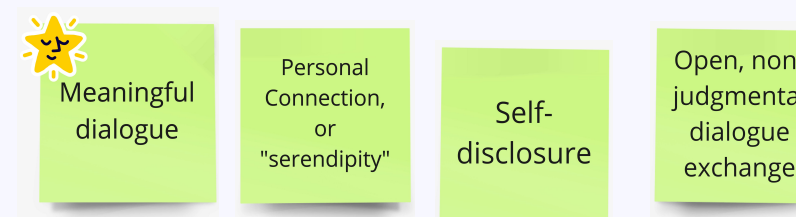
Literature Review

Our team read over 30 peer-reviewed papers and 2 books related to the topic of remote mentorship in the workplace to build a foundational understanding of the subject and help our team begin to narrow down our project focus.

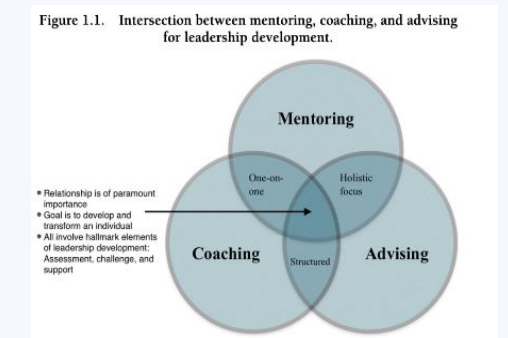
Key Insights

- **Good mentoring relationships** are facilitated through meaningful dialogue, perceived similarity, adequate mentor training, and having a structure to the relationship
- **Common problems** in mentoring relationships include:
 - Lack of time and resources
 - Lack of access to good mentors
 - Unsuccessful matching
- In **remote settings**, it can be even more difficult to build connections due to a lack of face-to-face interaction and missed cues, and can reduce the ability to feel comfortable and be vulnerable (Pfund et al., 2021).

What makes a good mentoring relationship?



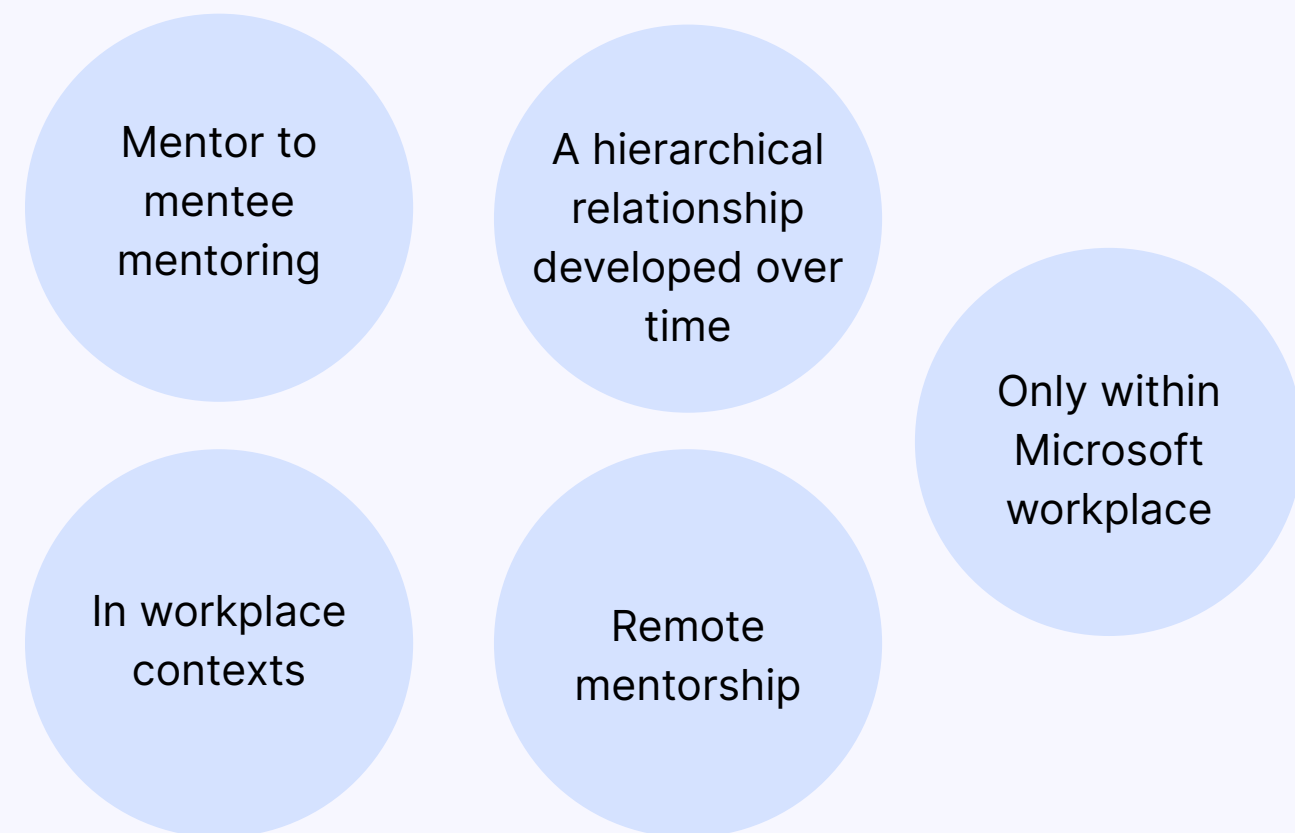
Common problems in mentoring relationships



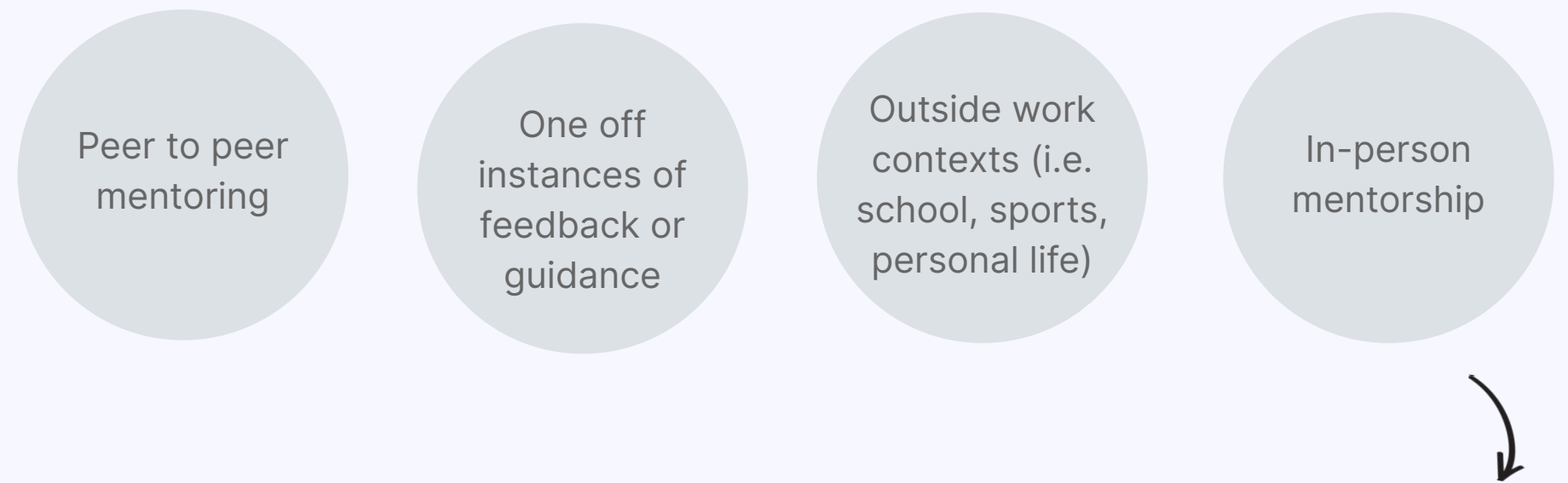
Narrowing Our Scope

Based on our literature review findings, our team collaboratively decided what aspects of the problem space to include and exclude from our project scope.

In Scope



Out of Scope



Key Learning Lesson: We pivoted from the topic of “coaching” (from the initial prompt) to “mentoring” after our team realized that we all had different ideas of what “coaching” meant. Thus, we learned about the importance of establishing and aligning on concrete definitions for each key term.

Competitive Analysis

To further contextualize our literature findings into real industry settings, we conducted a competitive analysis to understand how other large corporate mentoring programs are structured and how they support relationship-building between mentors and mentees.

We assessed direct competitors of Microsoft such as Google, Amazon, and LinkedIn, as our team had heard through word-of-mouth in our personal networks that these workforces all have well-established, corporate-led mentorship programs. Then, we looked at indirect competitors such as non-corporate mentoring platforms like ADPList, Mentorloop, and Chronus.

Key Insights

- Google and LinkedIn build strong mentorship culture by engaging involvement with leadership to provide support and resources, and give recognition to mentors/mentees for their efforts.
- Latest mentorship software such as Mentorloop and Chronus are leveraging AI-driven algorithms to effectively match mentees + mentors based on their needs.

One mentorship platform that stood out among competitors for its wide success was ADP List. Thus, we conducted a walkthrough of the platform to explore its user journey and assess the strengths and weaknesses of functionalities and UI.

Strengths: extensive mentor search filters (job, country, timezone, etc.) automated booking/scheduling system, supports remote connection through video call and messaging

Weaknesses: only supports one-time bookings and lack features that promote longer-term relationships

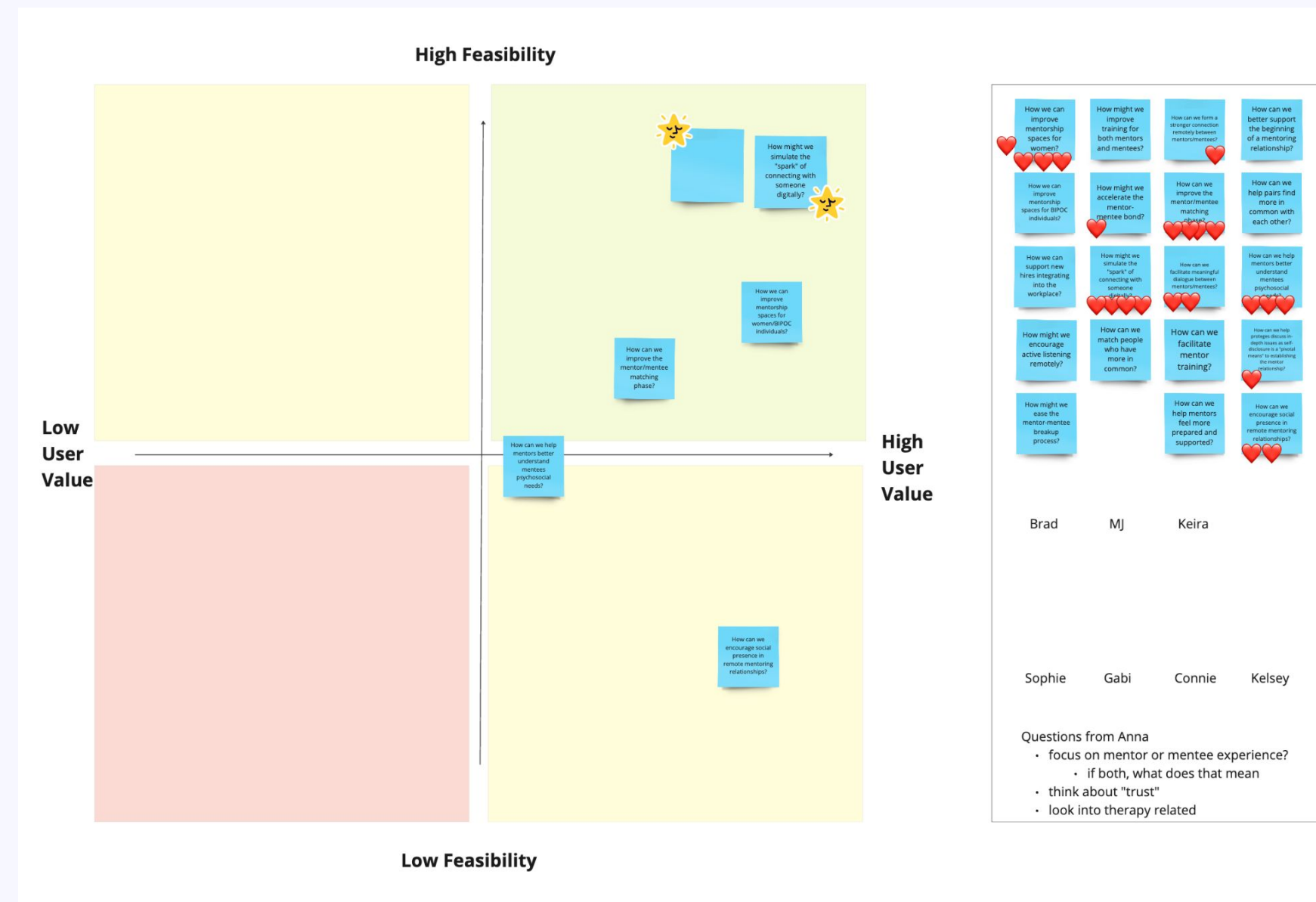
Research Process

Prioritization Matrix

Our secondary research revealed numerous potential areas for improvement, however, tackling them all within our project timeline was unrealistic. Thus, we conducted a prioritization matrix with our stakeholders to understand their priorities, interests, and expectations, as well as ensure their alignment with our project from the get-go.

Prioritization Process:

1. Our team narrowed down on 20 "how might we" problem questions based on our secondary research findings.
2. We established our "prioritization" variables as "feasibility" and "user value".
3. Our team and the sponsor team each voted on our top 3 interested questions.
4. The most popular-voted questions were then assessed on the prioritization matrix.
5. We identified 2 problem questions with the highest feasibility and user value.



