



UXpertise:

A tool to help bring together UX professionals for
the purpose of creating mentoring relationships

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Introduction

As of this document's writing, a quick Google search for "UX mentorship" yields an undeveloped resource (uxmentors.com), a portion of the UK's UXPA website that has limited, manually-managed resources dedicated to supporting UX mentorships, and a few blog posts that address UX-focused memberships. It doesn't take long to realize that *the UX Community lacks a resource dedicated to helping new or aspiring UX professionals find and develop mentoring relationships with experienced UX professionals.*

It is this problem that our project team sought to address by creating the design for a Computer-Mediated Communication (CMC) tool that could actively support the development and maintenance of UX-related mentoring relationships.

In the following pages, we provide information regarding anticipated users of our tool, the research we conducted, and an overview of the CMC solution which we designed - the UXpertise website. We end this report with an evaluation of what next steps we would suggest for future individuals who might wish to move forward with the implementation of this design.

Our work creating the design for UXpertise served to underscore the tremendous lack of tools the research and design community has to connect experienced professionals with new ones, the complexity of effectively matching individuals for the explicit purpose of mentoring, and the value such a resource could provide if implemented.

Note: We encourage viewing the UXpertise prototype located at <http://olg0wr.axshare.com/MENU.html> when reviewing this document.

Our Users & Their Goals

Mentoring relationships are mutually beneficial, since mentees can learn from mentors' knowledge and experience sharing, while mentors can find it personally rewarding to mentor others and can sharpen their skills from the process.¹ The benefits that mentors receive from this process oftentimes also increases the likelihood that mentors will serve as mentors again in the future².

UXpertise is a website that is designed to serve the professionals in UX field, bringing them together and connecting them for the purpose of establishing a network of mentorship. Our target users are all UX professionals, both mentors and mentees, who are interested in building

¹ Hartfield, Brad. "Learning HCI design: mentoring project groups in a course on human-computer interaction." *Proceedings of the twenty-third SIGCSE technical symposium on Computer science education* (1992): 246-251.

² Eby, Lillian. "The relationship between short-term mentoring benefits and long-term mentor outcomes." *Journal of Vocational Behavior* (2006): 424-444.

and maintaining mentorship relationships with like-minded professionals.

It might be important to note that when we talk about mentorships, we are referring to both hierarchical mentoring and peer mentoring. In hierarchical mentoring relationships, one more experienced individual is mentoring a less-experienced individual - and there is a clear semblance of hierarchy. In peer mentoring relationships, both people teach and learn from each other, and a defined hierarchy does not exist. In our interviews and literature reviews (to be discussed shortly), we observed a trend of mentees ultimately becoming mentors after several years of experience in a certain area.

As discussed later, there are benefits to supporting both types of processes, and as such, we have kept the design of our system robust and open - we let users decide which types of mentoring they want to adopt. Emergent behavior through use of the site would help us to learn users' preferences between the two types, and design changes could be implemented to enhance any preferences that were to be discovered.

Our Research

We conducted the following research:

Survey

We created a survey using Catalyst³, and received 27 responses. In this survey, two demographic questions, three UX experience-related questions, four questions about mentoring relationship preferences, and two open ended questions about barriers and mentor-mentee matching in mentoring relationships were asked. For a detailed overview of the survey questions and results, please see the "Survey Results" section in the appendix.

Interviews

In order to better understand our users and their needs, we interviewed twelve people from UX industry. Six of them were experienced professionals (likely or currently serving as mentors), and six of them were less-experienced or aspiring UX professionals (likely to request and benefit from mentoring within the UX field). Interview questions delved into past experience of being a mentor/mentee, possible challenges of having a UX mentor/mentee, the most important characteristics of an ideal mentor/mentee, and goals and expectations of the mentoring relationship⁴.

³ <https://catalyst.uw.edu/webq/survey/susanwen/216724>

⁴ Anderson, G., Kuo, C., Qu, Z., Wen, S., Zhang, Q. "UX Mentor & Mentee Feedback." Survey. *Catalyst*. Unpublished, University of Washington. Nov 2013.

Competitive Analysis

To understand design techniques and approaches for supporting mentorship already in the marketplace, we did competitive analysis of websites with related themes (mentoring) or functionality (e.g. personality matching). We analyzed five websites dedicated to creating and supporting mentorship relationships, two websites dedicated to mentorship relationships in the UX field, five websites for personal skill improvement and professional networking, and two dating websites (to better understand matching processes/methods). Please see the “Competitive Analysis” section of the appendix for a full list and links to each of these websites.

Key discoveries:

- None of these websites related to creating mentorships provided a service to help users find their potential mentors/mentees according to their personalized needs.
- None of the websites related to creating mentorships provided guidance to mentees and the process of approaching a mentor.
- Neither of the UX-dedicated sites provided a robust / self-help approach to locating and engaging mentorship relationships.
- The dating websites provided a great mechanism to match up people according to their expectations and helped uncover design patterns used to help users locate partners with a good personality fit.

Literature Review

Our team conducted an extensive literature review of true academic research as it related to mentoring, computer-mediated communication tools used within the context of mentoring relationships, network effects, matching process, etc. Each team member was assigned areas of research focus:

<p><i>Gary Anderson</i></p> <ul style="list-style-type: none"> ● Understanding mentoring relationships ● Impact & value of mentoring relationships ● Psychology and mechanisms of referrals 	<p><i>Chia-Chen Kuo</i></p> <ul style="list-style-type: none"> ● E-mentoring ● Mentoring in UX/UCD/HCI ● Social rewards (ranking, social reputation, appreciation) 	<p><i>Zening Qu</i></p> <ul style="list-style-type: none"> ● Factors affecting the quality of mentorship ● User profiling ● Auto-matching / recommendation
<p><i>Shu-fan Wen</i></p> <ul style="list-style-type: none"> ● Auto-matching ● Attracting participation in online environments ● Social capital & ties 	<p><i>Qian Zhang</i></p> <ul style="list-style-type: none"> ● Network effects ● Network and career success ● Online Trust Building ● Website Design 	

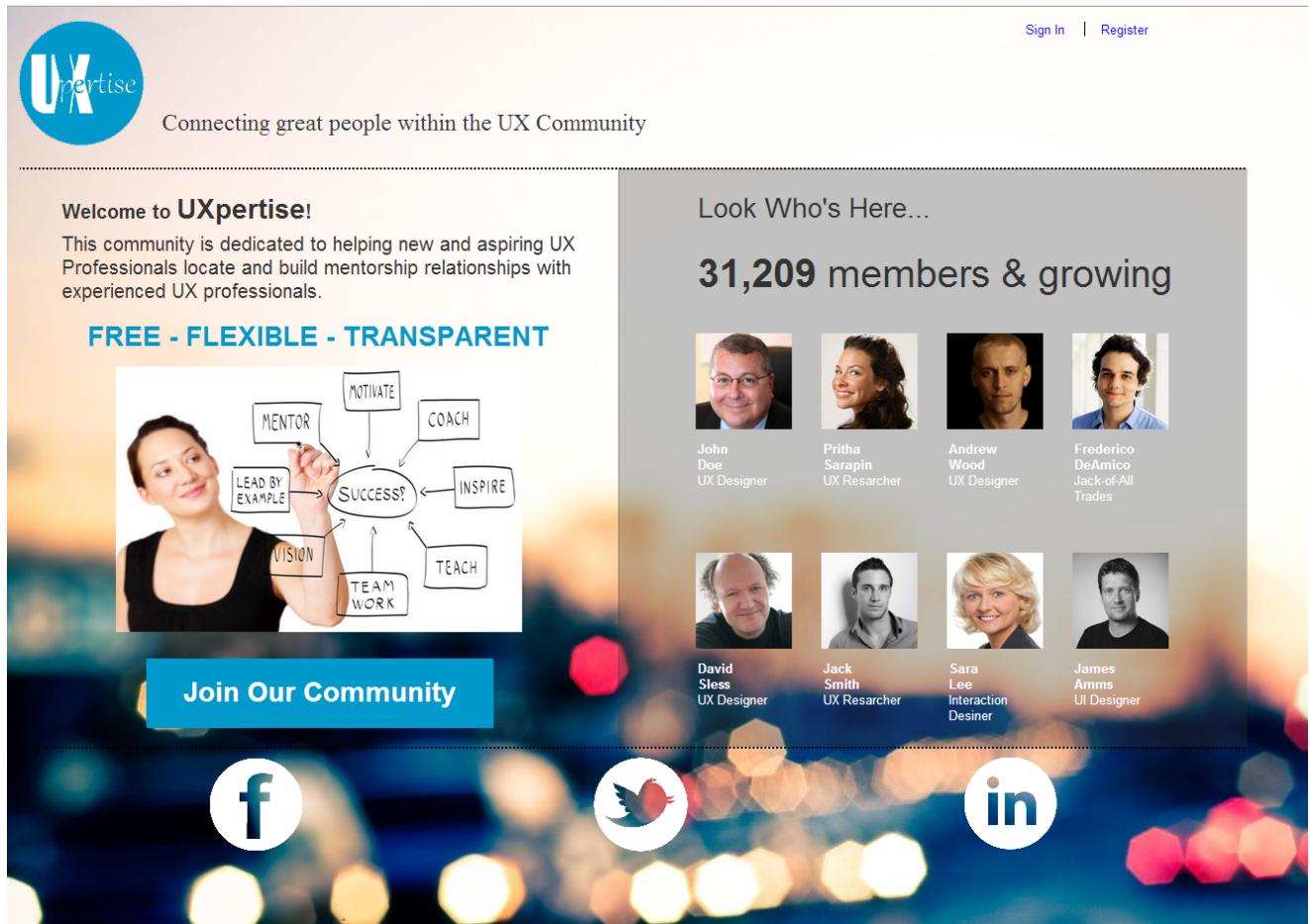
This research (and the impact it had on our design decisions) is referred to throughout this document via footnotes.

The Solution: UXpertise

<http://olg0wr.axshare.com/MENU.html>

UXpertise Main Page (Signed-out and Signed-in)

In order to help users understand the size and quality of the website's community members/membership, our design utilizes Aggregate User Representations (AURs) - as can be seen by the total number of community members with a profile. The design also has a live "count up" of members to provoke a sense of vibrancy, growth, and engagement.



Sign In | Register

Connecting great people within the UX Community

Welcome to **UXpertise!**
This community is dedicated to helping new and aspiring UX Professionals locate and build mentorship relationships with experienced UX professionals.

FREE - FLEXIBLE - TRANSPARENT

Join Our Community

Look Who's Here...

