# USER TEST PLAN

Gopher Buddies, Study Application

## Context

You are one of the researchers behind the "Gopher Buddies" app, an application that focuses on helping students find other study buddies with similar study habits, preferences, and goals. You would like to conduct a usability test to gather information on usability issues, get general feedback, and also demonstrate that the app works as intended for two tasks. This user test plan will include how to accomplish these goals, with a statement of objectives, a consent form, information about the intended users, the setting for the test, methods, tasks, open-ended questions, and the role of the researchers.

## Objectives

1. Formative: identify common usability issues with Gopher Buddies through observation and gather qualitative feedback on what users liked/disliked to use for next iterations
2. Summative: ask users to conduct the User Burden Scale (UBS) evaluating Gopher Buddies to help measure whether the app has low or high burden which helps researchers understand overall user experience

## Users

Participants will include current students at the University of Minnesota and/or alumni; a minimum of 12 user tests will be conducted. The participants should include users from a diverse range of majors and demographics, though the majority of users may be from within computer science related majors.

## Setting

The study will be conducted either in-person one-on-one with the researcher, or via Zoom. In the case of in-person, the researcher will provide a smart phone with the Gopher Buddies app installed and ready to run. Consent forms must be signed. In the case of Zoom, the researcher will run the app via an emulator on the computer and screen share with the participant. Researcher will allow for "remote control" access, allowing the participant to take control of the researcher's screen to perform the tasks provided. Consent may be given verbally, as Zoom meetings will be recorded.

## Researcher Roles

All user tests will be done one-on-one with a member from the research team. The researcher will greet the participant, gather consent, provide an overview about the Gopher Buddies app, explain the tasks the participant will perform, give the participant the post-tasks User Burden Scale (UBS) for a summative measurement, and end with some open-ended questions to gain qualitative feedback. The researcher will be responsible for observing the participant, recording the information via audio, and taking any notes throughout the study. If the participant is needing help, or if they are stuck on a task for more than 5 minutes, it will be up to the researcher to intervene to help and/or move the test forward. All equipment must be reset for the next participant.

## Methods

The overall study will take 30 to 45 minutes on average, though participants will be given a full class period (1 hour and 15 minutes) to complete the user test. The following is a breakdown of the sequence of duties the researcher must conduct and the approximate length of time each may take:

- The researcher will greet the participants, gather consent, describe the goals of the study, and give a brief overview of the Gopher Buddies app while answering any initial questions. (~5 minutes)
- Researcher will explain the first task scenario. The participant will be asked to do the task in a think-aloud method while using Gopher Buddies (see below for tasks). The researcher will observe the participant, record the study via audio, and take notes as needed throughout the study. After completion of the first task, the researcher will explain the second task scenario and prompt the participant to start the next task. (~15 minutes).
- After the completion of the tasks, the researcher will introduce a modified version of the User Burden Scale (UBS). The UBS will give researchers a summative measure of whether or not the app 1) was difficult to use, 2) time and social factors, 3) had a mental/emotional burden, and 4) privacy factors. The researcher will explain its purpose and provide a Google Form link (below) to the scale for the participant to evaluate Gopher Buddies and the tasks they completed. (~10 minutes)
- The researcher will ask the participant some open-ended questions and general feedback on Gopher Buddies (~5 minutes).
  - What is your overall perception of Gopher Buddies?
  - Could you see yourself using an app like this? Why or why not?
  - What are some things you liked about Gopher Buddies? What are some dislikes?
  - What would change about Gopher Buddies to make it more useful?
  - Any other feedback for us?
- Finally, the researcher will thank the participant for their time.

## Metrics

1. ***Think-Aloud Usability Tasks:*** formative evaluation through observation of tasks; allow for the researcher to observe different usability errors and user reasoning as the participant completes tasks.
2. ***User Burden Scale (UBS):*** summative evaluation as the user will complete a short, modified version of the UBS after their completion of the tasks. Will help the research team determine if Gopher Buddies has low or high burden—a higher level of burden on users may have a negative effect on the initial adoption of the app, retention, and overall user experience. The UBS will give the team a better understanding of what areas may be placing burden on users, and it will also help target future design efforts and what areas need improvement to reduce burden.
   - User Burden Scale - https://depts.washington.edu/chilllab/research/user-burden-scale/
   - Gopher Buddies User Burden Scale (UBS) Form - https://forms.gle/iuk7PZgg3CELLF5V8
3. ***Open-Ended Questions and General Feedback:*** formative evaluation through direct user feedback. Allows for more qualitative feedback about likes/dislikes for future iterations

**Tasks**

Think-Aloud Usability Tasks: Participant will perform both tasks with the Gopher Buddies application.

1. **User Profile:** *"Your name is Oak Culus, and you are enrolled in the College of Design as a Product Design major at the University of Minnesota. You have just logged into the Gopher Buddies app and want to update your profile and add Discord as your main communications platform. You'd also like to remove one of your classes and add 'CSCI 5115: User Interface Design' in its place. Edit your profile to match Oak Culus' needs."*
2. **Find a Buddy:** *"The Gopher Buddy Find Space section allows you to be matched with other students who fit your study habits. Looking at your current buddies, you notice that Goldy Gopher doesn't really match your study style. Unfollow Goldy and find two other students to follow who match your study preferences. View their profile and attempt to send a message."*

# CONSENT FORM

Gopher Buddies, Study Application

You are invited to be in class project investigation for the “Gopher Buddies” app. “Gopher Buddies” is an application intended for students at the University of Minnesota that focuses on helping others find study buddies with similar study habits, preferences, and goals. We would like to conduct a usability test to gather information on usability issues, get general feedback, and to see that the app works as intended for two tasks. This work may help us to design and improve iterations for the app prototype that could assist students in establishing study connections and support their study habits. We ask that you read this form and ask any questions you may have before agreeing to take part.

This class project is being conducted by: Alex Ayres, Isaac Lee, Praguna Bhatnagar, Temay Broadway, William Oswald, and Zachary Rankin from the University of Minnesota.

## Procedures

If you decide to participate, we will ask you to participate in a research study with us. The study will take approximately 30 to 45 minutes of your time and will consist of a usability study of you performing two designated tasks, a short survey about the tasks performed, and end with the researcher asking a few open-ended questions to understand your perspective and gain feedback to help with future iterations. For local participants, the study will be conducted either in-person one-on-one with the researcher at the University of Minnesota. For non-local participants or if more convenient, the study may be done over Zoom.

## Risks and Benefits of Being in the Study

The audio from the study that you participate in will be recorded and any notes that the researcher takes, as well as any surveys you fill out will be shared with course staff. While you may not directly benefit from being in this study, data from this study will be used in the development of an application that will be designed to meet the needs of students like yourself.

## Compensation

None

## Confidentiality

We will not collect any information that will make it possible to trace your participation back to you and will not share your participation with anybody outside of the student project team. We will keep your participation private to the extent allowable by law.

## Voluntary Nature of Project Participation

Participation in this project is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**Contacts and Questions**

The students conducting this project are: Alex Ayres, Isaac Lee, Praguna Bhatnagar, Temay Broadway, William Oswald, and Zachary Rankin. The faculty member supervising this class project is: Dr. Lana Yarosh. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at Keller Hall (Office 5-187), 443-622-4020, lana@umn.edu.

***You may keep this page for your records after signing and returning the attached sheet.***

**Statement of Consent**

I have read the attached information regarding the class project "Gopher Buddies, Study Application". I have asked questions and have received answers. I consent to participate in this class project.

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____