Defining our Scope

Focus on personal connection and open communication

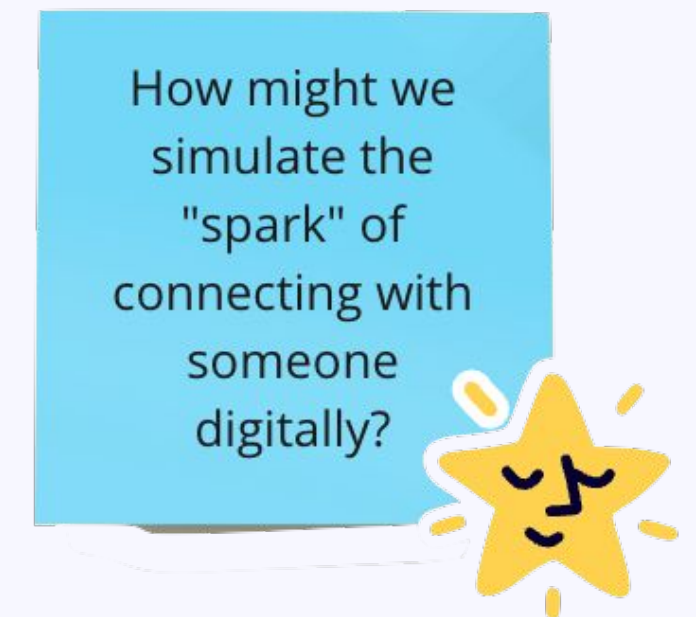
Based on our top ideas “facilitate meaningful dialogue” and “simulate the connection”, we focused on addressing the aspect of personal connection and open communication in mentoring relationships. These two aspects were supported by our literature review.

Focus on Mentorship at Microsoft

We decided to focus on specifically mentorship at Microsoft given our sponsors’ first-hand experience with these problems and to be more feasible within our project time constraints. Also, since every company has a different mentorship culture, we wanted to tailor our solution to Microsoft employees

Focus on Post-matching

We initially wanted to cater our solution only to the post-matching phase, since we felt that facilitating the matching process would be more service design and we wanted to create more of a system design solution.



Initial Research Questions

How might we foster more **meaningful mentoring connections** in **remote** settings at **Microsoft**?

RQ1

How are **personal connections** formed in remote mentoring relationships, and how can we promote stronger connections?

Methods: Interviews

RQ2

How is **open communication** fostered in remote mentoring relationships, and how can we facilitate open communication between mentors and mentees?

Methods: Interviews

RQ3

How can we facilitate a stronger **mentorship culture at Microsoft**?
How can we facilitate its growth?

Methods: Interview, Surveys

Research Process

User Interviews (Phase 1)

We conducted 10 semi-structured, remote interviews to collect in-depth data on user pain points and needs during their mentorship relationships. Preparing for our interviews involved **3 steps**:

1. Identify target users

We identified our target users to be employees at Microsoft with current or recent involvement with internal mentorship initiatives in remote settings.

To recruit our target users, I developed a Recruitment Screener Form on Google Forms.

Notably, we tried to sample from diverse ethnicities and technical backgrounds that are representative of the Microsoft workforce.

2. Recruit participants

Our recruitment methods included:

- Personal and school networks via Slack, LinkedIn, etc.
- Our sponsor team sent promo emails within their internal Microsoft channels.

We then scheduled meetings with eligible participants through Calendly.

Our participant pool consisted of **5 mentors and 5 mentees**.

3. Prepare Script & Pilot

Based on our 3 main research questions, I brainstormed prompts to ask in the interview.

I then worked with my research teammate to develop 2 interview scripts:

- a) [Mentor Interview](#)
- b) [Mentee Interview](#)

We conducted internal pilot tests with our sponsor team and made several changes to the prompt wordings to reduce bias and leading.

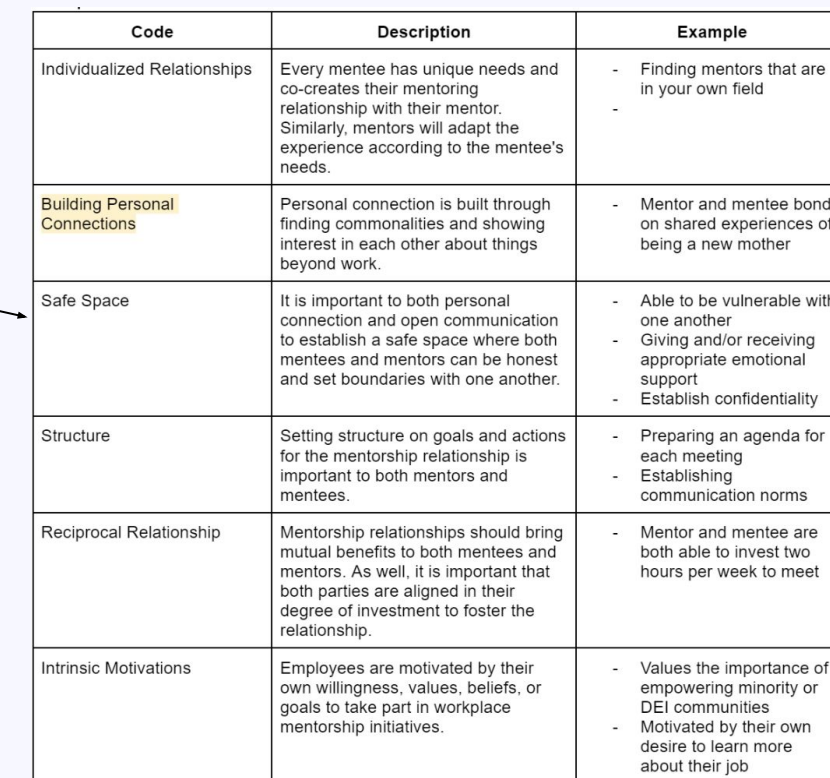
To promote internal consistency across the interviews, I moderated all 5 mentee interviews while my teammate moderated all 5 mentor interviews.

User Interviews (Phase 1): Analysis

1. I **open-coded my interview notes** for key findings on user pain points, needs, wants throughout their mentorship relationship.

3. I **developed a codebook** with all the common themes. I then inputted the codes into Atlas.ti to further analyze all interview transcripts to thoroughly identify any findings that we missed in our manual open coding.

2. Think back to the first time you met remotely with your mentor. What were some key discussion topics or techniques they used for getting to know each other and establishing a connection?
 - a. How does this differ between remote and in-person, if at all?



User Interviews (Phase 1): Findings

I synthesized our key findings into 3 categories: pleasure points, struggles, and wants. I then presented these findings to our designers and stakeholders to help them empathize with users and scope down on which pain points to address in our solution.

Key Insights

✓ What works well?

1. Top 2 ways that mentors and mentees build personal connection:
 - Finding commonalities
 - Showing interest in one another's personal life
2. To find suitable mentors, mentees will prepare and communicate their intentions, agenda, and goals.
3. Open communication is built on mutual trust, reciprocal investment, and positive mentor modeling.

✗ What are the struggles?

1. Mentees found utmost difficulty to find mentors that match their unique needs, goals, and preferences.
2. Mentees often struggle to understand their own goals and needs.
3. Mentors struggle with a lack of time, training resources, and recognition from leadership.
4. Users struggle to find mentors/mentees outside their org or or not aware of the initiatives that MS has to offer.

What do users want?

1. A way to more efficiently and accurately find suitable mentors/mentees based on their own needs, goals, and preferences.
2. More formal mentorship initiatives across MS to make it easier to find mentors/mentees outside of their direct team and orgs.

Research Process

Surveys

To support our findings from our phase 1 of user interviews, we designed a survey to gain high-level quantitative insights about the challenges that mentors and mentees face at Microsoft.

Unfortunately, despite consistent efforts to distribute our survey across various channels, we only received a total of 18 responses over 3 weeks. Moreover, of these 18 responses, only 5 (3 mentees and 2 mentors) had fully completed responses since our survey allowed users to skip questions at any point. Due to the low response rates, we were unable to gather any statistically significant findings from the survey.



Key Learning Lesson: *While we didn't gather any significant data from our survey, this "failure" brought us a valuable lesson: when designing surveys, be sure to tailor its length and number of open-ended questions to the availability of our audience (since we targeted busy Microsoft employees, the survey should have been shorter and with less fill-in-the-blank questions).*

Key Insights

- When asked mentees about which aspects of mentorship they struggle the most with, three out of four mentee responses indicated that they struggled with knowing what to talk about and the initial process of finding a mentor.
- When asked to rate their overall satisfied with their mentorship experience at Microsoft, 60% (3/5) respondents were strongly dissatisfied and 40% (2/5) were somewhat satisfied.

Adjusting Our Scope

Initial Scope ➡

Our initial research scope aimed to understand how personal connection and open communication are formed, with a focus on the **mentorship journey after mentors and mentees were already matched**.

This scope was informed by our discovery research findings and our initial assumptions of the user's needs and pain points.

Surprising Insights ➡

Our user interviews revealed that their perceived likelihood for personal connection and open communication were often determined within the first few meetings and largely dependent on **if mentees/mentors felt they were a compatible match**.

More importantly, we learned that throughout a mentee's mentorship journey, the **most common and critical barrier** was the process of **finding a compatible mentor**, with 80% of participants expressing this concern.

Re-aligning Our Scope

Despite some initial hesitations and frustration, we decided to adjust our project scope to better align with the (unexpected) research insights.

We **expanded our research focus** on the mentorship relationship journey to **include the initial matching process**.

This was a critical pivot in shaping our project direction in the upcoming design phase!



Key Learning Lesson: *This pivot taught us that research is never linear so don't be scared to "stray away" from your initial research plan and recognize that our user assumptions were disproved!*

User Interviews (Phase 2)

The decision to incorporate the mentor matching phase into our project scope, along with feedback from our mentors, led us to conduct a second phase of user interviews to dive deeper into the journey of finding a mentor/mentee.

1. Identify target users

Our target users are employees at Microsoft with current or recent involvement with internal mentorship initiatives in remote settings.

To recruit our target users, I used the same Recruitment Screener Form from phase 1.

2. Recruit participants

Since we had many survey respondents that we didn't have to time to interview in phase 1, we recruited the rest of them for phase 2, which made recruitment very quick and easy.

We conducted **5 interviews**:

4 on the mentee journey's of finding a mentor + 1 on the mentor's journey of finding a mentee.

We decided to recruit mostly mentees because they struggled the most with finding mentors, but not vice versa.

3. Prepare Script

After brainstorming on ways to facilitate the interviews, we decided to build an activity where users walk us through their mentorship relationship on a timeline journey map.

I then worked with my research teammate to develop interview scripts:

a) [Mentor Interview](#)

Since we only had 3 days to conduct phase 2 of interviews, we did not get to pilot the interviews.

Research Process

User Interviews (Phase 2): Findings

I synthesized the key findings from the mentor interviews into a **user journey map** to deliver to our designers and stakeholders, which helped them better empathize with the mentor's pain points and needs.

Key Insights

- Finding mentors with available time and trying to schedule meetings were the most common struggles for mentees.
- These interviews further validated that the most common pain point throughout the mentorship journey was the initial process of finding a suitable mentor.

Mentee Journey Map

User Flow: Mentee

Decides: Do I want to find a mentor?

*"When I first joined Microsoft, I didn't know how to **find a good mentor** [for me]... that's always been one of my main struggles." - P2*

Design Process

Ideate, Design, Test, & Reiterate

Design Process

Crazy 8's Ideation

1. Each team member sketched **8 concept ideas**, coming up with a total of 32 ideas!
2. We discussed the pros & cons of each concept and individually **voted on our top 3 ideas with a ♥**.
3. As a group, we **mashed up different ideas and features** to produce our final 3 concepts!

Portal for browsing mentors ♥

1. Portal for browsing mentors

2. Social Facility Booking (SFB) - you input what you're looking for

pros: - booking feature - filters

cons: - already existing platform - too many mentorship platforms already

Mentorship portal on viva engage

- Find mentors
- Matching like dating website - you input what you're looking for
- "open to mentoring"
- Can more easily find mentors through connections (like LinkedIn - 2nd connection, etc)

Gamification ★

3. Mentorship matching game

4. Feature track achievements and impact through mentorship

pros: - Gamification - makes it more engaging - makes it more fun - makes it more interactive

cons: - Gamification - makes it more complex - makes it more time-consuming

AI Supported Set up Meetings ♥♥♥

5. AI supported meeting facilitator

6. Teams co-pilot integration

- for people who have already been matched
- helps you set an agenda, goals, etc
- Helps send emails to potential mentors

feature of AI bot

- can understand the context of the meeting
- can provide resources to support the meeting

Matching mentors using AI and Scenario Based Questions ★

7. Scenario based question match

8. Matching mentors using AI and scenario based questions

Personal Dashboard for Mentorship/Goals ★

9. Career Progression Explorer

10. Feature track achievements and impact through mentorship

pros: - Co-pilot is highly relevant to the user

cons: - Co-pilot is highly relevant to the user

AI BOTS / Real-Time Virtual Assistant ♥♥♥

11. Mentorship Real-time virtual assistant

12. Conversational AI bot for finding mentors

13. Mentoring training

- Mentees don't understand their own goals and needs - maybe some sort of AI chatbot to help mentees figure out what they need (or this could be integrated into the teams thing)

Speed Dating / Roundtable Matching ♥♥♥

14. Speed matching/roundtable mentorship

15. Community building/roundtable

pros: - engages much interest from employees - AI automated matching

cons: - AI automated matching - AI automated matching - AI automated matching

Coffee Time Widget ★★

16. Coffee Time Widget

17. Matching mentors/mentees

pros: - widget can be used in many ways - widget can be used in many ways

cons: - widget can be used in many ways - widget can be used in many ways

Mutual Mentorship Matchmaker (Hinge) ♥♥

18. Mutual mentorship matchmaker

Viva Profile Redesign ♥♥♥

19. Viva Profile Redesign

Mentor Resource Sharing Marketplace

20. Mentorship portal

- Allows different mentorship programs to post their programs to share
- Searchable
- Gives tips and training for mentorship

Mentorship AI Scrapbook

21. Mentorship AI Scrapbook

Cross-org mentoring programs

- Set up two orgs to have a cross-org mentoring program - people can find mentors in the other org

A guide to creating a mentor program

Reddit/Quora for career advice

- The main reason people want mentorship at MSFT is to advance and navigate the corporate structure
- Can ask questions anonymously or with name, get responses

Role-specific mentoring programs

- One for designers, one for researchers, etc

FINAL CONCEPTS

1. AI Bots + AI Supported Meetings
2. Speed dating and ai matching
3. Centralized portal for finding mentors/profile customization

Concept Testing

Our team conducted **6 concept tests** on Zoom with Microsoft employees to gauge their acceptance and impressions of our top concepts from our Crazy 8 ideation session. The designers on our team expressed their interest in facilitating these tests with participants so I worked with them to develop our concept test protocol.

