Usability Study

| **Demographic Data** | **Student 1** | **Student 2** | **Student 3** | **Student 4** |
| --- | --- | --- | --- | --- |
| Name | Phurtemba Sherpa | Minh Vu | Filobatire Henein | Mesgana Geletu |
| Major | CSSE | CSSE | CSSE | CSSE |
| School (College) | UW - Bothell | UW - Bothell | UW - Bothell | UW - Bothell |
| Gender | Male | Female | Male | Male |
| Age | 25 | 30 | 22 | 26 |
| Race/Ethnicity | Asian | Asian | White | African American |
| Disability | None | None | None | None |
| Interview Duration | 30 | 28 | 35 | 30 |

**Verbal Consent**

Before we begin, may I have your consent to participate in this interview? Your insights are incredibly valuable to us, and we'd love to include your thoughts in our study.

**Introduction**

Hello and welcome. Today, we are excited to introduce you to our Team Recommender System, an innovative tool designed to assist university instructors and students to make group projects more dynamic and successful by using machine learning to match students into teams. This system creates well balanced teams for class projects. It considers a variety of factors like your major, classes, schedules, skills, and interest to suggest teams where everyone can Succeed.

**Phurtemba Sherpa**

* **Pre-Tasks questions:**
  + **Can you describe your past experiences working in teams for class projects? What were the challenges and successes?**

Phurtemba enjoyed working in teams but sometimes found it hard to coordinate schedules.

* + **What are the most important factors for you when forming a team for a class project (Schedules, Skills, Personality, etc)?**

The most important factors for Phurtemba are skills and schedules.

* + **How do you feel about using a machine learning system to form teams? What concerns or expectations do you have?**

Phurtemba does not care much if a team will be formed by using a machine learning system but worries about the accuracy of team compatibility.

* + **What type of information are you comfortable sharing for the purpose of team formation? How do you feel about the system collecting data on your skills, hobbies, and background?**

Phurtemba is comfortable sharing academic and professional skills but is cautious about personal hobbies and background.

* **Tasks:**
  + **Profile Creation:** Check out the profile creation on the system. Include details about major, class standing, current classes, schedule, availability, skills, hobbies and demographic information.
  + **Team Recommendation Review:** Review the team recommendation provided by the system and professor. Why would you accept this recommendation or reject it?
  + **Team’s Homepage:** Explore the team homepage and identify any modifications or improvements you would suggest.
* **Post-Tasks questions:**
  + **How did you find the overall experience of using the system for team formation?**

Phurtemba found the system user-friendly and efficient.

* + **Was there any information or feature you felt was missing or could be improved in the system?**

He suggested including a dropdown menu to help select skills, and hobbies.

* + **How clear and understandable were the team recommendations presented by the machine learning model?**

He prefers this automated system for its time-saving potential.

* + **Would you prefer this automated system over traditional methods of team formation? Why or why not?**

He would prefer the automated system over traditional methods because it removes personal bias and ensures a fair distribution of skills across teams. It makes the process more objective and can potentially lead to more balanced and effective teams.

**Minh Vu**

* **Pre-Tasks questions:**
  + **Can you describe your past experiences working in teams for class projects? What were the challenges and successes?**

Minh had mixed experiences; success depended heavily on team communication. In well-communicated teams, she thrived, but lack of clarity often led to frustration.

* + **What are the most important factors for you when forming a team for a class project (Schedules, Skills, Personality, etc)?**

Personality and schedules are Minh 's priority for team formation.

* + **How do you feel about using a machine learning system to form teams? What concerns or expectations do you have?**

Minh is excited about the machine learning system but wants assurance of data privacy.

* + **What type of information are you comfortable sharing for the purpose of team formation? How do you feel about the system collecting data on your skills, hobbies, and background?**

Minh is open to sharing most information but wants transparency about how the data is used.

* **Tasks:**
  + **Profile Creation:** Check out the profile creation on the system. Include details about major, class standing, current classes, schedule, availability, skills, hobbies and demographic information.
  + **Team Recommendation Review:** Review the team recommendation provided by the system and professor. Why would you accept this recommendation or reject it?
  + **Team’s Homepage:** Explore the team homepage and identify any modifications or improvements you would suggest.
* **Post-Tasks questions:**
  + **How did you find the overall experience of using the system for team formation?**

Minh was pleased with the interface.

* + **Was there any information or feature you felt was missing or could be improved in the system?**

She recommended adding a homepage after the student signed in.