31,209 members & growing

John Doe UX Designer	Priti Sarapin UX Researcher	Andrew Wood UX Designer	Frederico DeAmico Jack-of-All Trades
David Sless UX Designer	Jack Smith UX Researcher	Sara Lee Interaction Designer	James Amms UI Designer

f **Twitter** **in**

Main Page (not signed in)

We did intentionally stay away from the concept of “friends” within our tool - research by Walther et al. (2013) has shown that these forms of AURs tend to trigger reactions about desirability.⁵ Our design seeks to guide our members away from making rapid - and perhaps incorrect - judgments about mentors and mentees due to a perceived level of “desirability.”

User Account and Profile

Although users can browse our website and see other users’ public profiles without signing in, we require users to sign in to their account and recommend them to have a profile ready before they have the ability to start a mentorship. In our design thinking, user accounts and profiles have a fundamental impact on user experience of the system:

- Users are represented by their account and interact with each other using their account.
- A large portion of decision making (e.g. a mentor decides whether to accept or decline a potential mentee) is based on user profiles.
- The system relies on profile information to generate matches (see section “Matching Users”).

Users create their account by clicking the “Join our Community” button or the “Register” hyperlink at the top right of the website homepage. In the registration process we ask users a series of questions to help build up their user profile (which can be edited later).

The registration process is a lengthy one - but for necessary reasons. First, the user profile is used to provide important information both for other users and for the proposed auto-matching algorithm. Secondly, a longer registration process deters half-hearted users from registering (in fact, high motivation is a highly-desired characteristic that both mentors and mentees look for when attempting to find their mentor/mentee).⁶⁷ Finally, similar approaches are adopted successfully by other online CMC services (without significant impact to member registration).⁸⁹
¹⁰ Since we do value our users’ time, we do provide ways to auto-populate forms whenever possible. For example, for some questions users will find a “Use My LinkedIn Data To Answer This Question” button. This will allow users to import their LinkedIn data to automatically populate the forms for them. It is also important to note that we do inform users that the entire registration process will take approximately 30 minutes and has five major steps, thereby preparing users for the level of effort and time that will be required to complete a profile.

⁵ Walther, Joseph B., Jang, Jeong-woo. “Communication Processes in Participatory Websites.” *Journal of Computer-Mediated Communication*, Oct 2012, Vol. 18 Issue 1. 2-15. *Wiley Online Library*. Web. 10 Nov 2013.

⁶ Terrion, Jenepher Lennox, and Dominique Leonard. “A taxonomy of the characteristics of student peer mentors in higher education: Findings from a literature review.” *Mentoring & Tutoring* 15.2 (2007): 149-164.

⁷ Sambunjak, Dario, and Ana Marusic. “A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine.” *Journal of general internal medicine* 25.1 (2010): 72-78.

⁸ Match.com www.match.com

⁹ Meetup www.meetup.com

¹⁰ LoveRoom www.tryloveroom.com

The image shows the first step of a user registration process for UXpertise. At the top, the UXpertise logo and tagline "Connecting great people within the UX Community" are displayed. A navigation bar at the top right includes "Sign In" and "Register". Below the header, a progress bar shows five steps: 1. Personal Info (highlighted in white), 2. Experience, 3. Interests, 4. Preferences, and 5. Personality.

Welcome to UXpertise community!

Please take 20-30 minutes to complete your profile by answer the following questions. We will do a better job matching you with a mentor or mentee in this way!

1. Personal Info

* Answer required for all questions.

First Name:

Last Name:

Email:

Age:

Gender:

- Female
- Male
- Other
- N/A

Race:

Nationality:

Where are you currently located?

Country:

State/Province:

City:

Where have you previously resided?

Country:

State/Province:

City:

Add Another Residence

Personal Statement: (This statement will be featured prominently in your community profile.)

Write your statement here...

NEXT

On the right side of the form, there is a sidebar with the heading "Become part of the world's largest UX mentorship community!" followed by several testimonial snippets from users like Mary, student @UCSD, and others.

New User Registration - Step 1: Personal Info

In the rest of this section, we describe our five-step registration process and the data that supports our design decisions. In section “Matching Users” we elaborate how we utilize user profile data to suggest matches and how users may leverage this information to find matches on their own.

Throughout the registration process, you will notice that we have provided “Tips and Suggestions” on the right side of the page to provide users with suggestions that will help them to complete their profile. In some cases, we also provide user comments or other forms of inspiration that seeks to further encourage users to complete their registration.

If the user does not have time to finish the registration, the system would be established to save information automatically after each step so that when and if the user returns, he/she can continue registration from where he/she had left off.

Step 1. Personal Info

On step one we ask users to fill in some basic personal information (real name, age range, gender, race, nationality, etc.), contact information (email address) and a short personal statement. While asking for this information, we made the following design decisions.

Real Name

We ask for users’ first and last names for identification. Because we want users to take the mentorships seriously and be responsible and professional, we encourage users to use their real name.

Age Range

We ask users to choose the age range that best applies to them. Although age is not mentioned as an outstanding characteristic that affects quality of mentorship, we think it is strongly correlated with experience, which is an outstanding characteristic^{11 12} (Terrion, 2007; Sambunjak 2010). One of our interviewees put it this way: “age is not that big of a deal, but I would not consider someone under 21 as a mentor.”

Gender, Race, Nationality

We ask for gender and race information but make them non-required. Our literature review showed that certain gender and race compositions outperform other compositions^{13 14 15} (Terrion et al., 2007). We want to leverage these findings in our matching mechanism to increase users’ chances of getting a high-quality mentorship. However, we understand that gender and race are

¹¹ Eby, Lillian T., et al. "The protege's perspective regarding negative mentoring experiences: The development of a taxonomy." *Journal of Vocational Behavior* 57.1 (2000): 1-21.

¹² Ehrich, Lisa C., Brian Hansford, and Lee Tennent. "Formal mentoring programs in education and other professions: A review of the literature." *Educational administration quarterly* 40.4 (2004): 518-540.

¹³ Armstrong, Steven J., Christopher W. Allinson, and John Hayes. "Formal mentoring systems: An examination of the effects of mentor/protégé cognitive styles on the mentoring process." *Journal of Management Studies* 39.8 (2002): 1111-1137.

¹⁴ Ragins, Belle Rose, and John L. Cotton. "Mentor functions and outcomes: a comparison of men and women in formal and informal mentoring relationships." *Journal of applied psychology* 84.4 (1999): 529.

¹⁵ Turban, Daniel B., Thomas W. Dougherty, and Felissa K. Lee. "Gender, race, and perceived similarity effects in developmental relationships: The moderating role of relationship duration." *Journal of Vocational Behavior* 61.2 (2002): 240-262.

sensitive information so we give users the option to not disclose them.

Location of the User

The physical location of the user will determine whether a specific mentorship pairing would allow for in-person meetings (i.e. same geographic location) or if the mentorship would be limited to online computer-mediated communication. From our interviews, several participants pointed out that they have the tendency or preference to engage with mentors/mentees in their same geographic location. Other interviewees noted that they would be willing (or regularly experience) mentorship relationships via online communication only. Providing the location of the user allows members to self-select the mentoring relationships that meet their needs.

Place of Residence

We ask users about their place of residence and places where they have resided because residences can present possible common characteristics of users and bring people connections owing to their common experience and backgrounds. In other words, individuals who share places of previous residence oftentimes have immediate points of connection for which to build upon (e.g. understanding of local attractions, weather, and language).

Personal Statement

This section allows users to freely express their thoughts toward their possible match. From our competitive analysis of dating websites, this section is critical to reveal users' characteristics and their expectation of what kind of matches they are looking for.

Step 2. Experience

On step two we ask users about their previous experience in UX, HCI, and related fields. Much literature work (Terrion, 2007; Eby, 2000; Ehrich, 2004; Sambunjak, 2010) cited past experience and expertise as an important factor contributing to the outcome of a mentorship. In positive mentorships, mentees referenced their mentors' experience and expertise as one of the reasons for the desirable outcome (Terrion, 2007; Sambunjak, 2010). In negative mentorships, mentors lacking experience or expertise was commonly pointed out as the cause of dissatisfaction by mentees (Eby, 2000; Ehrich, 2004). Although experience and expertise are more commonly associated with mentors, Ehrich et al. (2004) has shown that they are also desirable mentee characteristics. Therefore we ask all users (both mentors and mentees) about their experience.

Questions regarding experience and expertise are broken out into the following fields:

Education And Work Experience

Education and work history constitutes a large part of professional experience. We operationally define education experience as whether the user has earned a degree in UX, HCI or related fields. Similarly, we define work experience as durations of employment in UX, HCI or related fields. As this information may available if the user has a LinkedIn profile, we provide the "Use My LinkedIn Data To Answer This Question" option to save the user some time.

Achievements

Honors, awards and achievements are identified as desirable mentor characteristics in much research work (Terrion, 2007; Sambunjak, 2010). We therefore ask users to self-describe these facts or import such data from their LinkedIn profile. We trust users will provide truthful information to fill out their profile and do not use mechanisms to prevent untruthful information input. The reason behind our confidence is that mentees will generally expect career-related outcomes from the mentorship,¹⁶ and providing untruthful information will not benefit their career-related goals in the long run. As an example, a mentee may be tempted to fake her profile to win a mentor's attention, but as the mentorship starts, her mentor will realize that the mentee's profile was faked, and may then be more likely to terminate the mentorship. The same rules apply for mentors: if a mentee found out her mentor's profile was untrue she may also chose to end the mentorship or communicate to other community members that the individual is lying about their profile (generating a loss of reputation). Although further design mechanisms for preventing / discouraging deception was beyond the scope of our initial design, it is something worthy of additional research. As such, we briefly discuss this topic in the Future Work section.

Skills

We ask users to define their UX skills. A match between the mentee's interests and mentor's expertise is important to the success of the mentorship as reported in (Eby, 2000; Ehrich, 2004). We think defining a skillset is meaningful to both mentors and mentees because it helps to encourage awareness and reflection. Having a defined skillset also helps users to know each other and supports the selection of effective mentorship pairings.

Previous Mentoring Experience

The amount of previous mentoring experience of a mentor has been identified as a potential indicator for the potential quality of a mentorship (Terrion et al., 2007). Given this impact, our design included this as a factor for our matchmaking (i.e. a mentee looking for a mentor will have a more effective match if they are paired with a more experienced mentor).

¹⁶ Kram, Kathy E. "Phases of the mentor relationship." *Academy of Management journal* 26.4 (1983): 608-625.

2. Experience

Do you have any collegiate or post-secondary education? *

Yes No

Use My LinkedIn Profile To Answer This Question

Degree

Start Date

Completion Date

Program

University

Add Another Degree

Do you have work experience in UX, HCI or related fields? *

Yes No

Use My LinkedIn Profile To Answer This Question

Job Title

Company

Start Date

Completion Date

Add Another Job

New User Registration - Step 2: Experiences

Step 3. Interests

Research shows that the first critical step to get the right mentor is to clarify the needs and goals for the mentoring relationship.¹⁷ Within step three we ask users about their interests and their goals for joining the community.