During the test, participants were introduced to each concept one at a time. For each concept, we asked questions such as:

- What is your first impression of this concept?
- What features would you expect this concept to have?
- What features would be the most helpful to you? Least helpful?
- What other scenarios do you think this concept could help you with?

Notably, the order of concepts presented to each participant was **counterbalanced** to reduce sequential bias:

Test version	A	B	C
Order of Concepts 1: AI bot 2: Speed dating matches 3. Mentorship portal	1	2	3
	2	3	1
	3	1	2

Design Process

Concept 1: AI Chatbot

An **AI chatbot** to help you prepare and guide you in your first meeting with your mentor/mentee.

Design Rationale: This concept came from our participants' uncertainty about how to prepare their own goals and agendas to discuss with their mentor, a common problem that was validated in our literature review.

Key Insights

✓ What Users Liked

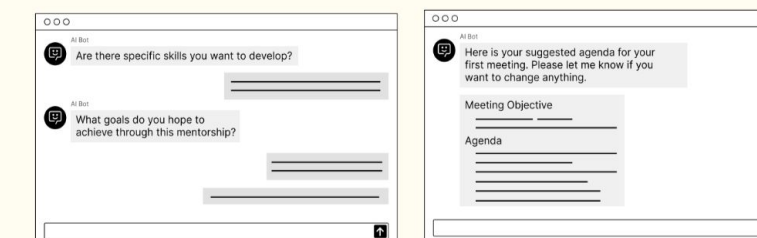
- Useful for assisting talking points, time-keeping, and scheduling
- Some users embraced Copilot AI to help in their everyday tasks
- Likes tool that supports them throughout their journey
- Great potential for integration with MS products and other ideas

✗ User Pain Points, Needs, and Feedback

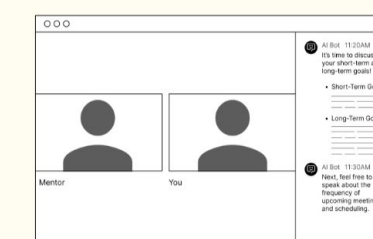
- Desire for personalized experience
- Want more support with interpersonal conflict and post-meeting tasks such as to-dos, tracking career progress, etc
- Doesn't address burden of matching
- Some users feared personal data used to train AI and loss of "safe spaces" for vulnerability
- Fear that it would add more cognitive load
 - Unexpected scheduling, interrupted workflows, etc

Avg. Usefulness Score: **7.2/10**

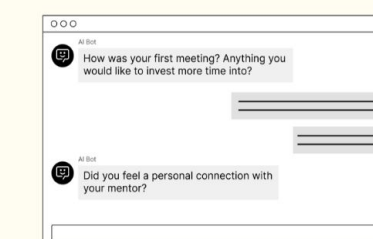
AI bot asks you questions to prepare for your first meeting



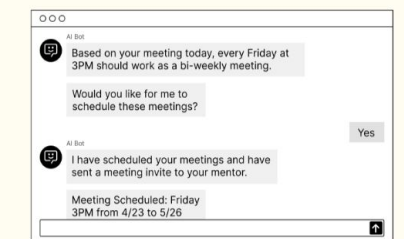
AI guides you by facilitating meeting and gives suggestions for talking points



Questions/polls after meetings for progress and satisfaction to adjust future recommendations



AI schedules future meetings



Design Process

Concept 2: Speed Dating

A “**speed dating**” inspired **experience** for mentors and mentees to promote successful and efficient matches.

Design Rationale: Because mentor-mentee matches were decided on “perceived vibes,” this concept intended to give participants the chance to meet with potential mentors in a casual setting before establishing their compatibility.

Key Insights

Avg. Usefulness Score: **6.4/10**

✓ What Users Liked

- Like the idea of being able to talk to a lot of people within a short period of time
- The idea of **mentorship analytics** were helpful

✗ User Pain Points, Needs, and Feedback

- Want to know who they’re talking to beforehand
- Worry about making long-term decisions on quick judgments
- Want **structure and ability to prepare for meetings**
- Concerns about analytics such as ratings degrading over time or scales may not be inclusive of all mentorship needs
- Worry about hurting others’ feelings or awkwardness
- Concerned about the feasibility of user’s time availability since meetings are synchronous

Registration for a speed matching event

Registration form titled "Register for Mentorship Speed Matching @ MS". It includes fields for Name, Role, "What are you looking for in a mentor?", Interests, and Goals. A "Submit" button is at the bottom right.

After each conversation, ratings across different metrics and additional comments are captured

Rating form titled "Rate your experience with Melissa". It shows a profile for Melissa Jones and rating scales for Personality, Interests, Goals, and Schedule. There is a text box for "Other Comments" and a "Rate next mentor" button.

Scheduling is automated with auto-generated highest compatibility matches

Automated speed matching schedule for April 13th 2024. It lists time slots and matches: 9:15-9:30 Morgan Brown (Product Designer) with Brandon Reeves (UX Researcher), 9:35-9:50 Brandon Reeves (UX Researcher) with Alex Newman, 9:55-10:10 Alex Newman (Product Manager) with Morgan Brown, and 10:15-10:30 Morgan Brown (Product Designer) with Brandon Reeves.

After event, highest compatible match is presented with auto generated compatibility scores

Match result screen titled "You've been matched!". It shows a profile for Morgan Brown and compatibility scores for Personality, Interests, Goals, and Communication Style. A "Schedule Meeting" button is at the bottom right.

Design Process

Concept 3: Mentorship Portal

This portal allows mentors and mentees to create a profile and **explore potential matches**.

Design Rationale: Microsoft does not have a company-wide mentoring platform as they are siloed within individual orgs. Many participants expressed difficulty looking for mentors with particular skills or backgrounds, and outside of their own org.

Key Insights

✓ What Users Liked

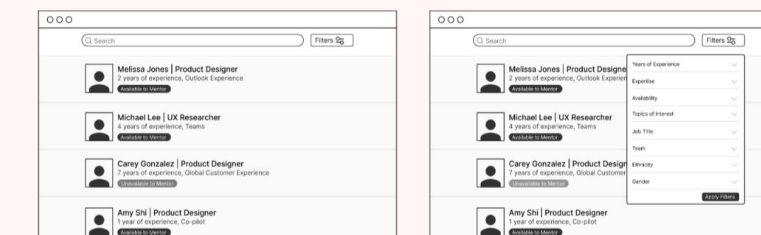
- Like **filters**, but desire for more granularity
- Like **dashboard**, but needs relevant stats
- Desire for portal to **integrate** into existing MS products
- Like progressive disclosure on profile
- Like having **centralized place** to see all available mentors
- Like that **integrated booking system** helps lower barriers for first meeting

Avg Usefulness Score: **7.7/10**

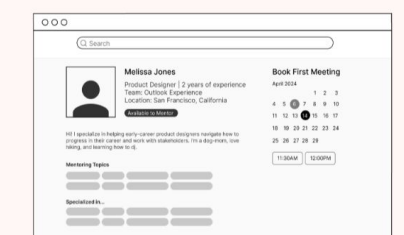
✗ User Pain Points, Needs, and Feedback

- Want the dashboard to be collaborative
 - Potential artifact for performance reviews (Connect)
- Want more transparency in **mentorship availability**
- Want **automated processes and guidance**
 - Mentor suggestions, generated intro messages, etc
 - Ability to track outcomes of conversations
- Want to see mentor reviews

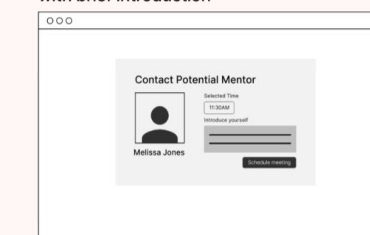
Explore page showing available mentors and filters



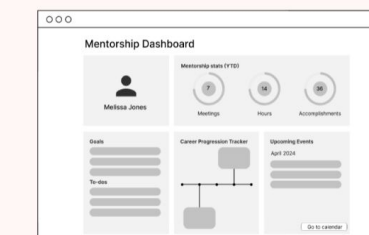
Mentor profiles with their information



Ability to contact mentor when scheduling with brief introduction



Personal dashboard for your mentorship



Concept Testing Findings

Key Insights

- 1. Participants wanted support for the end-to-end mentorship journey, from preparing for meetings to tracking progress.
- 2. Participants had privacy concerns related to both AI and what their mentors were able to see.
- 3. Mentees particularly wanted help with the introductions, scheduling, and meeting preparation.
- 4. Participants liked the idea of a document that tracked their progress and could be used during performance reviews.

	P1	P2	P3	P4	P5	P6	Average Usefulness
AI Chatbot	4	9	8	4	9.2	9	7.2
Speed Dating	6	6	5.5	7	8	6	6.4
Mentorship Portal	8	8	9	6	6	9	7.7

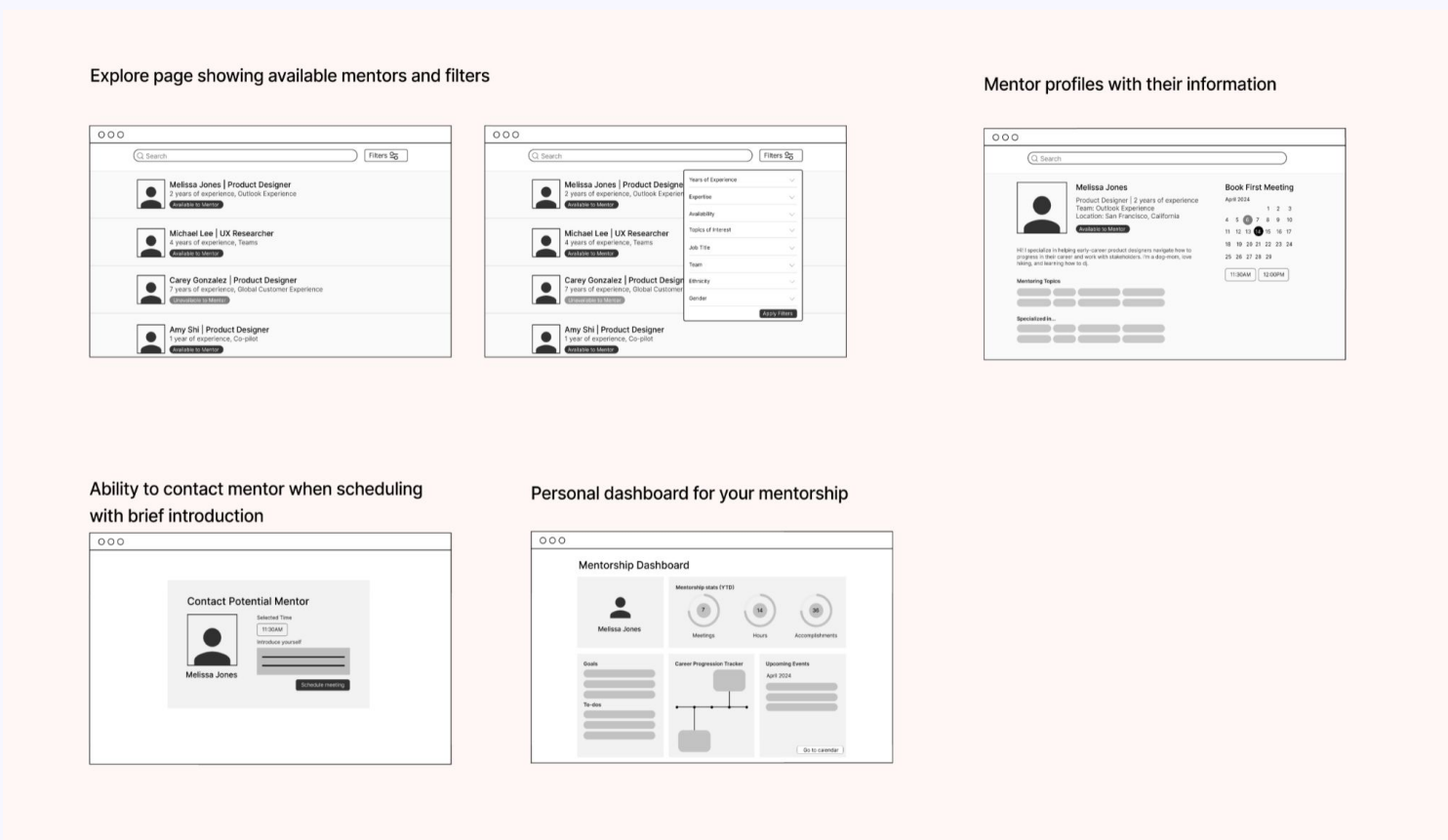
*The **mentorship portal concept** had the highest usefulness rating, which largely informed our final design solution.*

Design Process

Final Solution Concept

Based on our findings, we decided that our final solution concept would be Concept 3, **a centralized mentoring portal for Microsoft employees**, as it had the highest usefulness score out of the 3 concepts. Notably, we also combined other features from Concept 1 and 2 that our users had either suggested or pointed out to be particularly useful.