* + **How clear and understandable were the team recommendations presented by the machine learning model?**

Minh appreciated the clear visual representation of team strengths.

* + **Would you prefer this automated system over traditional methods of team formation? Why or why not?**

She would definitely choose the automated system because of its efficiency and the innovative way it matches team members. By analyzing skills, availability, and other factors with machine learning, it minimizes the time spent on manual team formation and ensures a more strategic alignment of team members' strengths and schedules.

**Filobatire Henein**

* **Pre-Tasks questions:**
  + **Can you describe your past experiences working in teams for class projects? What were the challenges and successes?**

Filobatire found working in teams rewarding but had issues with unequal work distribution.

* + **What are the most important factors for you when forming a team for a class project (Schedules, Skills, Personality, etc)?**

Diversity and skills are what Filobatire values most in a team.

* + **How do you feel about using a machine learning system to form teams? What concerns or expectations do you have?**

Filobatire is curious about machine learning but has accessibility concerns.

* + **What type of information are you comfortable sharing for the purpose of team formation? How do you feel about the system collecting data on your skills, hobbies, and background ?**

Filobatire is willing to share information as long as the system is accessible.

* **Tasks:**
  + **Profile Creation:** Check out the profile creation on the system. Include details about major, class standing, current classes, schedule, availability, skills, hobbies and demographic information.
  + **Team Recommendation Review:** Review the team recommendation provided by the system and professor. Why would you accept this recommendation or reject it?
  + **Team’s Homepage:** Explore the team homepage and identify any modifications or improvements you would suggest.
* **Post-Tasks questions:**
  + **How did you find the overall experience of using the system for team formation?**

Filobatire was satisfied with the system's inclusivity and ease of use.

* + **Was there any information or feature you felt was missing or could be improved in the system?**

Filobatire recommended more accessibility features, like text-to-speech for team updates.

* + **How clear and understandable were the team recommendations presented by the machine learning model?**

Team recommendations were clear, but Filobatire requested more details on diversity factors.

* + **Would you prefer this automated system over traditional methods of team formation? Why or why not?**

He would choose the traditional method of team formation, where either a professor assigns teams or students form groups together. This method allows for a more human touch in the team-creation process, taking into account not just skills and availability but also interpersonal dynamics and friendships that a computer might not recognize.

**Mesgana Geletu**

* **Pre-Tasks questions:**
  + **Can you describe your past experiences working in teams for class projects? What were the challenges and successes?**

Megsana's teamwork experiences have been highly positive, consistently boosting his success in academic pursuits

* + **What are the most important factors for you when forming a team for a class project (Schedules, Skills, Personality, etc)?**

Mesgana prioritizes clear communication.

* + **How do you feel about using a machine learning system to form teams? What concerns or expectations do you have?**

He is hopeful about the machine learning system but needs assurance that it can accommodate his needs.

* + **What type of information are you comfortable sharing for the purpose of team formation? How do you feel about the system collecting data on your skills, hobbies, and background?**

Mesgana agrees to share information if it leads to a supportive team environment.

* **Tasks:**
  + **Profile Creation:** Check out the profile creation on the system. Include details about major, class standing, current classes, schedule, availability, skills, hobbies and demographic information.
  + **Team Recommendation Review:** Review the team recommendation provided by the system and professor. Why would you accept this recommendation or reject it?
  + **Team’s Homepage:** Explore the team homepage and identify any modifications or improvements you would suggest.
* **Post-Tasks questions:**
  + **How did you find the overall experience of using the system for team formation?**

Mesgana enjoyed the system and found it easy to use.

* + **Was there any information or feature you felt was missing or could be improved in the system?**

He felt the system is complet the way it is.

* + **How clear and understandable were the team recommendations presented by the machine learning model?**

Mesgana thinks that the team recommendations were presented very clearly and understandable.

* + **Would you prefer this automated system over traditional methods of team formation? Why or why not?**

Mesgana thinks an automated system sounds useful but isn't sure it can really get how well people work together. He'd like a mixed method where the system suggests teams by looking at skills and when people are free, but still lets people make some choices or changes themselves.

**Closing**

Thank you so much for sharing your time and thoughts with us today. Your contribution is going to make a real difference in how this system supports student collaboration. We'll diligently work to integrate your suggestions, aiming to provide an even more intuitive and supportive team-building experience. Thank you again.