Specific fields of interests

Research shows that mutual interests are important in mentoring relationships (The University of Michigan Rackham School of Graduate Studies, 2013).¹⁸ Here we provide some common fields of interests, such as UX design and research, and leave one option as other for the user to fill in if they choose it. We anticipate this is an area that would receive additional refinement based on emergent behavior once the tool was in use.

¹⁷ The University of Michigan Rackham School of Graduate Studies. "How to get the mentoring you want: A Guide for Graduate Students at a Diverse University" 2013.

¹⁸ Ceca I.L. and Fraser S. C. A Method for Encouraging the Development of a Good Portege-Mentor Relationships. *Teach Psychol* 16: 125-128 (1989)

Goals of the mentoring relationship

Our interview results show that mentors believe it is critical to find a mentee who has a specific goal rather than a vague one. Some interviewees who were a mentor before revealed that they were disappointed to find that their mentees were involved in their mentoring relationship only for networking. They expressed that if they had known this up front, they would not have begun mentoring the individual (this is the difference between sponsorship and mentorship). By asking users what they expect to get from the service, we elicit details about the user's goals for their relationships and improve the chances of matching people effectively. Even more, by reducing virtual distance, it becomes more likely that we will create the foundation for an effective mentoring relationship.¹⁹

3. Interests

I'm interested in... * (check all that apply)

UX Design
 UX Research
 Information Architecture
 Graphic Design
 Mobile Design
 Web Design
 Others, please specify:

I would like to be contacted for... * (check all that apply)

<input type="checkbox"/> Personal Development	<input type="checkbox"/> Work Opportunities
<input type="checkbox"/> Skill Development	<input type="checkbox"/> Professional Advices
<input type="checkbox"/> Networking	<input type="checkbox"/> Career Prospects
<input type="checkbox"/> Academic Support	
<input type="checkbox"/> Other, please specify:	<input type="text" value="enter text..."/>

PREVIOUS **NEXT**

New User Registration - Step 3: Interests

Step 4. Preferences

Within step four we ask users about some logistic preferences that are crucial to the success of a mentorship relationship.

Meeting availability (and matching expectations that each participant has around availability) is

¹⁹ Philippart, Nancy. "Global e-mentoring: overcoming virtual distance for an effective partnership" *Proceedings of the 4th international conference on Intercultural Collaboration* (2012): 1-10.

crucial to the success of the mentorship. This information is another significant piece of data used in the proposed matching system.

Frequency of contact

In the registration process we ask about general availability and the user's preferences/expectations for others. According to Philippart et al's (2012) study, the availability to meet and the understanding of meeting/availability expectations is critical for effective mentoring practices (Terrion, 2007; Eby, 2000; Ehrich, 2004; Sambunjak, 2010). Our interview results also confirmed this finding - interviewees talked to us about mentorships ending because of different meeting expectations and the difficulty in scheduling. Whether a mentor or a mentee has time to meet depends on many factors such as schedule, motivation (Terrion et al., 2007), perception of the quality of previous meetings, altruism (Eby et al., 2000), and trust (Ehrich et al., 2004). Many of these factors are hard to measure and are subject to change as time passes by. Therefore, we decided to not break the availability questions into sub-questions, and we only ask for general expectations during profile registration and encourage users to update this information when their unique needs and expectations change.

Working Style

We ask users whether their expected mentorship should be more scheduled or more flexible. This question is present because a mismatch in working style has been seen to be a common cause for mentorship relationship failures (Eby et al., 2000).

Types of meeting

To improve the mentoring relationship, mentors and mentees should use multiple methods of contact in communicating with each other as a way to increase comfort level and to learn about each other in multiple contexts.²⁰ We ask users if they have a preference between online meetings and face-to-face meetings. Our system does not confine users to either type of meetings -- we let users make their own choices, but we arm them with this information to help them with the process of self-selection. Our interviews reinforced the value of this simple expectation, since even for our one-time, half-an-hour interview sessions, some people preferred to meet in person while others preferred online.

Location of the meeting

If a user prefers in-person meetings, we would then ask them where s/he would want to meet. Our interviewees shared feedback about mentorship relationships ending because one of the participants had moved to another city or to a different employer.

²⁰ Ensher, Ellen. "Online mentoring and computer-mediated communication: New directions in research." *Journal of Vocational Behavior* (2003): 264-288.

1 Personal Info 2 Experience 3 Interests 4 Preference 5 Personality

4. Preferences

How scheduled do you prefer the mentorship to be? *

I don't have any preference
 Highly scheduled, stick to the agenda
 Have a schedule but I'm OK to changes
 Highly flexible, communicate whenever there is a need
 Other, please specify:

How often do you expect to communicate with your mentorship partner? *

I don't have any preference
 Intense, communicate on daily basis
 Often, communicate on weekly basis
 Lightweight, communicate on monthly basis
 Other, please specify:

Where do you prefer the mentorship to take place? *

I don't have any preference
 Online
 In person
 Sometimes online, sometimes in person
 Sometimes online, mostly in person
 Mostly online and sometimes in person
 Other, please specify:

If you are going to meet your partner in person, where do you want to meet? *

Country

State/Province

City

[Add Another Place](#)

New User Registration - Step 4: Preferences

Step 5. Personality

Personality plays an important role in maintaining relationships between mentors and mentees (Terrion et al., 2007). In fact, it is necessary to understand the personality of a potential mentor/mentee in order to match the mentor and mentee well. Since one's online presentation does not necessarily show the person's real personality, designing an online questionnaire is a challenging method to evaluate the real personality of the user.²¹ Questions asked online to assess personality should be carefully designed in a non-obvious (i.e. masked) way in order to gain information about the "true" personality of the user.²²

Originally, we developed our questions according to the Keirsey Temperament Sorter²³ and planned to sort the personality of users into several typical types for matching. In the end, we decided to use a sliding scale instead of a binary outcome (e.g. Extrovert or Introvert). In this fashion, users can adjust the sliding scale to the point where they feel it shows their true personality. These sliding bars then show up in a user's profile, allowing other members the ability to view those self-proclaimed characteristics to help them better determine if they would like to propose a mentoring relationship with that person. In execution, the questions are presented in a way as to present "two good options" ("are you a good listener or a good conversationalist?") instead of a "good and bad" option (e.g. "are you organized or are you messy") to better address the previously-noted effect of people not answering truthfully because they want to put forth a projected image of what they believe others might prefer.

Here we chose the five most critical characteristics for a good mentoring relationship:

Introvert / Extrovert

This information is displayed in user profiles and judged by users when they seek a relationship. Some mentors prefer quiet mentees and some prefer their mentees to be very active. Introversion and extroversion is one of the most important personality characteristics that determines the effectiveness of the relationship (Terrion et al., 2007).

Good listener / Good Conversationalist

Another important personality characteristic is the ability of the mentor to listen to and try to understand the feelings of the mentee (Sambunjak et al., 2010). Many of the individuals we interviewed who were mentee candidates noted a desire to find a mentor who always gives suggestions. This item of evaluation provide users with information about approach so that they can determine if the other individual will be able to meet their expectations.

²¹ James Houran, Rense Lange, Jason Rentfrow, Karin Bruckner. "Do Online Matchmaking Tests Work? An Assessment of Preliminary Evidence for a Publicized 'Predictive Model of Marital Success'" *North American Journal of Psychology*, December 1, 2004

²² Stephanie Jones. "Psychological Testing: The Essential Guide to Using and Surviving the most Popular Recruitment and Career Development Tests". Harriman House (2011)

²³ <http://www.keirsey.com/sorter/instruments2.aspx>

Warm-hearted / Cool-headed

Generally speaking, people who are warm-hearted tend to be more sympathetic. Being sympathetic is an important element of being a good mentor (Sambunjak et al., 2010). However, not all mentees like sympathetic mentors. Individuals usually have a preference when selecting their mentors and mentees. Again, awareness of this characteristic helps the participant avoid mismatches and reduces risk of a poor pairing.

Analytic / Intuitive

Users can show their style of action through their response to this question. A great quality for being a mentor (Armstrong et al., 2002) is being analytic. However, much like the other personality based questions, not all mentees prefer to have a mentor who analytic - instead preferring mentors who make decisive decisions via hunches (e.g. "my gut tells me that..."). Providing this information in the profile can help users to select individuals who have a style of action that they will find compatible.

Do you speak more in...

This question indicates the style of one's thinking habits. People who exercise similar ways of thinking tend to communicate more easily - which in part makes the mentorship efficient (Terrion et al., 2007). A more efficient partnership helps the participants to feel like their communication is easy and quick; lower efficiency results in partners feeling like they are "wrestling with understanding how to talk to one another."

Hobbies option

Similar hobbies connect people with different backgrounds. Matching people with similar hobbies will increase the chance of a good match and also provides initial conversation tops for mentors and mentees to help them build their initial connections.

Open Response questions

The open response format questions convey two important pieces of information. First, the content of the response helps to directly refine the goals and expectations of the participant. Secondly, the style of communication delivers to viewers important and very subtle clues as to the individual's personality: Do they have a sense of humor or are they straight-laced? Is their communication style loose or do they opt for a highly professional tone? Are they big-picture thinkers or are they very process-based? Are they optimistic, pessimistic, or neutral in tone? Open response questions were seen frequently in the dating sites which we analyzed - in large part due to their ability to serve as very information-rich forms of data that do a great job in helping users understand another individual's personality.

5 Personality:
Please slide the bar to the point that best describes yourself.

I am... *

introvert ————— extrovert

good listener ————— good conversationalist

warm-hearted ————— cool-headed

analytical ————— intuitive

I speak more in *

generalities ————— particulars

My hobbies... *

<input type="checkbox"/> Drawing	<input type="checkbox"/> Reading	<input type="checkbox"/> TV	<input type="checkbox"/> Movies
<input type="checkbox"/> Hiking	<input type="checkbox"/> Singing	<input type="checkbox"/> Skiing	<input type="checkbox"/> Theatre
<input type="checkbox"/> Gardening	<input type="checkbox"/> Shopping	<input type="checkbox"/> Cooking	<input type="checkbox"/> Live Music
<input type="checkbox"/> Camping	<input type="checkbox"/> Gaming	<input type="checkbox"/> Traveling	<input type="checkbox"/> Sports

Others, please specify:

What do you like to do when you have a free weekend? *

New User Registration - Step 5: Personality

Matching Users

Why

Mentorships are valuable. However, our interviews, surveys, and literature review (Terrion, 2007; Eby, 2000; Ehrich, 2004; Armstrong, 2002; Sambunjak, 2010; Philippart, 2012) consistently noted that it was critical for there to be a “good match” between the mentor and the mentee. Philippart et al. (2012) suggested that we can build an effective mentoring relationship through a matching process that matches participants based on compatibility of professional skills, work experience, and personality (such as interests, development goals, etc.). In fact, our interviewees identified the matching problem to be their biggest concern; many of them mentioned that their previous mentorships failed because the relationship was initiated by their company manager and there wasn’t a match between mentor and mentee. In short, they never felt “connected” to their mentor.