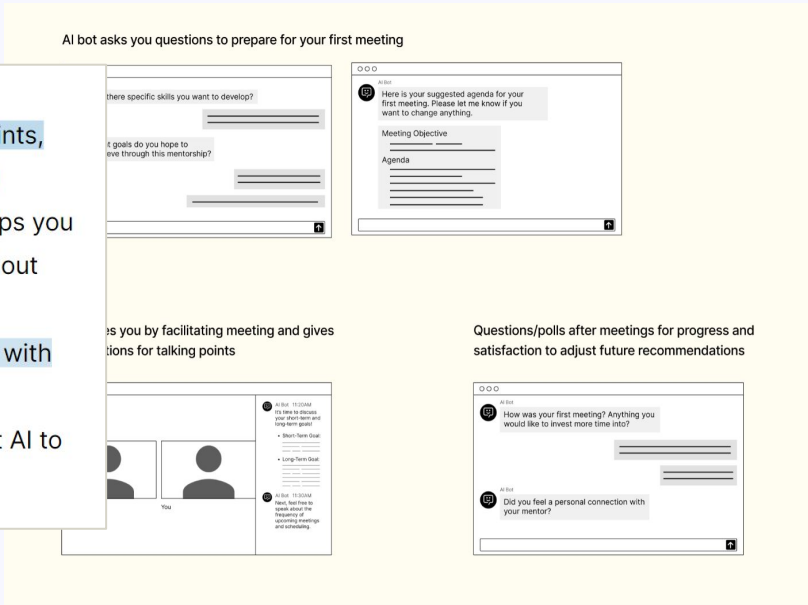
Design Solution: Concept 3



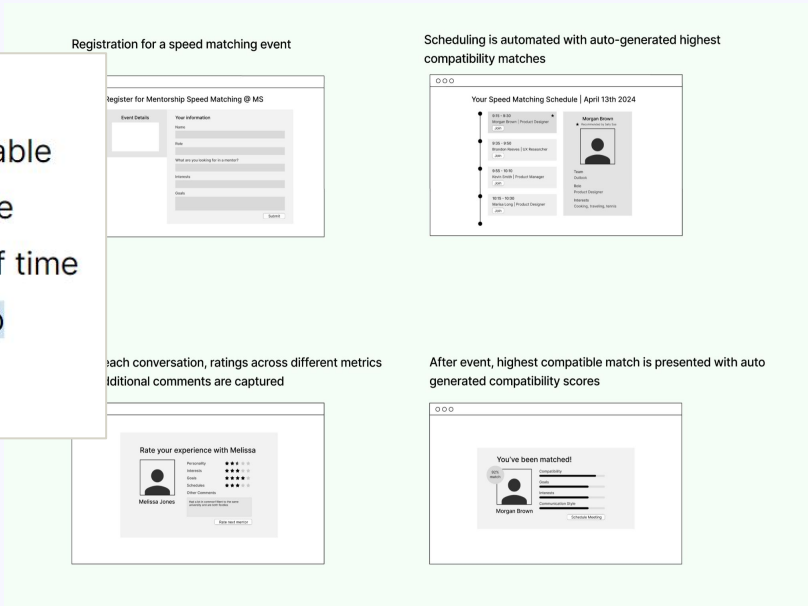
- ✓ What Users Liked
- Useful for assisting talking points, time-keeping, and scheduling
 - Like the idea of a tool that helps you prepare and supports throughout journey
 - Great potential for integration with MS products and other ideas
 - Some users embraced Copilot AI to help in their everyday tasks



- ✓ What Users Liked
- Like the idea of being able to talk to a lot of people within a short period of time
 - The idea of mentorship analytics were helpful



Concept 1: AI Bot

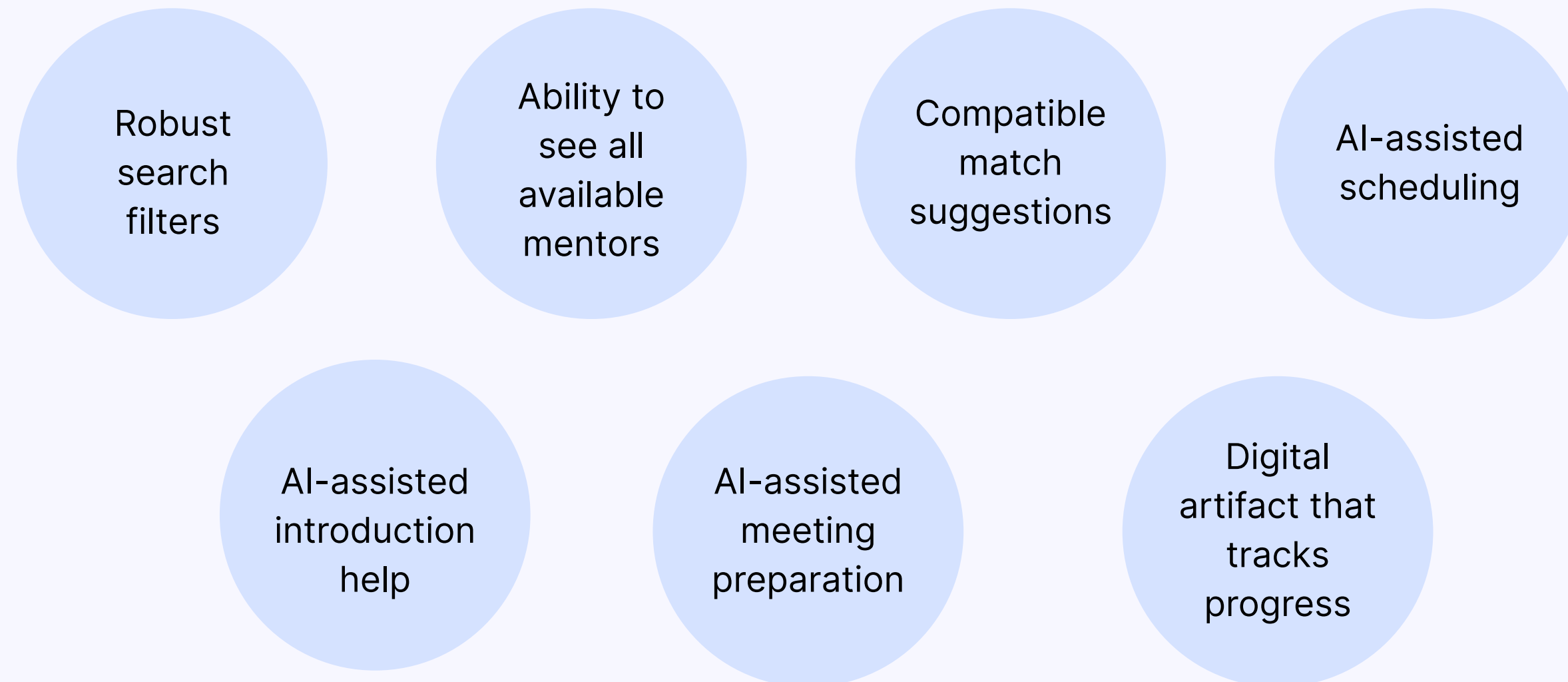


Concept 2: Speed-dating

Final Solution Specifications

After aligning on a final design concept, we established the core features of the solution that were necessary to meet our design requirements as well as the needs of our target users.

Proposed Features:

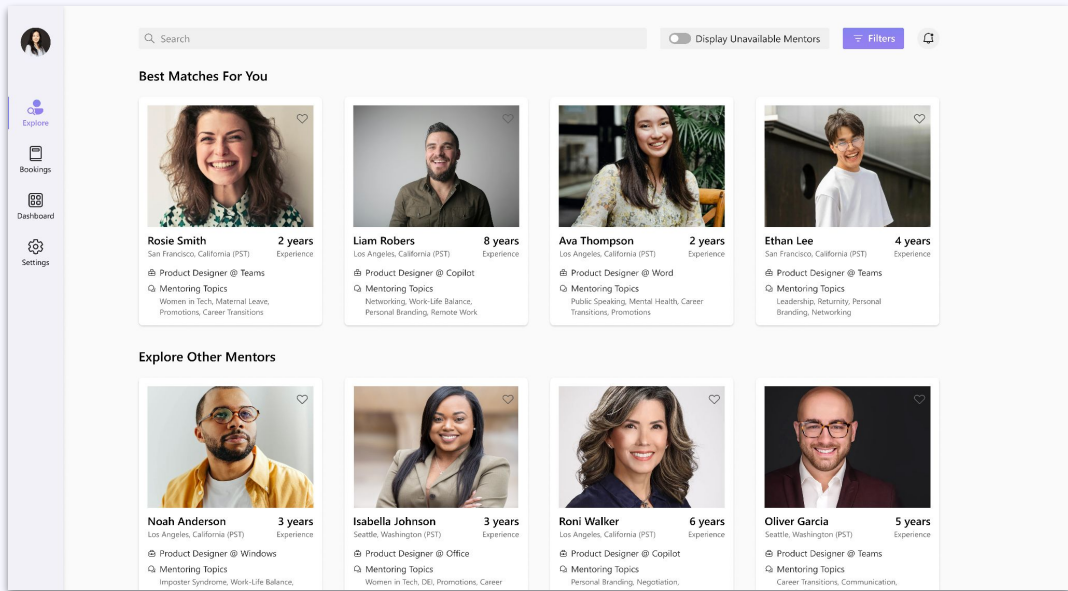


Design Process

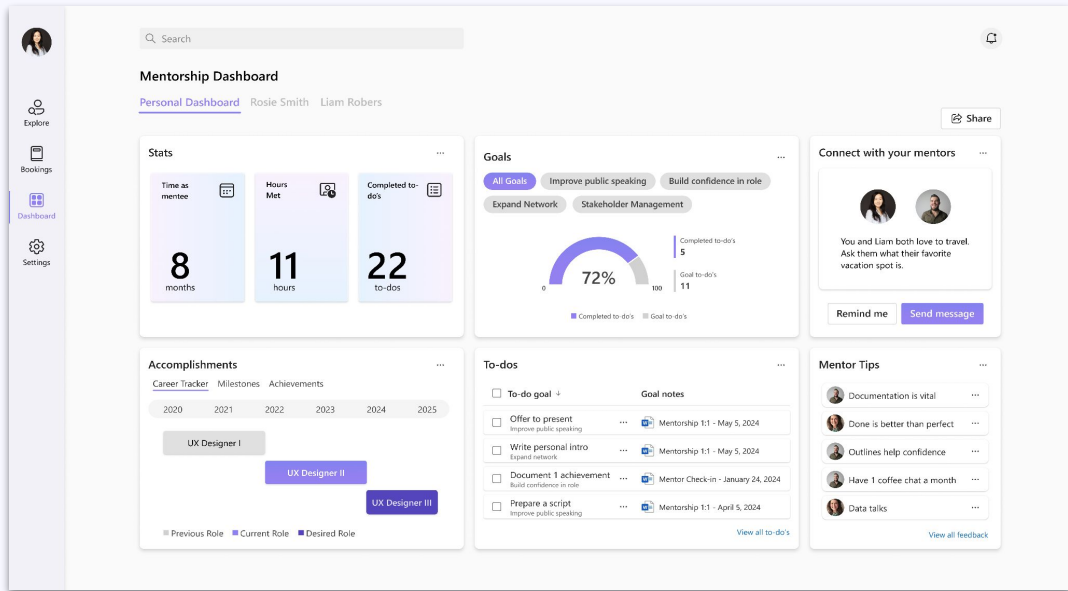
Mid-Fi Prototypes

The designers on the team developed [mid-fidelity prototypes](#) for all the key user flows with limited interactivity. The UI of the prototype was based on an archived Microsoft design system which not only streamlined our prototyping process but also promoted stronger product fit into the existing Microsoft ecosystem.

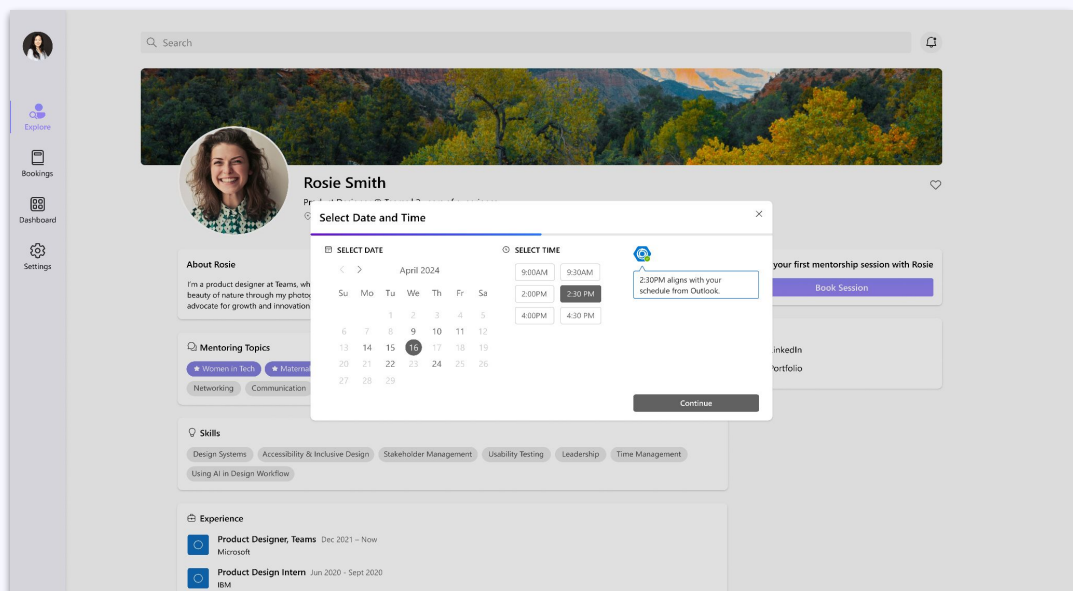
Explore Page



Dashboard



Book Session



Design Process

Usability Tests

We conducted 7 remote usability tests on the mid-fi prototypes, where we facilitated each participant through 6 scenario-based tasks to uncover their pain points, needs, and perceived usefulness of the platform.

To prepare for the tests, I developed:

Recruitment Screener Survey

Screener Survey: Improving Mentorship at Microsoft

We are a group of graduate students at the University of Washington studying Human Centered Design and Engineering. For our capstone project, we have partnered with Microsoft to study ways to improve mentoring connections in remote settings.

If you work at Microsoft and are interested in the topic of mentorship, we'd love to hear from you!

Take part in a 60-minute usability test on Zoom between the dates of May 6-9, 2024 where you will be asked to share your thoughts on a new mentoring platform that our team has developed. Participants will be compensated with \$25 e-gift cards.

To sign up for this study, please fill out this survey below. If selected to participate, our team will reach out to you within 2 business days.

If you have any questions about this study, feel free to reach out to our team at cyang393@uw.edu.

Thank you for your interest!

What is your first and last name? *

Short answer text

What is your email address? *

Short answer text

Post-Study Questionnaire

Post-Study Questionnaire

System Usability Scale

What is your name?

Short answer text

I think that I would like to use this dashboard frequently *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I found the dashboard unnecessarily complex *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

I thought the dashboard was easy to use *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Consent Form

Microsoft Usability Testing Consent Form

PURPOSE OF STUDY

This study is conducted by a team of graduate students at the University of Washington's Department of Human-Centered Design and Engineering as part of their capstone project. Team members are Connie Yang, Kelsey Yeh, Sophie Park, and Gabi Cronk.

Our team is currently engaged in designing a platform to support mentorship experiences at Microsoft. We are inviting Microsoft employees to join a one-hour usability testing session on Zoom.

DATA CONFIDENTIALITY

Any data you provide during the interview may be accessed by the research team team solely for the purpose of this study.