In our UXpertise solution the mentorship relationship is always initiated via the user. Our users are given great opportunities - they have a wide range of choices and they don’t have to be limited by geographic proximity. However, these users also face great challenges: they have

to find a good match from a large pool of users and much of their decision-making has to rely on the online representation of the potential partner.

To help users with these challenges, we included user profiles (online representation) and a matching mechanism. The goal of the matching mechanism is to provide users with personalized recommendations about who could be a good match for them. We are able to give such customized recommendations based on (1) user information collected in the registration process (see the User Account and Profile section above), and (2) our knowledge of factors that affect mentorship satisfaction.

How

We propose a matching algorithm that would calculate a unique match score for each user based on the potential pairing. Users with the highest match scores are identified as “Best Matches” and are shown first in the “Community” page by default.

It is important to note that the matching mechanism only recommends potential *mentors* to *mentees* and never the other way around. If the system decides that a user is a well-qualified mentor (based on user input in *Step 2: Experience* in the registration process), he or she will receive none or little recommendations from the matching algorithm. Our reasons for disabling the recommendation of mentees to mentors is two-fold. First, we think there is a much greater need for mentees to find a mentor than there is need for mentors to find mentees (based on our interviews and competitive analysis). Second, recommending some mentees to a mentor could introduce unfairness to other mentees.

In the rest of this section we introduce how the match score is calculated using user profile information. We do not discuss what specific algorithm or technique should be used as this was beyond the scope of our research and design. However, we do cover all factors mentioned in the User Account and Profile section and quantify their effect on the matching score.

Table 1 summarizes the effect of various factors on the matching score. A factor’s effect is quantified based on the frequency of that factor being mentioned in literature and our research activities. For each mentor-mentee pair, the algorithm first computes a raw matching score. The raw score is then normalized to a final matching score between 0% and 100%.

Table 1. Summary of mentorship factors and their effect on the matching score.

Factor	Effect on Matching Score	Research Evidence
Mentor’s UX expertise and mentee’s interests match	+5	(Eby, 2000; Ehrich, 2004)
Mentor has rich experience and/or great achievements in UX	+5	(Terrion, 2007; Sambunjak, 2010)

Mentor has rich experience in mentoring	+3	(Terrion et al., 2007)
Availability expectation match	+5	(Terrion, 2007; Eby, 2000; Ehrich, 2004; Sambunjak, 2010)
Working Style match	+3	(Eby et al., 2000)
Personality match	+0 (users be the judge)	(Terrion, 2007; Sambunjak, 2010)
Cognitive style match	+3	(Armstrong et al., 2002)
Gender match	+3	(Armstrong, 2002; Ragins, 1999)
Gender mismatch	-3	(Ragins et al., 1999)
Race	+0 (users be the judge)	(Terrion, 2007; Turban, 2002)
Logistic match	+20	our interviews

Experience/Interest Match

During the registration process all users provided information about their expertise and UX interests. If there is a match between a mentor's expertise and a mentee's interests, that mentor's matching score for the mentee will increase (+5).

A mentor with rich experience and/or great achievements is desirable to every mentee (Terrion, 2007; Sambunjak, 2010). Rich experience in a domain of interest improves the matching score for all mentees to a great degree (+5). If a mentor has great previous experience in mentoring, there is an additional improvement (+3) for the matching score for all mentees.

Availability Expectation Match

When the mentor and the mentee have similar expectations about how much time they are willing to invest in communicating with the other person, their matching score increases (+5). This question asks about the user's availability and willingness to spend time in *communication*, which should be equal for mentors and mentees. Besides time spent communicating with their mentor, mentees are likely to spend additional time learning and practicing.

Working Style Match

When there is a similar preference in how structured and scheduled the relationship should be, there is the potential for a better match (+3).

Personality Match

There are many personality traits that make a potential mentor desirable: enthusiasm, supportiveness, trustworthiness, empathy, patience, honesty, responsiveness, non-judgmentalness, reliability, active listening ability, and sincerity are all desirable personality characteristics as identified by mentorship research literature (Terrion, 2007; Sambunjak, 2010). However, there is some level of debate about whether there is an effective classification of personalities; there is no clear resolution as to what types of personality compositions will ultimately result in a successful relationship (the old adage that “opposites attract” still may apply). Although, as we discussed earlier, research notes the importance of personality when it comes to a successful mentorship relationship, there is no black and white answer as to what will create a good personality match. Because of this lack of clarity, we intentionally did not include personality traits in the matching algorithm. Instead, we display personality information within user profiles and let mentees themselves decide whether they would like to work with the mentor. For now, the art of making connections via personality remains just that... an art, and not a science.

Cognitive Style Match

There is research evidence that cognitive styles significantly affect mentorship relationship quality (Armstrong et al., 2002). The more similar cognitive styles are within a pairing, the better the mentorship. So, as an example, matching analytic pairs with analytic mentors allows the pairing to speak the same language and to share information about issues in a way that will resonate for each partner. Within our algorithm, a cognitive style match results in an improved matching rating (+3).

Gender Match/Mismatch

Gender is mentioned in some literature to be important (Armstrong, 2002; Ragins, 1999). Researchers found that female mentors with male mentees have lower overall mentorship satisfaction than other gender compositions (Armstrong, 2002; Ragins, 1999), while female mentors with female mentees have better psychosocial satisfaction than other gender compositions (Ragins et al., 1999). Based on these insights, we defined a gender match as female mentee with female mentor and a gender mismatch as male mentee with female mentor (and vice versa). A gender match improves the matching rating (+3).

Race

Controversies exist in the case of race. Although researchers have observed positive correlation between race of mentors and race of mentees (Turban et al., 2002), race composition of mentors and mentees has no significant effect on quality of mentorship (Terrion, 2007; Turban, 2002). Hence, we do not consider the effect of race when computing the matching score.

Logistics Match

If a mentee *strongly* prefers meeting in person than online, all mentors that have a similar preference experience a huge match improvement (+20). If the mentee only has a slight preference of meeting in person over meeting online, the logistics match will not be scored.

Community/Member Search

Welcome Back, Samantha | Sign out

Home **Community** Resources

Search for mentors or mentees using keywords Find a Member

Refer other UX professionals to the UXpertise community! Refer a Member

All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

ONLINE/LOCAL
 Online
 Seattle, WA

ROLES
 Mentors
 Mentees

PROFESSION
 UX Designer
 UX Researcher
 Information Architecture
 Interaction Designer
 User Interface Designer

EXPERIENCE
 Any

SKILLSETS
 UX Design
 UX Research
 Interaction Design
 Visual Design
 Usability Testing

31209 results

Best Match	Higher Experience	Most Relevant	Recently Joined
	John Doe SKILLS: UX Research, Usability Testing EXPERIENCE: 16 years PROFESSIONAL: UX researcher in Microsoft	95%	
	Katy Donaldson SKILLS: UX Design, UI Design, UX Research EXPERIENCE: 8 years PROFESSIONAL: UX designer in Amazon	95%	
	Andrew Dulecki SKILLS: Interaction Design, UX Research EXPERIENCE: 13 years PROFESSIONAL: Interaction designer in Facebook	94%	
	Mike Joe SKILLS: Interaction Design, UX Research EXPERIENCE: 5 years PROFESSIONAL: Interaction designer in Facebook	93%	
	Sammy Han SKILLS: Interaction Design, UX Research EXPERIENCE: 5 years PROFESSIONAL: Interaction designer in Facebook	89%	
	Gaurav Joshi SKILLS: Interaction Design, UX Research EXPERIENCE: 5 years PROFESSIONAL: Interaction designer in Facebook	82%	
	Daryl Hepting SKILLS: Interaction Design, UX Research EXPERIENCE: 5 years PROFESSIONAL: Interaction designer in Facebook	80%	
	David Sless SKILLS: Interaction Design, UX Research EXPERIENCE: 5 years PROFESSIONAL: Interaction designer in Facebook	72%	
	Michelle Mederos SKILLS: Interaction Design, UX Research EXPERIENCE: 5 years PROFESSIONAL: Interaction designer in Facebook	70%	

1 2 3 4 5 next > next 6-10 >>

Community / Member Search Page²⁴

Like all social websites whose goal it is to let members find others easily, UXpertise provides its members a place to find others members. Based on user profile and the matching process

²⁴ <http://olg0wr.axshare.com/Community.html>

described above (as well as competitive analysis²⁵), we created a design that allows users to:

- Narrow down member search results using the following filters:
 - Online/Local: As discussed above, members may choose to meet each other face-to-face (locally) or online/remotely. This filter helps them find the right person.
 - Mentors/Mentees: Members may be looking for only mentors or mentees.
 - Professional Experience & Skillsets: Like what is mentioned in user profile and matching process, mentees would want to find mentors with professions that better match their career goals, with more experience, or have specific skills.
 - Name
 - Keyword Search
- Members can sort search results based on:
 - Best Match: This sorts the results by matching scores calculated using each member's profile and matching algorithm. UXpertise uses Best Match sorting by default.
 - Higher Experience: Mentees would also want to find mentors with higher experience.
 - Most Relevant: When members want the results to be more relevant to the keyword they typed.
 - Recently Joined: Make new members more visible and engaged.
- Members can click on each member search result and link to that member's profile, to propose a mentoring relationship as follows.

Proposing and Managing mentoring relationships

Our research helped us to understand and design for the unique needs of mentors/mentees when it comes to proposing and managing new mentoring relationships.

Formal and Informal Mentoring Relationships

While all Interviewees validated an interest in having an online tool or formal service that could help to bring together individuals interested in participating in a mentoring relationship, nine of the 12 interviewees indicated that they had been in a mentoring relationship that began via a means other than a formal program. Although most of the interviewees didn't describe these relationships as "informal mentoring relationships", our discussion made it clear that these relationships oftentimes began organically and were not established via any formal process. Most importantly, all participants spoke of these informal relationships in positive terms, while four interviewees specifically noted that at least one of their previous "formal" mentoring relationships were not as effective as they would have liked it to have been. Oftentimes difficulty of communication, lack of shared interests, or incompatible personalities were cited as the reasons for these ineffective relationships. For our interviewees, they experienced a higher level

²⁵ <http://www.ixda.org/members> and <http://www.skillshare.com/classes>

of satisfaction and success via their informal mentorships than their formal ones.

Our interviewee's feedback paralleled the research conducted by Murphy Bova and Phillips,²⁶ which documented that the development of mentoring relationships via informal means (as opposed to strictly formal approaches) is an important and prevalent means of establishing a mentoring relationship. It became clear that our design needed to facilitate both formal and informal mechanisms for establishing mentoring relationships.

The UXpertise site was designed to help people self-select and pursue mentoring relationships that they feel would be effective - in essence, re-creating in the digital space the foundation that would allow informal relationships to be built, and, if desired, be supported by a more formal structure - with the intent of providing the best of both worlds.

Proposing the Mentorship (Steps 1 and 2)

Our interviews uncovered several concerns about the process of proposing a mentorship (or for mentors, having a mentorship request proposed):

- Two interviewees noted that they would “not feel comfortable” or “would not know how” to propose a new mentoring relationship.
- Several of the experienced practitioners discussed the importance of the potential mentee “owning” the relationship - i.e. not coming to the mentor “empty-handed” and expecting the mentor to direct the mentee (instead of providing guidance).
- Experienced practitioners discussed (or alluded to) a level of evaluation they are performing at this stage of the relationship - seemingly to help them determine if they feel they will be able to help the mentee and if such investments are worth their time.
- New practitioners - perhaps through the virtue of their lack of experience - had concerns about how they (and their candidacy) would be viewed by their potential mentor.

These concerns seemed to align with important elements of research we uncovered. For example, Stokes et al. (2013) documented that high levels of anxiety were frequent and common occurrences at the start of a relationship.²⁷ This same research also discussed the costs of ineffective mentoring relationships - a concern that was also present in some of our more experienced interviewees when alluding to the balance that was required within the relationship and the expectations that the mentee doesn't “just show up and expect to be taught.”

Research by Ensher also noted that “to improve mentoring relationships, methods to protect confidentiality must be developed, maintained, and properly communicated to mentors and protégés engaged in online mentoring.”

²⁶ Murphy Bova, Breda, and Phillips, Rebecca. “A Study of the Mentor Relationship.” *American Secondary Education*, Vol. 12, No. 1 (Summer 1982). 29-31. Dwight Schar College of Education, Ashland University. JSTOR. Web. 11 Nov 2013.

²⁷ Stokes, Paul and Merrick, Lis. “Designing Mentoring Schemes for Organizations.” *The Wiley-Blackwell Handbook of the Psychology of Coaching and Mentoring*. 2013. 197-215. Wiley Online Library. Web. 10 Nov 2013.

Based on this research, we created a design that:

- Allowed individuals to conduct communications without sharing personal communication information (e-mail, phone, etc.) until they so chose to do so.
- Allowed individuals to contact individuals via one-time communication (“Ask a Question”) or to begin the process of a more formal mentorship (“Propose a Mentorship”).
- Provided potential mentees with resources AND encouragement to help them overcome some of the inherent concerns that come with a mentorship proposal via direct communication of “best practices” (i.e. tips and tricks) for creating an appropriate user profile and structuring their communication to improve effectiveness.

The screenshot shows the UXpertise website interface. At the top, there's a navigation bar with 'Welcome Back, Samantha | Sign out'. Below it is a header with the 'UXpertise' logo and the tagline 'Connecting great people within the UX Community'. The main content area has tabs for 'Home', 'Community' (which is selected), and 'Resources'. On the left, a sidebar titled 'Step 1: Update your Profile' shows a profile picture of 'John Doe' (UX Researcher at Microsoft) and indicates 'Relationship: None'. To the right, four numbered steps are listed: 1. Update Profile, 2. Send Message, 3. Progress Checks, and 4. End Formal Mentorship. Below these steps, a section titled 'Sending a Message - Helpful Hints' provides tips for communication. The left sidebar also contains sections for 'Personal Information' (with fields for First Name, Last Name, Age, Gender, Email Address, Race, Nationality, Current Location, and Previous Residences) and a 'Personal Statement' (with placeholder text).

Proposing and Managing the mentoring relationship - Step 1: Update your Profile

Our process first prompts the potential mentee (the requestor) to update their profile to help them put their best foot forward. After an update to the profile, we assist the user in sending a message. The user can include attachments and links, and keep contact info concealed.

The screenshot shows the UXpertise platform interface. At the top, there's a navigation bar with 'Home', 'Community' (which is highlighted in black), and 'Resources'. Below the navigation, there's a section titled 'Step 2 Send a Message' featuring a profile picture of John Doe, described as an 'UX Researcher at Microsoft' with a 'Relationship' status of 'None'. To the right of this are four numbered steps: 1. Update Profile Complete (with a checkmark icon), 2. Send Message (with a '2' icon), 3. Progress Checks (with a '3' icon), and 4. End Formal Mentorship (with a '4' icon). Below these steps is a section titled 'Sending a Message - Helpful Hints' with two lightbulb icons and accompanying text. On the left side of the main content area, there are fields for 'From' (Samantha Lee, Student, University of Washington) and 'To' (John Doe, UX Researcher at Microsoft), a 'Subject' field, and a large 'Message' text area. A note at the bottom left indicates that the asterisk (*) denotes a required field.

Proposing and Managing the mentoring relationship - Step 2: Send a Message

Once a request has been made, the potential mentor has two immediate points of evaluation before they invest any more of their time: First, the quality/intent/personality seen in the potential mentee's profile and the intent/personality/approach observed via the initial message requesting mentorship. Both of these sources help the potential mentor make more effective judgments regarding the "seriousness" of the mentee and whether or not the relationship will be a good fit.

Because we envisioned that at this point of the process the relationship may require more than just a single incidence of communication, we intentionally left this stage very open - it is not time-bound or formal. In fact, the outcome of this could be the start of a formal mentoring relationship or it could truly just naturally resolve itself as closed, when one or more the parties indicates they do not wish to proceed further with the relationship. From the mentor's side, we also encourage them to actively inquire more deeply with the potential mentee to better assess the potential relationship. Such additional communication could also involve what our team referred to as "challenge" questions - requests for additional communication or supporting documentation (such as portfolios/etc.) that further help the mentor make a decision about whether or not they would like to begin a formal mentoring relationship. This is akin to how we observed communication in other online venues that require matching (e.g. dating sites) - there is period of time where both parties "size up" the other one before moving forward with a deeper exploration of the relationship.

Managing the Mentorship (Steps 3 and 4)

Mentorship pairings, as part of the proposal process, determine the duration of the mentoring relationship, establish expectations for communication, and share contact information (outside of the UXpertise site). This approach is in alignment with the suggestion from Philippart's 2012

study which discovered that mentoring relationships are more efficient if the mentor and mentee pairing comes to an agreement on how the relationship should work before starting the relationship.

Once both parties have agreed upon the logistics of the relationship, we consider the “proposal” stages of the mentoring relationship to have been completed and the mentoring relationship to have officially begun.

Promoting regular evaluation of the relationship

Philippart's 2012 study also encouraged mentorship pairings to have regular check-ins throughout the mentorship process to improve the effectiveness of the relationship.

As can be seen in Step 3 of the design (Progress Checks), the UXpertise site encourages mentors and mentees to answer a few simple questions on at least a monthly basis. These periodic check-ins provide a desirable level of accountability for both parties, preserve a record of the relationship, and can even serve as an ad hoc communication tool between both parties should they choose to share the information with the other party.

Welcome Back, Samantha | Sign out

UXpertise Connecting great people within the UX Community

Home Community Resources

Step 3
Check Progress

John Doe
UX Researcher at Microsoft
Relationship You are currently being mentored.
(3 months 2 days)

How is your mentorship relationship progressing? We recommend regularly evaluating your relationship every month to help keep things moving along smoothly. Even better, we will keep a record of your responses for future review or to share with your mentor / mentee.	Mentorship Status 32% complete 8 months 28 days remaining	Progress Checks - Helpful Hints How is your relationship going? Progress checks help to provide a consistent mechanism for ongoing relationship feedback. Consider the following practical tips to keep your relationship strong.
Update March 6, 2014	Progress Check History February 10, 2014 January 13, 2014 December 8, 2013	Ask anything Your mentor is has presumably been there and done that, so ask them anything you want. Ask them about their first job, the highs and lows of their career, what their lifestyle is like after work. If there's anything you're curious about, just ask.
What are you currently working on? <input type="text"/>		Be open to criticism This is your chance to get an honest critique from somebody that's volunteering their time to make you a better designer. Be a good listener and be willing to make changes in response to feedback.
What areas of the relationship can be improved? <input type="text"/>		Communicate often Check in frequently with your mentor, when you're applying to jobs, before and after interviews, when you get your offers, anything. Keep them in the loop with where you are at every step of the way, and don't forget to respond quickly (less than 24 hours) when they email you.
What changes are you making to address the areas of improvement noted above? <input type="text"/>		Follow up and thank your mentor Let your mentor know the outcome of their help and suggestions. When you move forward with your job search and career, always thank them and keep in touch about your successes.
What changes should your mentor/mentee make to address the areas of improvement noted above? <input type="text"/>		

Proposing and Managing the mentoring relationship - Step 3: Progress Checks

Creating Availability

Although our design did not seek to recreate a synchronous communication tool, research did

remind us of the importance of partner availability. In fact, perceived availability has been shown to improve coping and support-seeking likelihood.²⁸ To promote availability, we directly include (as part of the formal relationship setup process) an encouragement for participants to share and connect via synchronous communication tools.

Supporting Relational Maintenance Strategies

Madlock and Booth-Butterfield studied co-worker behavior to understand what actions people may take to develop successful working relationships.²⁹ These behaviors, which they call “supporting relational maintenance strategies,” could be as simple as thoughtful inquiries as to how the person was doing or providing positive feedback. Since these behaviors were seen as present in successful relationships, our design needed to account for them - in this case, by helping partners to link up their existing communication tools we indirectly provide a solid foundation for such behaviors. Even outside of a mentoring relationship we allow users to send messages directly through the system’s asynchronous communication tool (“Ask a Question”) and we allow mentoring relationship participants to make their progress checks transparent.