For reference purposes, the interview audio, video, and participant computers screen will be recorded. Should we directly use any data that you have provided during the study, any participant identifying information will be removed from the recording and we will only refer to you anonymously using a pseudonym. The recordings can only be accessed by the researchers on the team. The recording will be saved on a secured computer and deleted by December 30th, 2024. All information will be handled in a strictly confidential manner, so that no one will be able to identify you when the results are recorded/reported.

RISKS, STRESS, OR DISCOMFORT

There are no expected risks associated with your participation in the study.

RIGHT TO WITHDRAW AND QUESTIONS

Your participation in this study is voluntary and you may withdraw at any time without any negative consequences. If you wish to withdraw at any time during the study, simply say you would like to end the interview, we will stop the interview and the recording will be deleted. You also have the right to refuse to answer any questions and complete any tasks.

If you decide to stop participating in the study or have questions, concerns, or complaints, please get in touch with the researchers leading this work.

COMPENSATION

Participants will be compensated with \$25 digital gift cards, funded by the University of Washington.

PARTICIPANT STATEMENT

I volunteer to take part in this research. This consent form has been explained to me and I have had a chance to ask questions. If I have questions later about the research or if I have been harmed by participating in this study, I can contact one of the researchers listed on this consent form.

Usability Test Protocol

TASK 1: ONBOARDING [5:00 - 15:00]

For your first task, please complete the onboarding and sign-up process for this platform as a mentee. Please remember to think out loud as you complete this task, and let me know when you are done with the task or have completed it to the best of your ability by saying "I'm done".

[After Participant has indicated that they are done with the task]

Observations/difficulties/quotes

Now that you've completed the task, we have a few follow-up questions:

How would you rate the level of ease in completing the task you just performed on a scale of 1 to 5? With 1 being that the task was very difficult to 5 being it was very easy.

☐ Very difficult (1)
☐ Difficult (2)
☐ Neither difficult nor easy (3)
☐ Easy (4)
☐ Very Easy (5)

Why did you give it that rating?

- Ask follow up questions on which specific aspects, if any, were particularly easy or difficult

Were there any parts that you felt were missing from this process? Anything that you felt was not necessary?

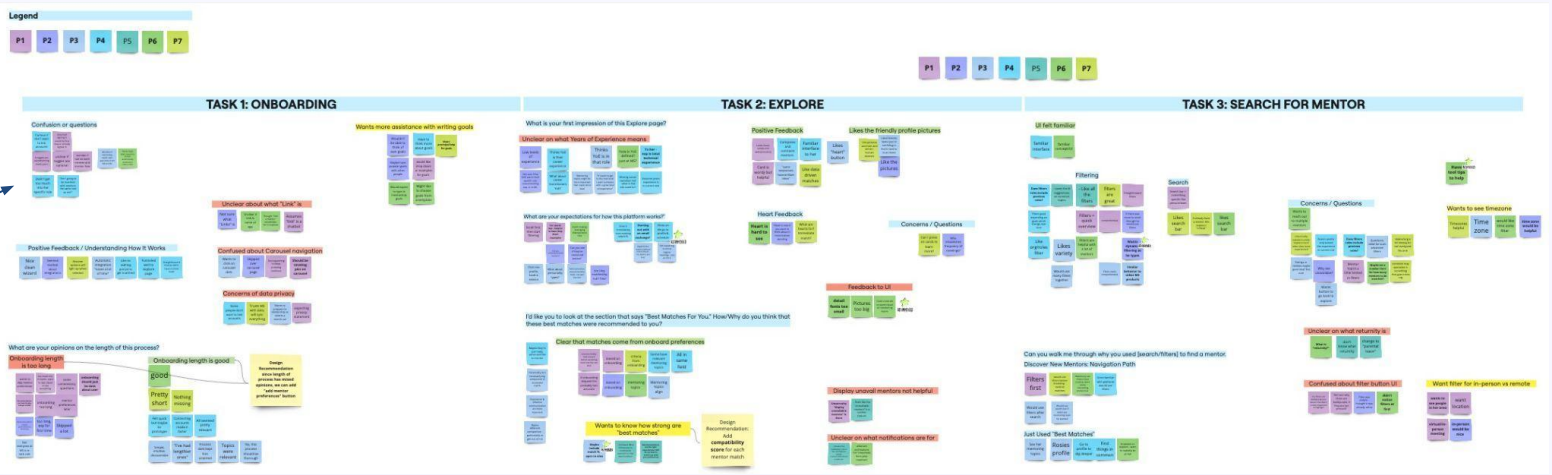
Design Process

Usability Tests: Qualitative Analysis

We analyzed the **qualitative data** with a 2-step thematic analysis:

1. I individually coded my interview notes for key insights about user **pain points, expectations, and notable quotes.**
2. I worked with the other researcher to synthesize findings on an affinity map to identify **common observations between users.**

	Participant 1	Participant 2	Participant 3	Participant 4
Task Success	4 - Success	3 - Success with minimal difficulty	4 - Success	4 - Success
Observations / Notes	<p>Overall, first impression is that there should be some rotating pictures that show up in the grey box, was not expecting the buttons to keep pressing on continue buttons but after the arrow button and a way to stop. If this was a mobile product, I would be more of a swipe, the lack of illustrations makes me not really wanna read the text here. I expect there to be a feature where I can do advanced search or filter. I assume the link is going to be a carousel, for "sign in at microsoft", I expected it as a first step so that I am already signed in. This looks like a chat experience but it is giving me a form. the 3 toggles are a bit overwhelming for me and I would rather see checkboxes here. It does not give me a lot of info about what these toggles do. I was expecting a privacy statement about what these features include. I prefer a single checkbox for all these options and just one single checkbox for all these options. It is unclear if these toggles are optional/mandatory. Once I press continue, the additional info was what I expected from my microsoft account. I wonder if I can do both mentor and mentee role but just for now, I will pick one. I want to see what's on the platform first instead of putting in all my details, did not expect "how soon" - "questions start with 'hi' and so" to see if like my mentor. why is it asking me about mentor preferences in the onboarding process since I can just do this later (skip)? for goals, I wish there was a drop-down menu for example goals since I haven't thought through my goals clearly and can't articulate them, I like the goals question.</p>	<p>Not sure what "microsoft links" means. Skips over some without reading on carousel page. "Oh yeah" to opting in to everything, seemed excited? Wanting topics don't work? Similar to LinkedIn topics of interest. He hasn't seen what he can click on by clicking outside the prototype. Keeps clicking skip for now instead of continue.</p>	<p>Wants to click through the carousel elements to learn more (on the side). "That saves a lot of time" - automatic integration Outlook - aligning free time is important to him. Not sure if he's selected them or they have been pre-selected for him, based off what he selected on the previous screen. Doesn't want anything - did he realize he could click on them? Wants a month for mentorship timeline to prepare for mentorship. "How often do you want to meet with your mentor?" still buggy.</p>	<p>Wasn't clear what "link" means. "Oh yeah" to opting in to everything, seemed excited? Wanting topics don't work? Similar to LinkedIn topics of interest. He hasn't seen what he can click on by clicking outside the prototype. Keeps clicking skip for now instead of continue.</p>



Since we found 30+ observations, we then counted the frequency of each observation to **identify which pain points have highest criticality!**

Task ID	Observations	P1	P2	P3	P4	P5	P6	P7	Frequency
Task 1: Onboarding	Confused about Carousel navigation	1	1	0	0	0	0	1	3
	Unclear about what "Link" is	0	0	0	1	1	0	1	4
	Unclear on what Years of Experience means	1	1	1	1	0	0	0	3
	Concerns of data privacy	1	1	1	1	0	0	0	3
	Wants more assistance with writing goals	1	1	0	1	1	0	1	5
	Onboarding length is too long	1	0	1	1	1	0	0	4
	Unclear on what Years of Experience means	0	1	1	1	1	0	1	4

Usability Tests: Quantitative Analysis

To analyze the **quantitative data** from our tests, I calculated the completion rates and average ease of use scores across all tasks.

	Task 1		Task 3		Task 4		Task 5		Task 6 (OPTIONAL)	
Participant ID	Task Completion	Ease of Use	Task Completion	Ease of Use	Task Completion	Ease of Use	Task Completion	Ease of Use	Task Completion	Ease of Use
P1	4	3	1	4	4	5	4	1	N/A	N/A
P2	3	4	1	5	4	4	3	4	N/A	N/A
P3	4	5	1	5	4	5	4	5	N/A	N/A
P4	4	5	1	5	4	4	3	3	1	2
P5	4	4	N/A	N/A	4	5	4	N/A	N/A	N/A
P6	4	4	1	5	4	5	3	4	2	2
P7	4	5	4	4	4	4	3	5	4	3
Mean	3.86	4.29	1.50	4.67	4.00	4.57	3.43	3.67	2.33	2.33

	Avg Task Completion (1=fail, 2=partial fail, 3= partial success, 4= success with ease)	Avg Ease of Use (1=not easy, 5=very easy)
Onboarding	3.9	4.3
Search	1.5	4.7
Book Session	4.0	4.6
Dashboard	3.4	3.6
Profile	2.3	2.3

Key Insights

1. The **Book Session** feature had the highest task completion rate and second highest ease of use score. This finding is helpful to know what is working well in our prototype.
2. The **Profile** and **Dashboard** features had both the lowest task completion rates and ease of use score. This finding allowed us to effectively prioritize improving these two features in our next iteration of prototypes.

Usability Tests: Design Recommendations

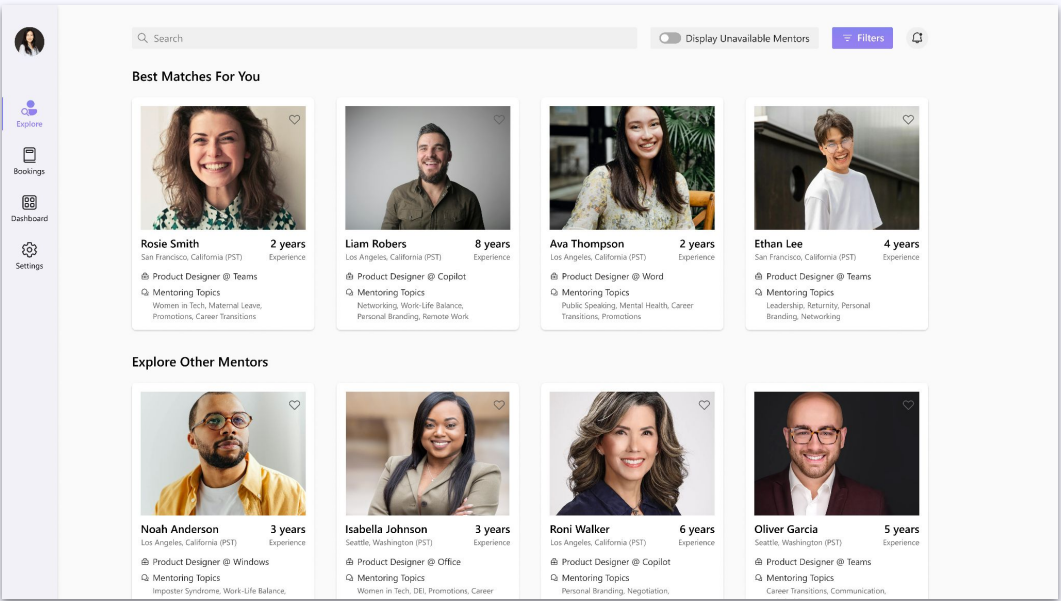
I translated our key findings on user pain points into actionable design recommendations. Since there were 30+ pain points, I delivered a [presentation](#) starting with the recommendations that had the most critical impact on the overall user experience, followed by the lower ones if designers felt that it was feasible. **All my recommendations led to key improvements** in the final prototype.

Key Insights		
User Pain Points	Design Recommendations	High Criticality?
Feels that mentor cards look like a dating app and wants filters as a sidebar	Mentor cards emphasize content more and filters are more easily accessible	
Wants profile to be more personalized and goals are too personal to be public	Profile has Hobbies & Interests section and goals are only viewed by mentors	
Wanted to use Copilot assistance over the generic AI bot	Replaced generic AI assistant with Copilot branding	✓
Dashboard felt too corporate with lots of unnecessary info	More personalized dashboard with widgets from user feedback	✓
Did not know how to write goals and self-intros, often skipped	Added Copilot assistance feature to support writing goals and self-intros	✓

Design Process

Usability Tests: Key Improvements

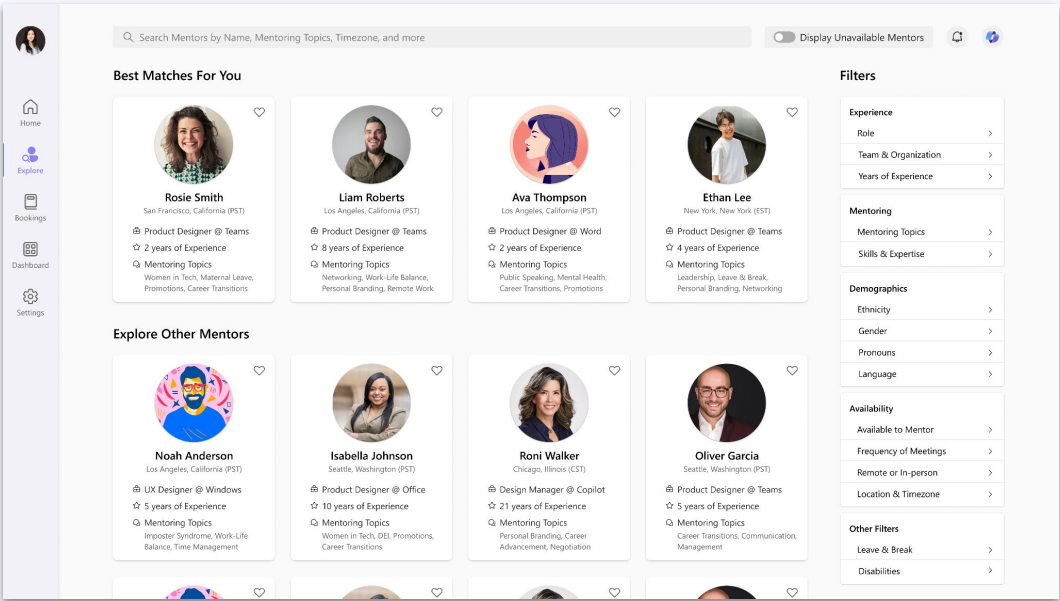
Before: Explore



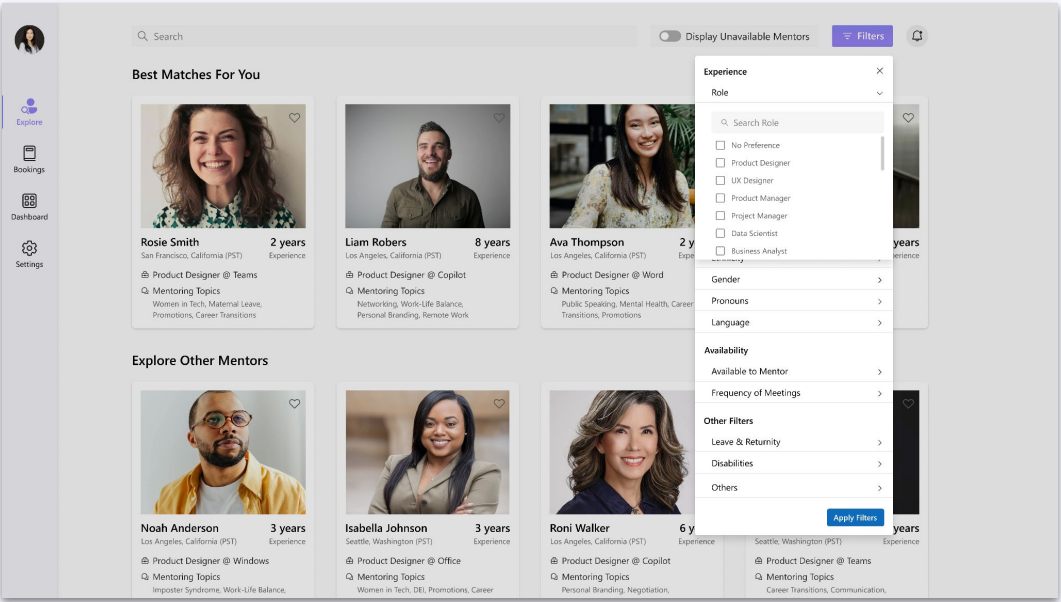
Users voiced how the explore page mentor cards almost looked like a dating profile, with too much emphasis on the photos.



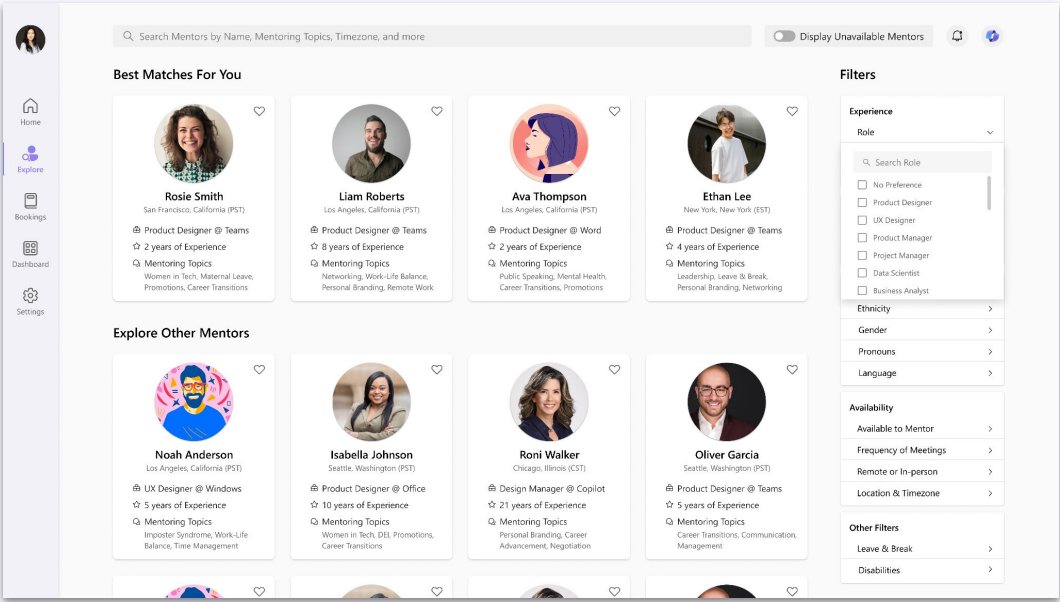
After: Explore



The updated explore page has smaller photos and resize text to put more emphasis on potential mentors' job, experience and mentoring topics.



Users wanted the filters to be a sidebar instead of a popup that they have consistently x out to see results.



Filters are now added to the side so the users can see the results of their preferences without needing to open the filters consistently.

Design Process

Usability Tests: Key Improvements

Before: Dashboard

The 'Before' dashboard shows a form titled 'What are your mentorship goals?'. It has three input fields labeled 'Goal #1', 'Goal #2', and 'Goal #3'. Each field has a small edit icon to its right. Below the fields is a link 'Add another goal'. At the bottom are three buttons: 'Back', 'Skip for now', and 'Continue'.

Users did not know how to write goals and self-intros, often skipped.



After: Dashboard

The 'After' dashboard shows the updated form. It includes a Copilot assistant chat window on the right with prompts like 'Can you give me goal prompts?' and 'Can you show me more examples?'. The form now has a 'Back' button, an 'Add goals later' button, and a 'Submit' button. A small text box above the 'Goal #1' field provides guidance: 'Goals are essential for making the most out of your mentorship relationship and also help you stay on track. Don't forget to ask me for help if you get stuck!'.

The updated version has a Copilot assistant chat feature to support users in writing goals and intros, with suggestions based on popular responses and past user data.

The 'Before' dashboard is a complex, cluttered layout. It features a sidebar with navigation links: Home, Explore, Bookings, Dashboard, and Settings. The main content area is filled with various widgets: 'Stats' (Time as mentee: 8 months, Hours Met: 11, Completed to-dos: 22), 'Goals' (Progress bar for 'Improve public speaking' at 72%), 'Connect with your mentors' (Liam and Rosie), 'Accomplishments' (Career Tracker), 'To-dos' (List of tasks), 'Mentor Tips' (List of tips), and 'Mentor Meeting Notes' (List of notes). The layout is dense and overwhelming.

Users felt that the dashboard was too corporate and professional, too overwhelming with information, and confused about the purpose of each widget.

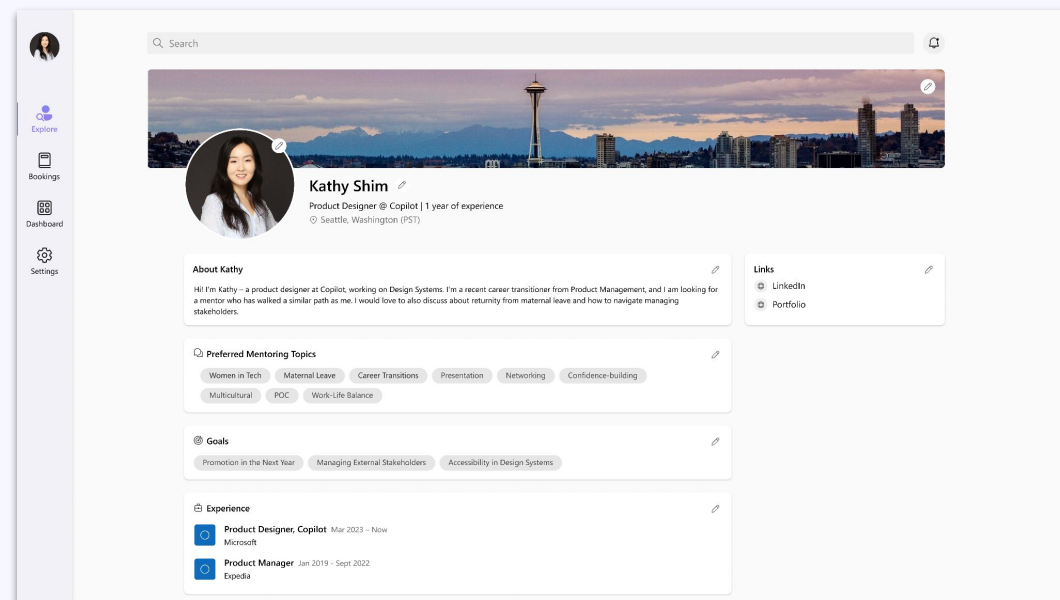
The 'After' dashboard is a simplified, more user-friendly layout. It features a sidebar with navigation links: Home, Explore, Bookings, Dashboard, and Settings. The main content area is organized into a grid of widgets: 'Stats' (8 months as a mentee, 11 hours of mentorship meetings, 22 completed to-dos), 'To-dos' (List of tasks), 'Mentor Meeting Notes' (List of notes), 'Week in an Emoji' (List of emojis), 'Accomplishments' (List of achievements), and 'Mentor Tips' (List of tips). The layout is clean and easy to navigate.

The dashboard “edit widget” is more discoverable for content personalization and has light-hearted widgets such as “week in an emoji”. “Share” button more clearly allows users to share dashboard data directly to their Microsoft Connect.

Design Process

Usability Tests: Key Improvements

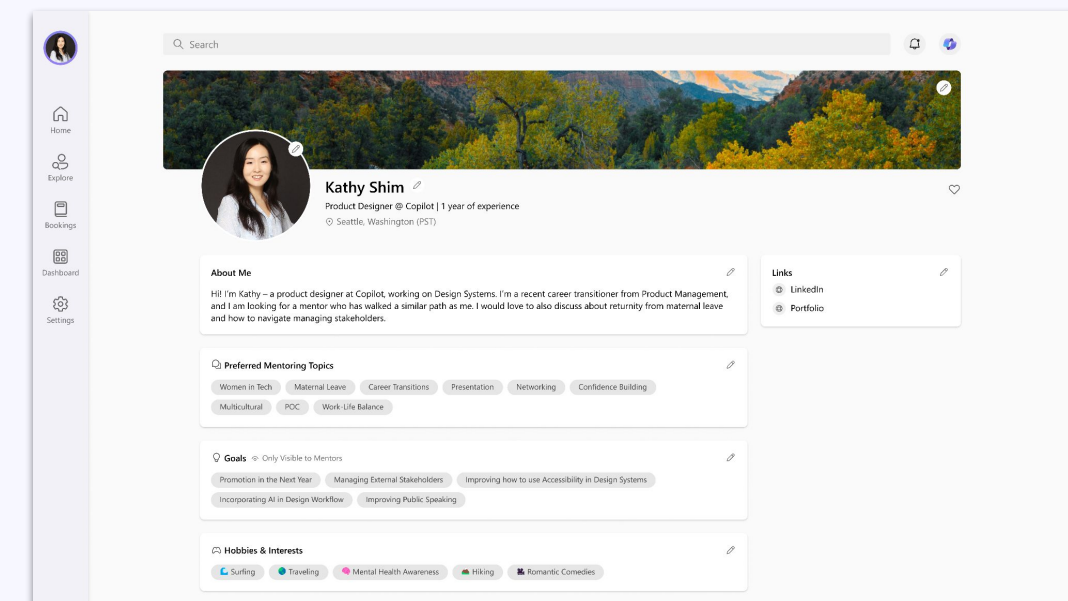
Before: Profile and AI



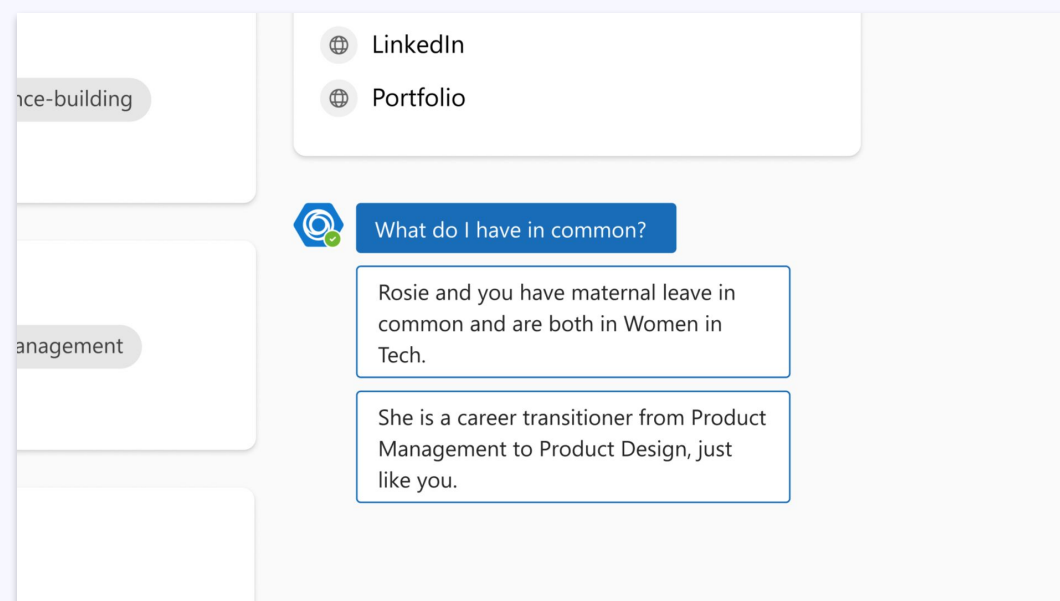
Users found the profile to be too “corporate” and wanted to add more personality to their profile. They also thought goals were too personal to be public.



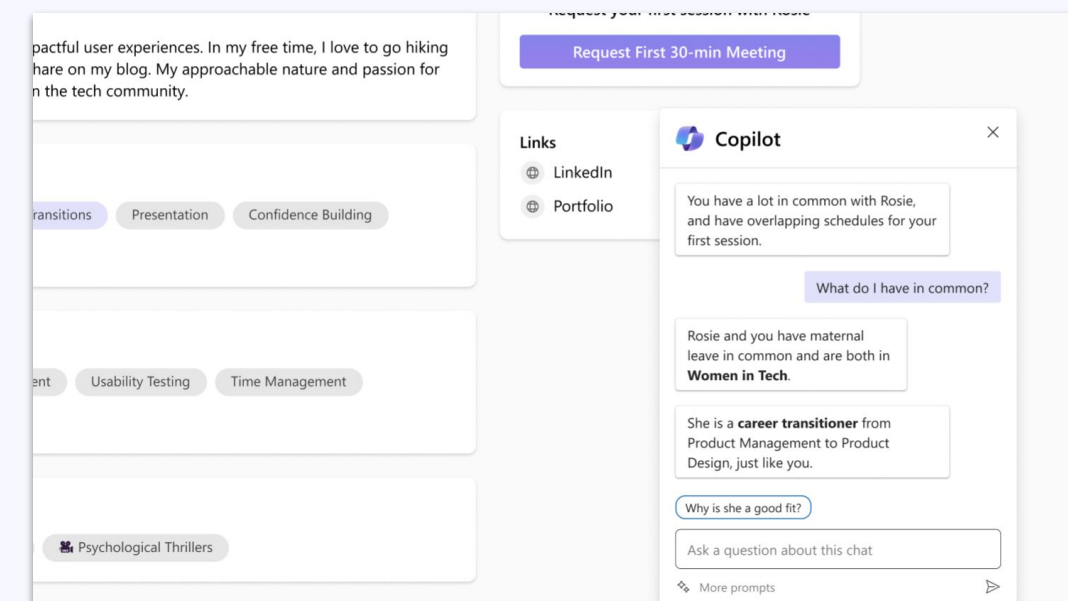
After: Profile and AI



Goals are hidden and only visible to current mentors. Also, Hobbies & Interests section is added to show users interests outside of work and facilitate better personal connection.