Mentorship Timelines

Kram noted that mentoring relationships - especially when formal in nature - go through a typical lifecycle. Milestones that mark shifts in the nature of the relationship naturally occur, and the end of the relationship oftentimes involved interesting implications - if the relationship was separated too early (prior to emotional separation), it would oftentimes result in increased anxiety on the part of the mentee. However, if emotional separation occurred prior to formal separation, the relationship would oftentimes sour - creating animosity or disappointment.³⁰

Given the risk that a formal mentoring relationship that exists “too long” can be damaging, we have imposed a one-year time limit for all formal mentoring relationships. To offset the risk of anxiety due to an effective relationship ending sooner than desired, we make it clear to users that they can either maintain the mentorship informally outside of the tool or, if desired, both parties can create a new formal mentoring relationship. In short, we created a definitive end to all relationships with the flexibility to extend the relationship either formally or informally.

Ending the Formal Mentorship

At the end of the predefined mentorship period the Mentor and Mentee are asked to provide a recommendation for the other party. The recipient of the recommendation may choose to have it displayed on their profile or may choose to keep it not-displayed. This provides a form of evaluation that protects participants from negativity - if the recommendation is not acceptable to

²⁸ Feng, Bo; Hyun, Min Jung. “The Influence of Friends’ Instant Messenger Status on Individuals’ Coping and Support-Seeking.” *Communication Studies*, 2012, Vol. 63 Issue 5. 536-553. *Taylor and Francis Online*. Web. 10 Nov 2013.

²⁹ Madlock, Paul E. and Booth-Butterfield, Melanie. “The Influence of Relational Maintenance Strategies Among Coworkers.” *Journal of Business Communication*, vol. 49, no. 1. January 2012. 21-47. *Sage Journals*. Web. 11 Nov 2013.

³⁰ Kram, Kathy E. “Phases of the Mentor Relationship.” *The Academy of Management Journal*, Vol. 26, No. 4 (Dec., 1983). 608-625. *Academy of Management* (via JSTOR). Web. 10 Nov 2013.

the recipient, they may simply choose to not display it.

Completed mentoring relationships are displayed as part of a participant's history, and the notes from the relationship's progress checks may be viewed even after the relationship has ended.

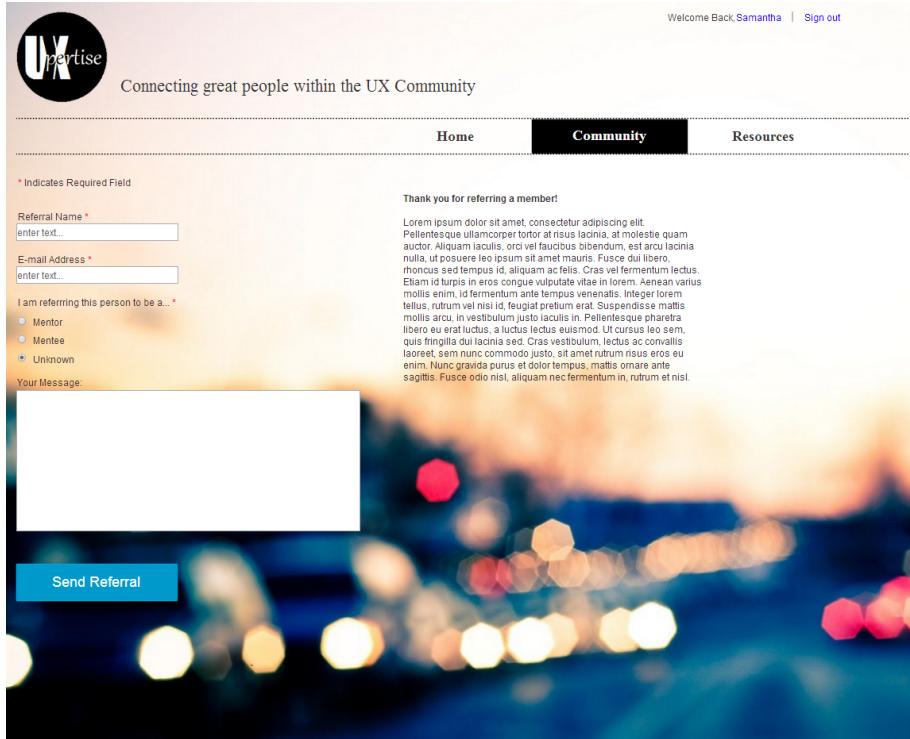
The screenshot shows a user interface for managing a formal mentorship relationship. At the top, there is a navigation bar with tabs: Home, Community (which is selected), and Resources. Below the navigation bar, there is a section for "Formal Mentorship Compete" featuring a profile picture of a man named John Doe, described as an "UX Researcher at Microsoft". A status message indicates he was "Mentored me from November 30, 2013 - November 26, 2014". To the right of this information are four buttons with checkmarks: "Update Profile Complete", "Send Message Complete", "Define Mentorship Complete", and "End Formal Relationship Complete".

Below this, there is a "Mentorship Status" section showing "100% complete" with "0 months 0 days remaining". A "Progress Check History" section lists dates from November 29, 2014, to December 8, 2013, with each date having a small circular icon next to it. On the left side, there are two large text areas: "Your Recommendation" and "Your Mentor / Mentee's Recommendation for You:", both containing placeholder text. At the bottom of the page are two blue buttons: "Return to your profile" and "Return to the Community".

Proposing and Managing the mentoring relationship - Step 4: Ending the Formal Mentorship

Referring people to UXpertise

As discussed earlier in this paper, we desired an auto-matching function to provide mentor/mentee recommendations upon immediate sign-up. However, our interviewees talked often about how their organic/informal mentoring relationships became very influential in their careers and personal lives. These relationships were generated completely through person-to-person referral or simple serendipity (being in the right place at the right time), and as such, we wanted to provide a mechanism that better allowed for individuals to recreate these real-world actions within the context of the site. Thus was born a feature that allowed simple referrals.



Referring a Member

Pushpa et al. (2010) noted that a “central repository of social relationships” is not a realistic solution for accessing expertise from domain experts.³¹ Instead, a network of search that works based on referrals is suggested as a more appropriate solution because it utilizes pre-existing relationships to encourage action on behalf of the information provider and, if the referral network is visible, it provides a built in mechanism for assessing the credibility of the provided information. Although our matching process is an automated one (system to person), our referral process is a “person-to-person” one - allowing us to capture within the system people who have been referred to the community by other like-minded individuals (akin to Dribbble). A future design consideration for our team is to more deeply consider if we would want to display who recommended an individual or to even limit membership to those people who have been referred to the community by another community member.

In the early stages of design, we also discussed reward systems and whether or not we should reward referrals. We uncovered recent research that validated our concerns - while referral rewards do appear to positively impact the number of referrals a person will make³², it also bears with it the unfortunate side effect of the recipient questioning the motivation of the referrer - which

³¹ Pushpa, S., Easwarakumar, K. S., Elias, Susan, Maamar, Zakaria. “Referral Based Expertise Search System in a Time Evolving Social Network.” COMPUTE '10: Proceedings of the Third Annual ACM Bangalore Conference. January 2010. *ACM Digital Library*. Web. 16 Nov 2013.

³² Ryu, Gangseog and Feick, Lawrence. “A Penny for Your Thoughts: Referral Reward Programs and Referral Likelihood.” *Journal of Marketing*, Vol. 71, No. 1 (Jan., 2007). 84-94. *American Marketing Association (via JSTOR)*. Web. 8 Nov 2013.

adversely impacts the receipt of the referral and potential action of the recipient.³³ Given the implications of such referral rewards, we choose to keep them removed from the system.

One inclusion that was made within the tool was for asking the referrer to specify whether or not they were referring the person as a potential mentor or a potential mentee. This simple declaration allowed our design to provide two different basic templates of invitation copy that could be a starting point for the sender to craft a message that is more appropriate (and targeted) to the needs/interests of the recipient.

Support Information (Resources, Contact Us, etc.)

Website Copy

Extensive research has been conducted that identifies the impact and value of mentoring relationships.^{34 35 36}

This research, along with a few prominent non-academic articles regarding mentoring in UX within the online community^{37 38 39} were utilized to help us create appropriate copy throughout the site (e.g. “why get involved in a mentoring relationship?”) and for the important considerations / tips-and-tricks that align with sign-up and propose/maintain membership step-by-step processes.

Resources

Many of the aforementioned online non-academic articles would be included as prominent features within the resource section - along with referrals to other prominent concepts of value (e.g. prototyping resources, user research resources, etc.) - had our team moved forward with implementation of the UXpertise website. Many of interviewees talked about how our site could add additional value by serving as a hub to existing UX-related content, and our Resource section was built into the design with such a purpose in mind.

³³ Verlegh, Peter W. J., Ryu, Gangseog, Tuk, Mirjam A., and Feick, Lawrence. “Receiver responses to rewarded referrals: the motive inferences framework.” *Journal of the Academy of Marketing Science*. November 2013, Volume 41, Issue 6. 669-682. *Springer Link*. Web. 11 Nov 2013.

³⁴ Chun, Jae Uk, Sosik, John J., Yun, Nami Yi. “A longitudinal study of mentor and protégé outcomes in formal mentoring relationships.” *Journal of Organizational Behavior*, 33. (2012) 1071-1094. Wiley Online Library (wileyonlinelibrary.com). Web. 10 Nov 2013.

³⁵ Bolman Pullins, Ellen, and Fine, Leslie M. “How the Performance of Mentoring Activities Affects the Mentor’s Job Outcomes.” *The Journal of Personal Selling and Sales Management* Vol 22, No 4, Fall 2002. *M.E. Sharpe (via JSTOR)*. Web. 10 Nov 2013.

³⁶ Tong, Chloe and Kram, Kathy E. “The Efficacy of Mentoring - The Benefits for Mentees, Mentors, and Organizations.” *The Wiley-Blackwell Handbook of the Psychology of Coaching and Mentoring*. 2013. 217- 241. *Wiley Online Library*. Web. 10 Nov 2013.