Users wanted to use Copilot assistance over the generic AI bot since Copilot is more familiar and used commonly within Microsoft.




The generic AI assistant is replaced with Copilot, allowing Microsoft users to intuitively understand and feel familiar with how Copilot can guide them.

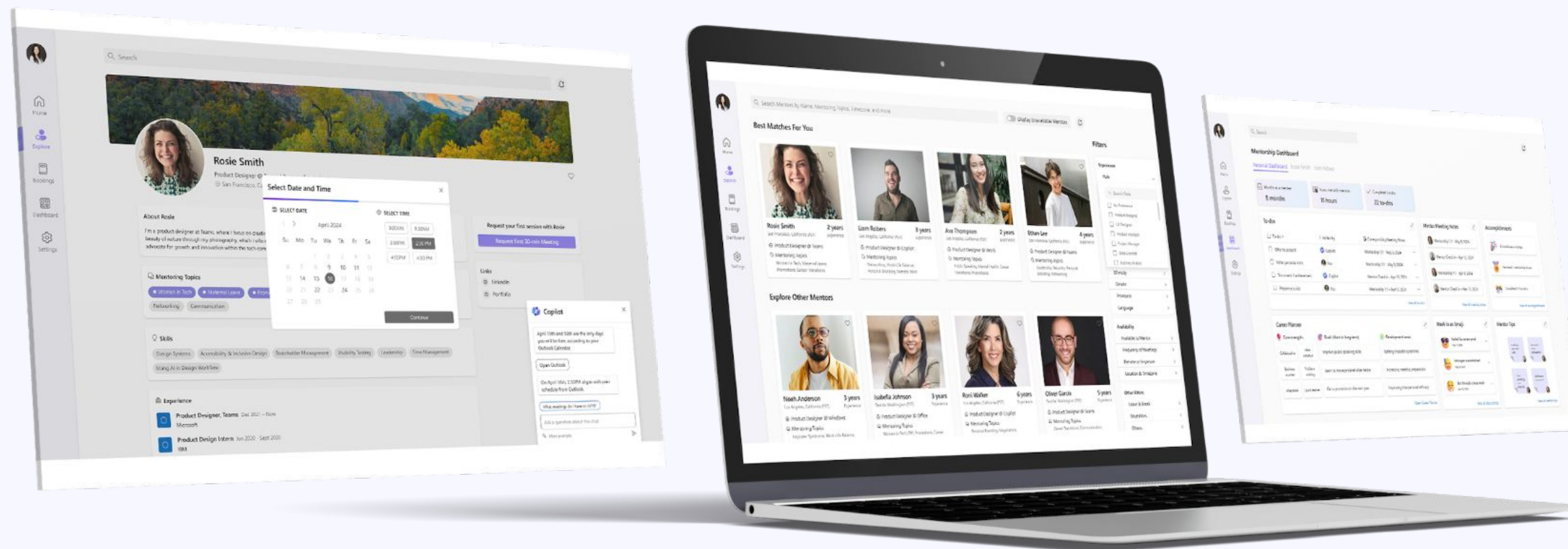
Our Solution

Final Solution and Key Features

Our Solution

MentorPath

 **MentorPath** is a centralized web-app mentorship portal that helps Microsoft employees find personalized mentors based on their unique needs, streamline meetings and goal creation with Co-Pilot assistance, and track their learning progress through a collaborative dashboard.

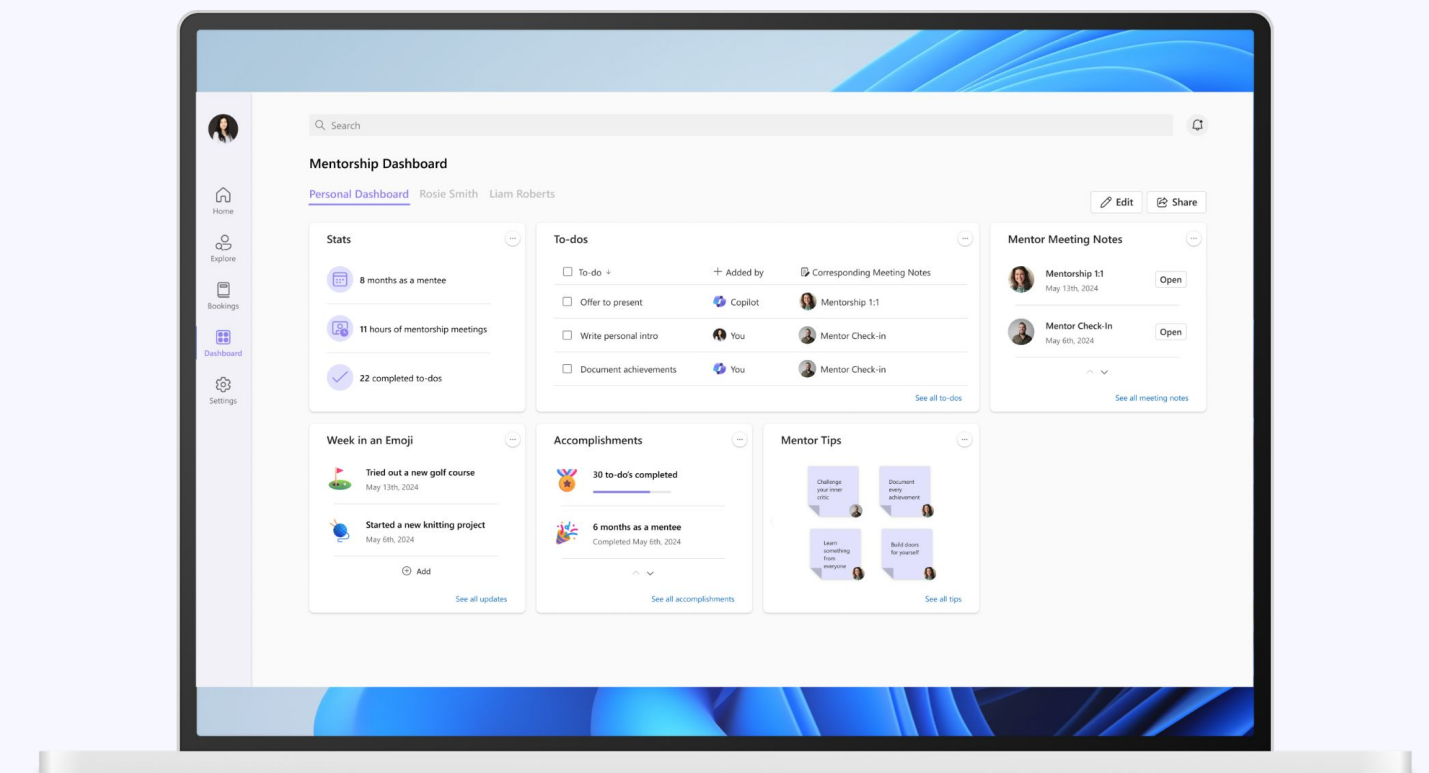


Our Solution

MentorPath

Key Features:

- ★ **Onboarding and Explore Page:** Matches you with personalized mentors based on your unique needs, goals, and preferences and has a built-in Copilot assistant helps you to assess your learning goals and set up meetings with mentors.
- ★ **Requesting Meeting and Booking Page:** Streamlined booking process with Copilot integrating Outlook to find mutual availability and giving prompt ideas for introduction message.
- ★ **Progress Dashboard:** Track your mentorship progress and contributions to support accelerated career growth with an interactive dashboard with mentorship stats and resources.
- ★ **Home:** A one-stop page to access all your bookings, action items, new matches, etc.
- ★ **My Profile:** Customize your profile for potential mentor matches by adding preferred mentoring topics, hobbies & interests, and more.



[Link to Final Prototypes](#)

Our Solution

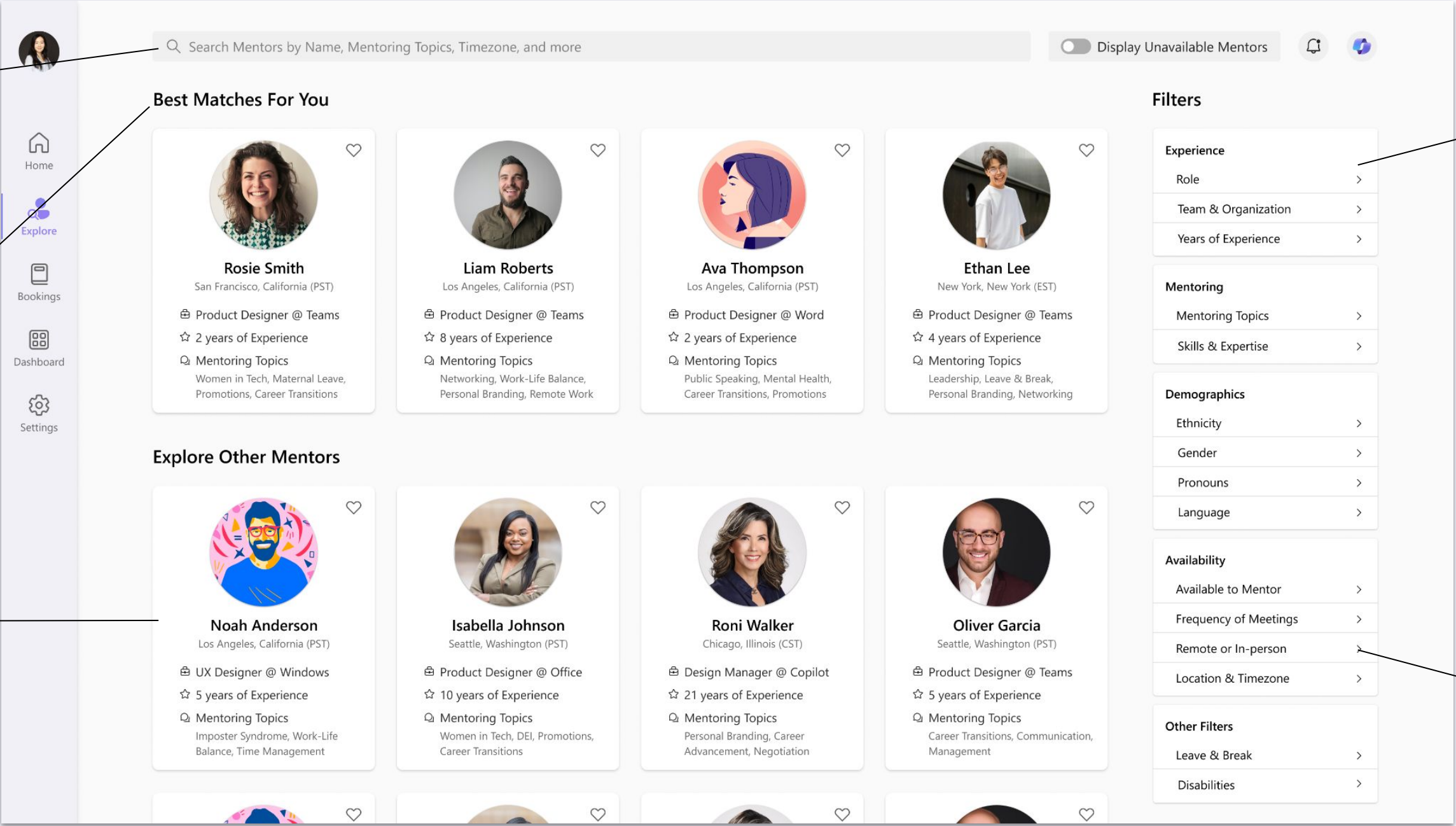
Key Feature 1: Explore Page

Find personalized best matches for your preferences and filter to your needs.

Participant confusion regarding the use of search led to the addition of search suggestions.

Best Matches and Explore Other Mentors to balance both AI-driven matches and manual exploration.

Mentor photographs made less prominent visually to emphasize experience and promote equity.



Robust filtering system allows users to find mentors with particular backgrounds or skills.

Added time zone and in-person availability to filter due to research participant interest.

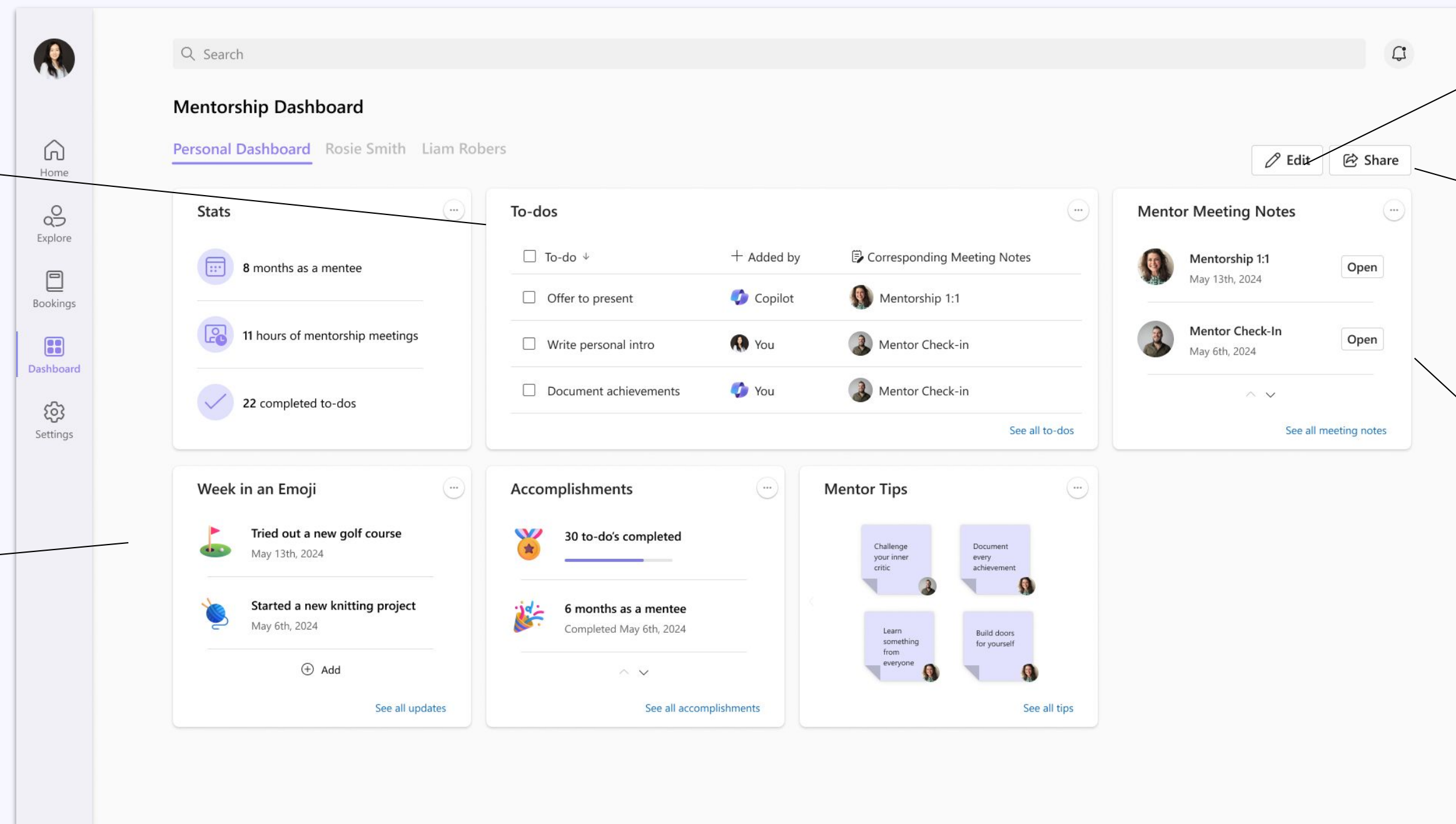
Our Solution

Key Feature 2: Interactive Dashboard

A collaborative living document between mentors and mentees to track their progress.

Manage your goals and tasks with a to-do list by manually adding items or leveraging Copilot's suggestions.

Personal widgets act as launch pad to connect with mentors asynchronously



Easily customizable widgets to suit each user's unique needs and wants.

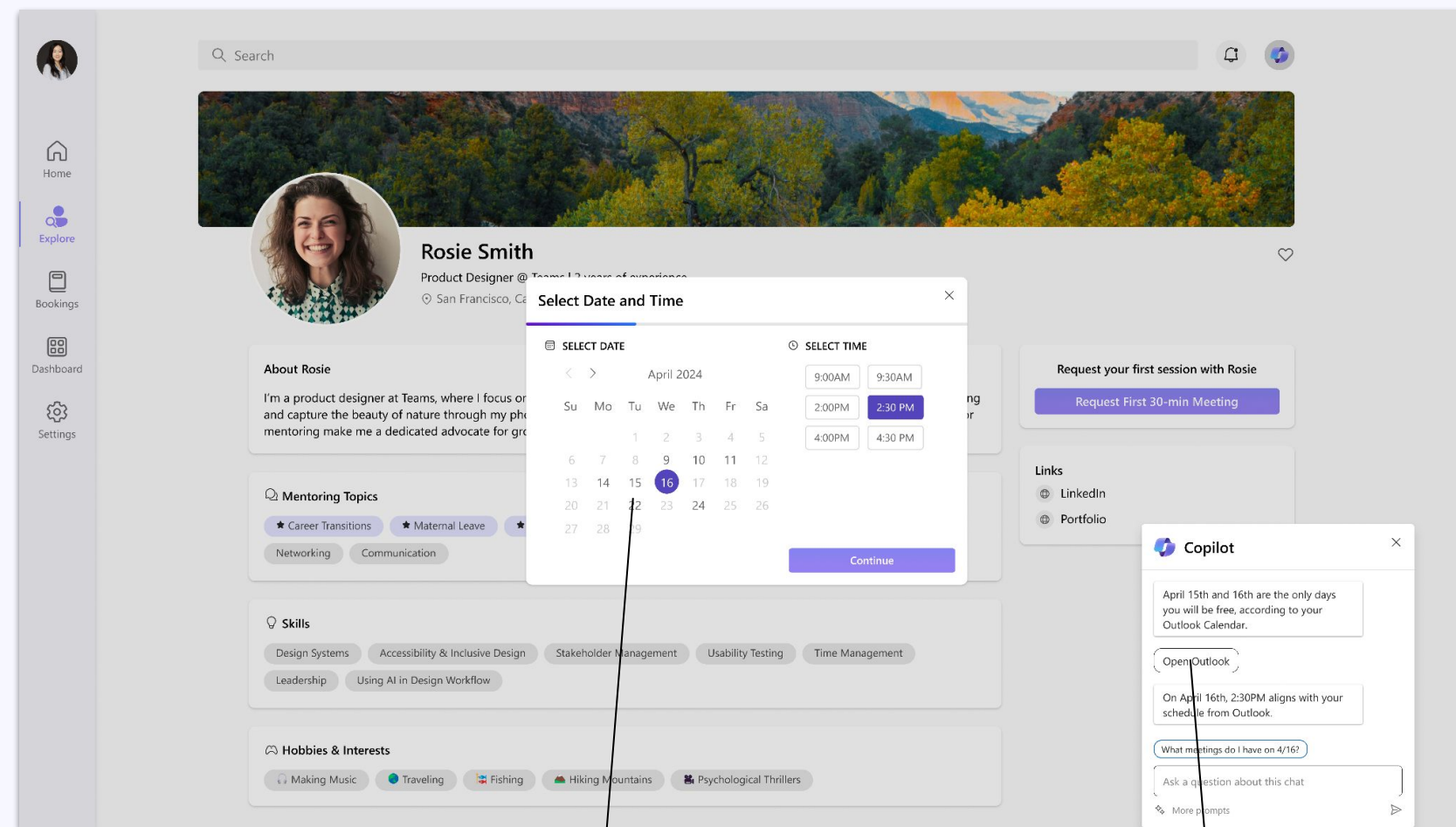
Dashboard stats can be shared to promote career growth.

Copilot-generated meeting notes organized for future reference.

Our Solution

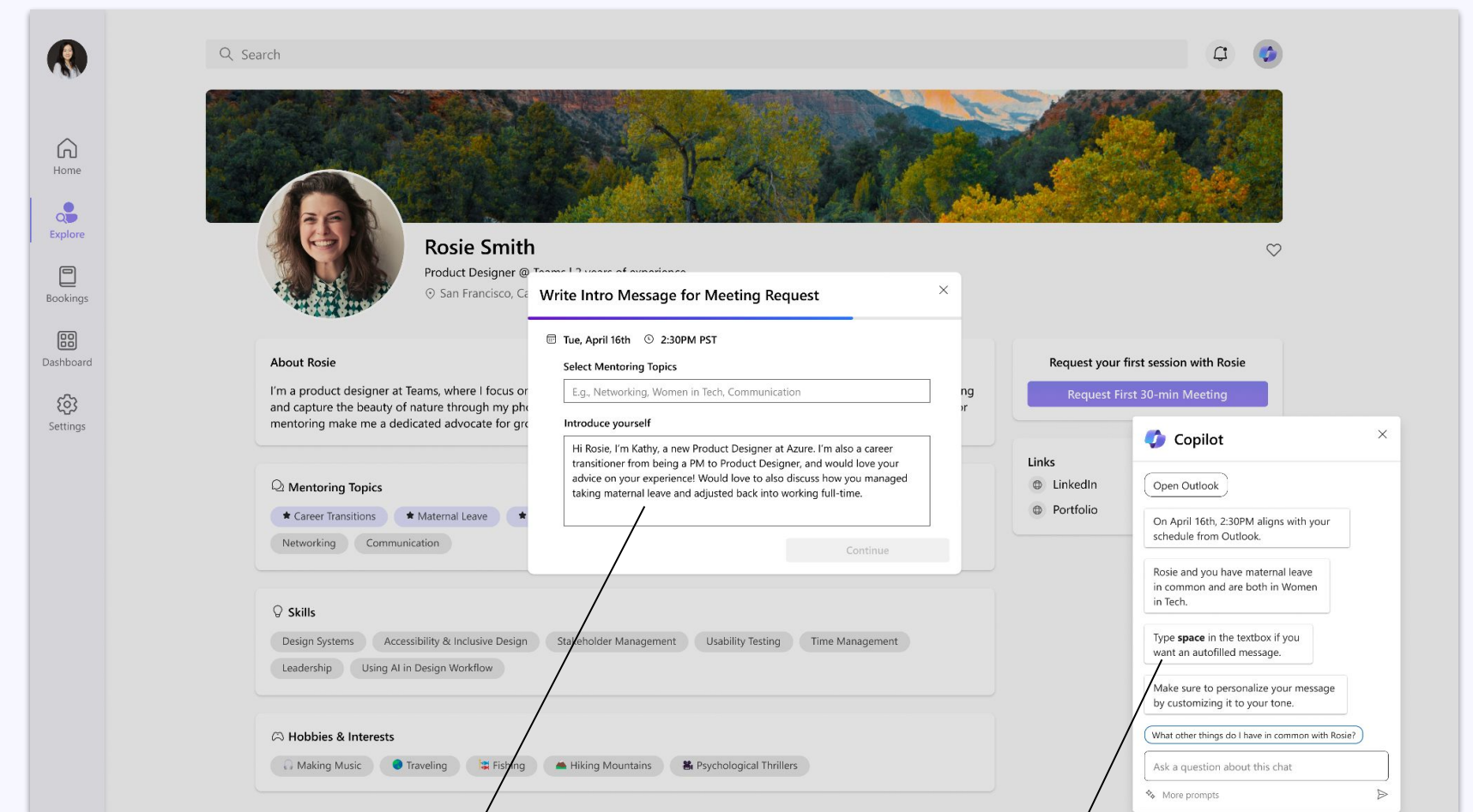
Key Feature 3: Request First Meeting

Request your first meeting easily with Copilot assistance with mutual availabilities and intro prompts.



Shows dates and times the potential mentor is available

Ability to open Outlook to see side-by-side, and meeting date and time suggested by Copilot



Ability to edit introduction prompt and mentoring topics

Copilot writes an introduction message based on your mutual interests and topics

Reflection

Future Work, Ethical Concerns, and Societal Impact

Reflection

Future Research

1. **Further Usability Testing:** Following our initial round of usability testing, we made significant changes to our designs. Further usability testing should be conducted to ensure a seamless and positive user experience.
2. **Connect Research:** Usability testing revealed a strong desire for dashboard integration with Microsoft's Connect performance review system. However, the feedback was varied on what the integration would look like - some participants were worried that their dashboard might share information to their Connect that was overly personal. It would be valuable to explore participants wants and fears in further detail.
3. **Further Qualitative Feedback:** Due to significant revisions to the dashboard features, gathering further qualitative feedback from users would be valuable. This feedback should explore user perception of the new features, their likelihood of use, and potential needs for additional features not currently offered.
4. **Competitor Interviews:** During our discovery competitive analysis, we faced significant limitations with accessing publicly available information on how competitor companies managed their internal mentorship initiatives. If given more time, we plan to conduct phone interviews with employees who work at companies with well-established mentorship initiatives (such as Google and LinkedIn) to gain “insider” insights on how their mentorship programs are structured.

Ethical Concerns

1. Concerns for Co-Pilot Privacy and Data Security

Given that Microsoft's Co-Pilot capabilities are integrated as an assistant tool at every touchpoint of the mentorship platform, the use of AI raises privacy concerns for collecting personal information about employees, such as career goals, performance data, or any sensitive information shared during meetings. To mitigate against these risks, we designed the platform to give users the autonomy to turn the Copilot feature ON/OFF, create full transparency on how their data will be used to create personalized matches, and hold accountability that their collected data will not to be used for any other intent than what was consented to.

1. Risks for Algorithm Biases Equity in Access

The integration of Co-Pilot AI poses concerns for how users' data will be collected for further training and development of its algorithm. It is critical that all employees at Microsoft, especially those who historically face barriers to accessing technology, have equal opportunity to access the mentorship portal and its AI features. Otherwise, these disparities may lead to exacerbated algorithm biases that promote or reinforce discrimination, inequalities, and oppressive societal structures.

1. Reduced In-person Connection

While our solution aims to facilitate more meaningful mentorship in remote settings, there is a potential concern that the overdependence on remote communication methods may lead to one's eventual reduced ability to engage in face-to-face human interactions. Thus, we foresee this platform to be a way to support primarily remote mentorship relationships or if it's person, to facilitate the matching phase and connection between mentors and mentees.

Reflection

Societal Impact

MentorPath brings positive impacts to not only the Microsoft workforce and its corporate culture but also the broader community.

1. Promotes Workplace Diversity and Equity

Our product promotes community-building and inclusive spaces for women, minority groups, and other underrepresented groups at Microsoft. For example, mentees can easily filter for and find mentors that identify with specific communities. By connecting with others that share similar experiences, they may feel empowered to overcome systemic barriers in the workplace and advance quicker in their careers. Moreover, having diverse mentors, especially at the leadership level, provides visible role models for traditionally underserved groups while fostering an workplace environment where all employees can have equal opportunities to succeed.

1. Strengthens Workplace Culture and Employee Engagement

Facilitating meaningful mentorship relationships foster a stronger sense of community at Microsoft. Mentorship relationships are a valuable source of support, encouragement, and personal and professional growth opportunities. As a result, employees with strong mentors tend to feel more engaged in their role and be more motivated in the company's success. When people feel supported in their role, this often leads to improved overall workplace morale and productivity.

1. Extending Mentorship to the Broader Community

We hope to inspire Microsoft employees to recognize the value of mentorship and extend these benefits beyond their workplace towards the broader community. This may include establishing partnerships with local schools or non-profits organizations, where Microsoft employees can provide mentorship to the next generation of aspiring tech professionals, and anyone who who would benefit from career guidance.