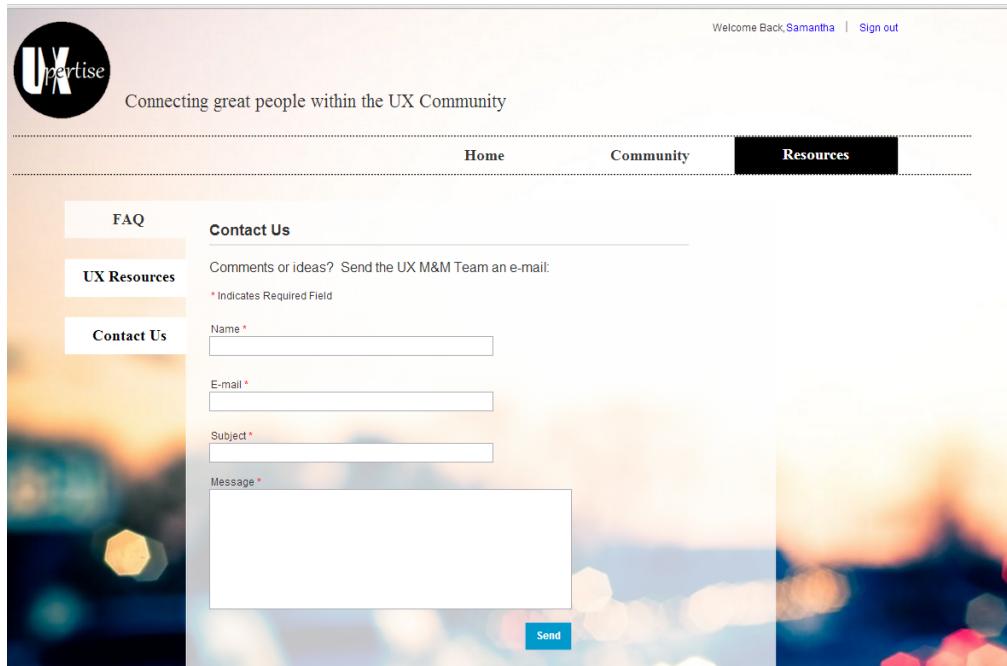
³⁷ Baldwin, S. “A Case for Mentorship.” *UX Magazine*. Article No. 683. 6 Jun 2011. Web. 02 Dec 2013.

³⁸ Lori, L. “Getting Started With a UX Mentor.” *Cornell UX Design: Bringing Design Culture to Cornell*. 22 Feb 2012. Web. 02 Dec 2013.

³⁹ Hubert, E. “Advice on Finding the Best UX Mentor.” *Johnny Holland: It’s all about Interaction*. 08 May 2012. Web. 02 Dec 2013.

Contact Us

As should be expected, we included a simple message form to capture feedback regarding the UXpertise site. This contact form follows a tried-and-true design seen across the web today.


 A screenshot of a website page titled "UXpertise". The header includes a logo, a welcome message ("Welcome Back, Samantha"), and a sign-out link. Below the header is a navigation bar with links for "Home", "Community", and "Resources" (which is currently selected). On the left side, there is a sidebar with links for "FAQ", "UX Resources", and "Contact Us". The main content area features a contact form with fields for "Name", "E-mail", "Subject", and "Message", each marked with a red asterisk indicating it is a required field. A "Send" button is located at the bottom right of the form. The background of the page has a blurred, colorful bokeh effect.

Resources page (FAQ, UX Resources, and Contact Us)

Future Work

Usability Testing

Although our team conducted extensive research and generated a preliminary design, we haven't gotten any user feedback regarding the design. If this project were to continue, the next step we would suggest would be to conduct usability testing with this version of prototype to gather behavioral information (such as task completion rates) and perceptual information (such as user opinions) about our initial design. After gathering such data, we would then be poised to make refinements to our design and approach. This cycle of work could continue iteratively until we had great confidence in the effectiveness and overall user experience of our design.

Additional Research

Even though our research and design resolved the need for UX practitioners to find a mentor or mentee, there is still much more work to be done within the realm of researching and understanding this complex space. One example (of the many that could be explored), relates to the concept of hierarchical vs. peer mentoring. Currently, there is no clear cut research that shows that either hierarchical mentoring or peer mentoring is more beneficial than the other.

Although our design for UXpertise allows users to initiate both types of relationships, it is clearly skewed towards the support for hierarchical mentorships - our search focuses mostly on the side of helping mentees find and propose mentorships with mentors, and then when a match is found, to initiate a formal, hierarchical relationship.

The concept of deception was touched upon earlier in this paper. As noted, deception has been identified as a cause of mentorship dissatisfaction (Eby et al., 2006) . In our system, there is the potential for some mentees to fake their profiles to impress potential mentors. At the same time, some mentors may be tempted to over-inflate their experience to attract mentees. Due to the barriers we previously discussed, we are hopeful that this would not be a severe problem in our system, but this is not confirmed. Luckily, our current design allows both mentors and mentees to terminate the mentorship at any time, effectively creating a safety valve for such dishonesty. However, this is a space that warrants deeper investigation.

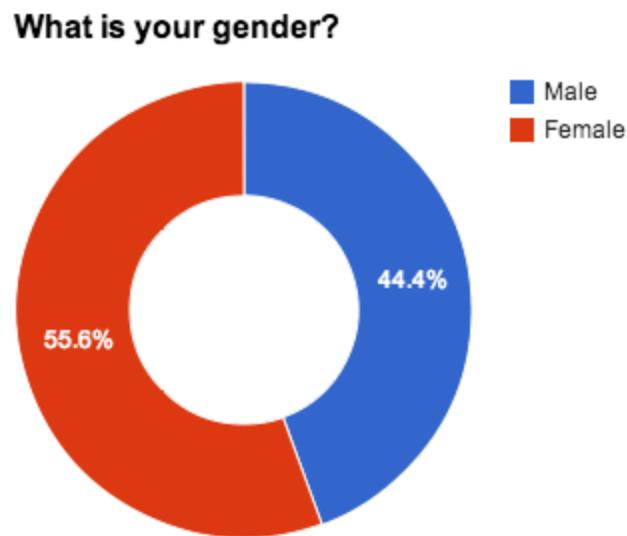
Ensher's study showed that negative aspects of online relationships can be greatly reduced with training and education. Therefore, providing training for both mentors and mentees to communicate with each other and then providing them with information help them make this communication effective is another feature that UXpertise can implement in the future. Today, the tool only provides simple "hints and tips," but we envision UXpertise as being a full "hub" that connects users to the valuable content and resources that are continuously being generated by the UX community.

Finally, our ultimate goal is to develop a fully designed matching system in UXpertise. However, because of the time constraints, our current matching system only includes questions that are a "subset" of what would be necessary to help users get a full picture of another user's personality. We couldn't integrate all the questions that took into account the key factors pointed out by our research (and ensured validity) due to the excessive nature and potential lack of reliability of many personality-based quizzes that exist today. Some of our research pointed to several additional dimensions of mentoring relationships - such as whether the relationship is open/closed, public/private, etc.- as being could indicators as to the success of the relationship(Stokes et al., 2013). We would recommend spending a lot more time and effort polishing the matching system in UXpertise prior to actual implementation.

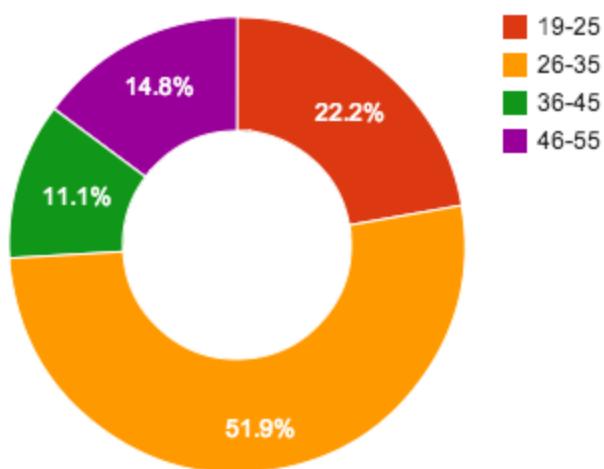
Overall, we feel great about the progress we made toward creating a shared understanding of this domain and moving forward a design concept that we feel could serve as a great starting point for further investigation and development in this space.

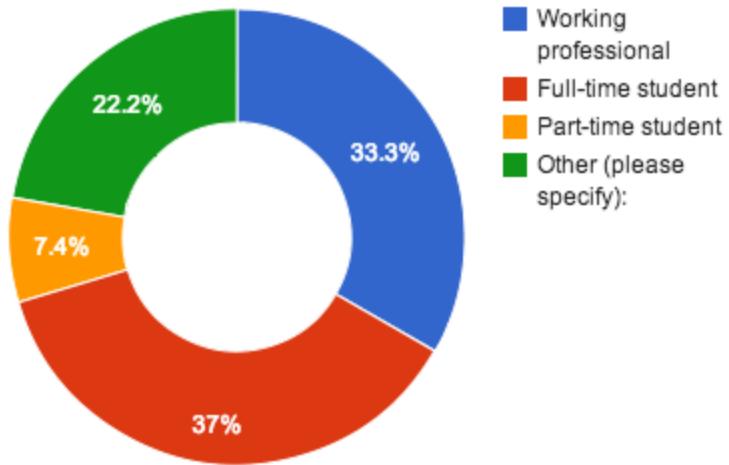
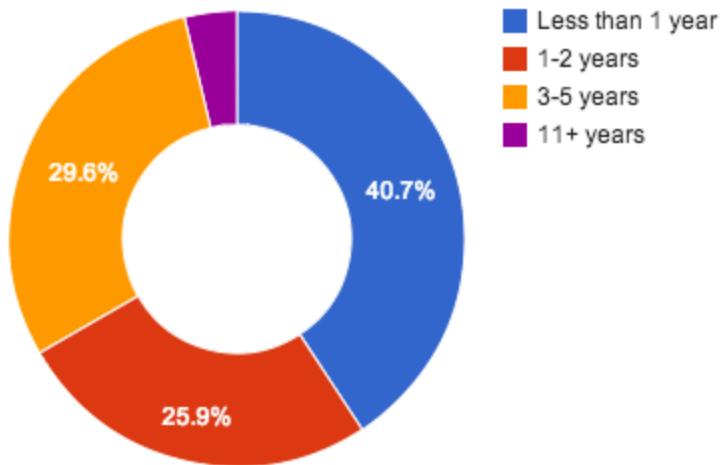
Appendices

Survey Results

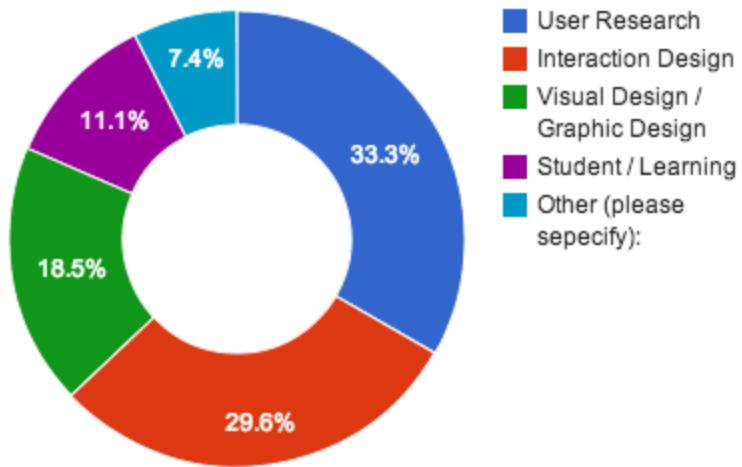


Which age group do you belong to?

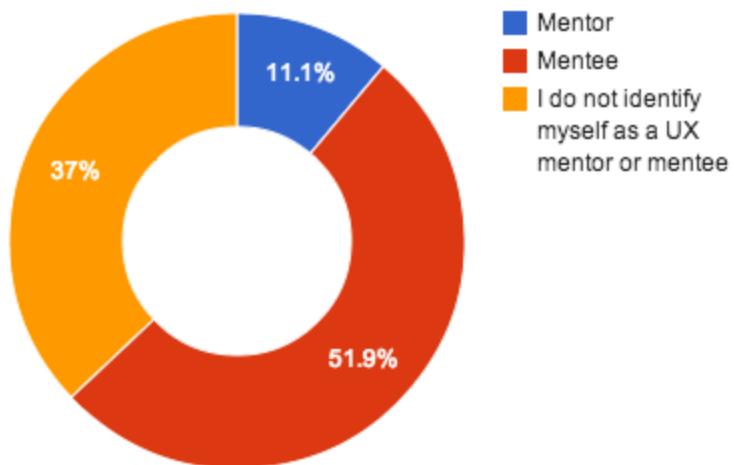


What best describes you? You are a ...**How much experience do you have performing user experience (UX) related work?**

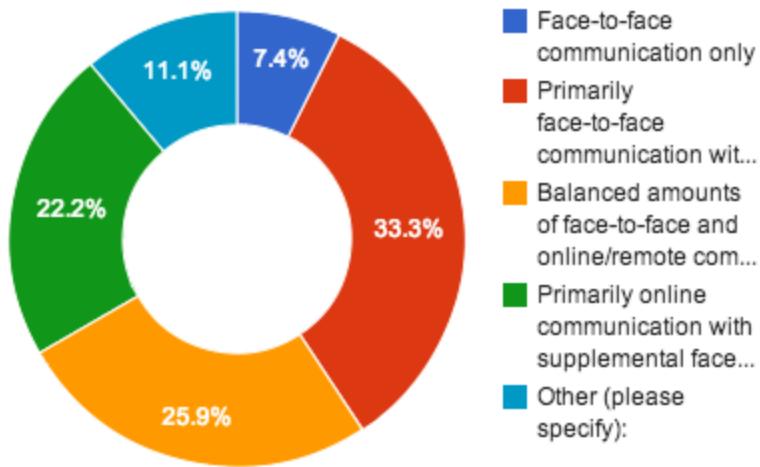
Where do you spend the majority of time when conducting user experience (UX) related work?



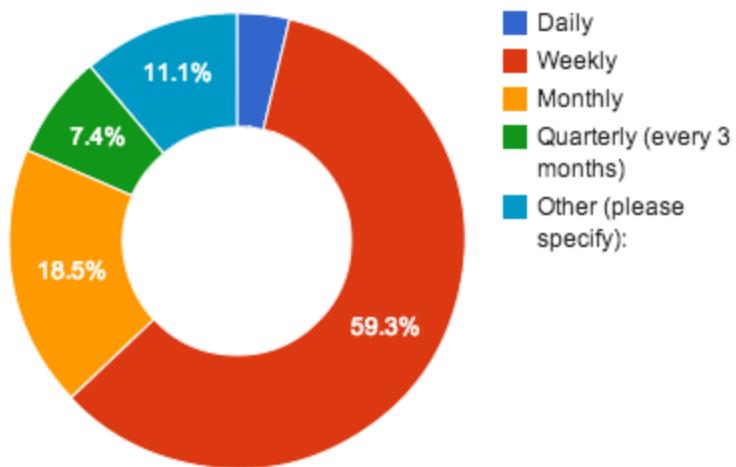
Do you identify yourself primarily as a UX mentor or UX mentee?



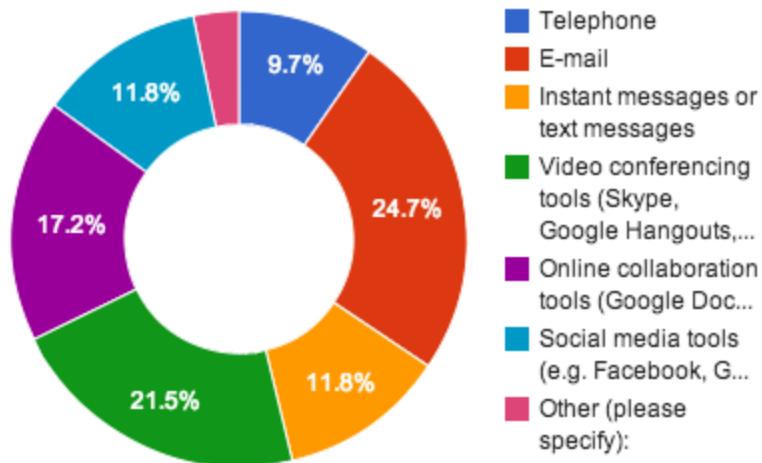
How would you like your mentor/mentee relationship to work?



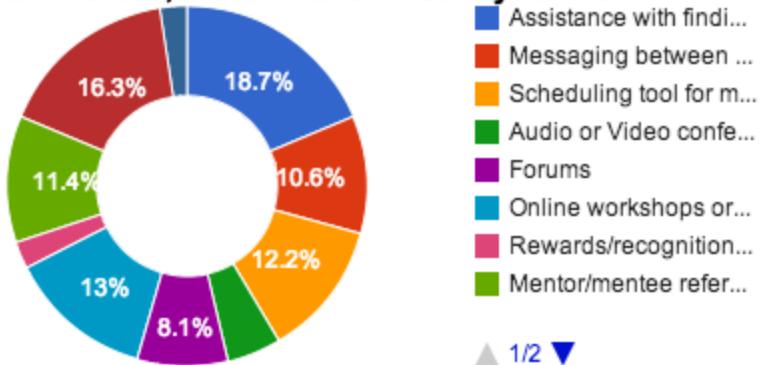
How frequently do you want to be involved in the mentor-mentee relationship?



What tools would you like to use to communicate with your mentor/mentee? (Check all that apply)

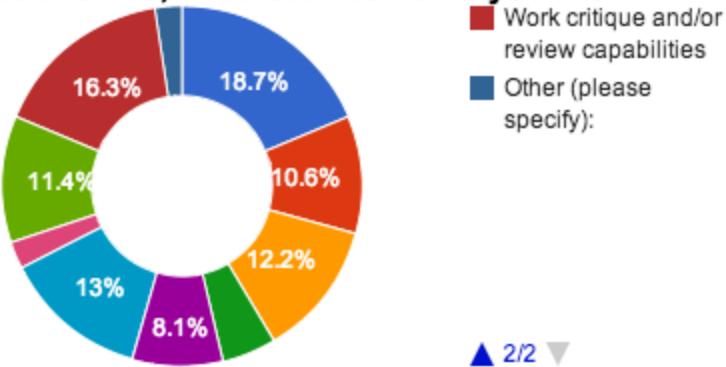


If a website existed that allowed you to build and maintain a mentorship between you and your mentor/mentee, what features would you like?



▲ 1/2 ▼

If a website existed that allowed you to build and maintain a mentorship between you and your mentor/mentee, what features would you like?



▲ 2/2 ▼

Interview Questions

Intro (to be read to interviewee)

Thank you for helping us out today. As we discussed via e-mail, I am part of a small team of students within the Human Centered Design and Engineering program at the University of Washington. As part of an assignment for our Computer Mediated Communication course, we have been tasked with the responsibility of developing a computer-mediated communication solution for an existing problem or need.

Our team wants to look at a solution that would make it easier for individuals to find a mentor- or be a mentor- within the UX community. Your feedback will help influence how and what we might design as a tool to help support this goal.

I will be taking notes during our conversation today. Please be assured that your comments will only be communicated anonymously outside of our immediate project team, so please feel free to speak openly and honestly.

Goal

1. Understand what negatively impacts mentor-mentee relationships. (the barriers)
2. Better understanding of why a person wants to be mentor or mentee. (motivation)
3. Features of the website that would be beneficial.
4. Understand the context for mentorship: what communication tools a person uses, their environment, and what is needed for people to participate in a mentor/mentee relationship.
5. How does the mentoring relationship start? How do mentors/mentees match each others?

Warm-up

1. To begin, can you please tell me a little about your experience as a [new/experienced] UX practitioner?
2. Have you ever been part of a mentor-mentoring relationship? If so, can you tell me about that experience? (is it good/bad...) If, not, can you share with me why you haven't? (i.e. what barriers prevented you, if any?)

Mentorship preferences

1. If you've ever had experience in mentorship, how did it begin? (e.g. was it with someone you know, through a friend, through networking events, websites, etc.?)
2. How is mentoring impacting (or has impacted) your career growth?

3. From your perspective, what does a successful mentoring relationship look like?

For experienced practitioners (mentors):

1. Are you currently mentoring anyone? If so, how do you approach that? If not, have you mentored others in the past? How did you approach those relationships?
2. How do you feel new UX practitioners are gaining experience and guidance today? What role does mentorship play in that process?
3. Do you want to mentor individuals in the future? If so, why? If not, why not?
4. How have you "selected" mentees in the past? What would (will) your process be for finding and selecting mentees in the future?
5. What barriers exist that you work through (or have worked through) to mentor others?
6. What would help you to mentor others?

For new practitioners (mentees):

1. Are you currently being mentored? If so, what is the approach you take with your mentor? If you are not, is a mentoring relationship something you are interested in?
2. What are your biggest frustrations or concerns regarding your development as a UX professional? How are you gaining experience and guidance today?
3. Do you anticipate having an interest being involved in future mentoring relationships as a mentee? What about as a mentor? Why?
4. How have you "found" mentors in the past? What would (will) your process be for finding and selecting mentors in the future?
5. As a mentee, what barriers exist that negatively impact or prohibit your mentorship?
6. What would help improve your experience as a mentee?

Mentorship barriers & technical needs

1. What would an ideal online mentoring system look like from your perspective? What functionalities should it have? What tasks would you want to perform? What information would you want to get from the system? Please tell me your top 5.
2. Do you foresee any benefit of an online mentoring system? Is there anything in a mentor-mentee relationship that can be easier done online than face-to-face?

Competitive Analysis

The following are the websites we evaluated as part of our research:

[500 Startups](#)

[Meetup.com](#)

[Unicorn Institute](#)

[UXMentors](#)

[UXPA UK Development \(Find a Mentor\)](#)

[Interaction Design Association](#)

[Quora](#)

[Skillshare](#)

[icouldbe](#)

[eMSS](#)

[MENTOR](#)

[Dating websites \(Match.com, etc.\)](#)

[After College network](#)

[ACM SIGCHI mentoring program](#)

[LinkedIn](#)

[Other Concepts](#)