

User Study

CPS 350 and ART 370A

User Study

Do a qualitative User Study of your Hybrid Mobile App project ("P1"). Use it to improve your system and its UI.

Read before starting: "Chapter 9. Usability testing on 10 cents a day" in Don't Make Me Think. Revisited, by Steve Krug. It's on informal reserve in the workstation lab (KOSC 244).

Procedure for doing the study:

- Define 3-5 tasks for users, corresponding to the major use cases. If you need more tasks to cover the use cases, do that.
- Recruit at least 3 users - they must be students, faculty, or staff of Gordon College.
 - Ask their permission before starting any audio or video recording. Don't do anything they aren't completely comfortable with.
- Ask participants to complete tasks while thinking aloud
- Note critical incidents during the course of the study
- Audio record for quotes, if practical. (Consider video of the device.)
- Above all else: do not help the user (unless they get too frustrated and you have to stop that task), & keep them talking

Very important requirements:

- You may not publish this research. It is for class use only.
- You must preserve the privacy of your participants. You must keep their names, personal information, and recognizable image or recording confidential.
- In your report, you may (and should) quote their words and identify them as "participant 1", etc. You may include still images of the mobile device with their hand. You may give relevant background (like why and how they would use your system, and aspects of their experience or background that influence their perspective).

Write and present a report. Sections must include:

- Methodology & Participants
 - Describe the tasks in detail, including the steps you anticipated users taking. It is best to write this section before doing the tests.
 - Briefly summarize relevant characteristics of the users: students, staff, employees, experience with similar systems, etc.
- General reactions from users
- Positive & negative comments (exact quotes from notes or audio recording)
- List of usability issues with severity ratings, categories, and images. Images may come from video of the user testing, and/or screen shots of the UI.

- Submit the written report as a .pdf or .docx in Blackboard.
- Present brief highlights of your report in class. Show issues with a demo or with screen shots.

Extra credit:

- Fix one or more of the higher-priority usability issues found in your study.
- Repeat the user study with just 1 user, either a new user or one of your initial study users.
- Report on the results.

Submit the report via Canvas (as .pdf or .docx) and present in class. Written reports will be judged on clarity, completeness, and insight gained, as well as on coverage of the intended capability of the system. Oral reports will be judged on effectiveness in communicating the major results in the context of your app in the allotted 5 minutes.

User Tasks

1. Find weather conditions now and 10 hours from now and find the sunset for today
 - a. Go to home page, look at temperature, and current weather text/icons
 - b. Scroll down and find the temperature/conditions from hour list
 - c. Scroll to bottom and find sunset icon and time at bottom
2. Find the event on Wednesday and tell the temperature, time, and precipitation
 - a. Go to event page
 - b. Click on Wednesday event (Morning Chapel)
 - c. Expand the list item
 - d. Find weather conditions under expanded item
3. Search for your hometown weather through zip code or address and talk about current weather there
 - a. Go to search page
 - b. Put in address
 - c. Look at rendered weather for that location
4. Find weather for Seattle and talk about current weather there
 - a. Go to search page
 - b. Put in "Seattle"
 - c. Look at rendered weather for that location

Participant Feedback

Participant 1 (History Major, Senior, Gordon Student):

- Sunset doesn't have "am" or "pm" specified. Just the time
- Fahrenheit or Celsius not specified

Participant 2 (Kinesiology Major, Senior, Gordon Student):

- Fahrenheit or Celsius not specified
- Sunset intuitively PM but not explicitly
- Said it was very straightforward and did not have trouble navigating UI

Participant 3 (Comp Sci & Math Major, Senior, Gordon Student):

- User kept repeatedly pressing the times to see if they were interactive
- Noted effectiveness of icons

Participant 4 (Engineering Major, Senior, Gordon Student):

- Dark mode would be nice

Participant 5 (Business Admin & Finance, Sophomore, Gordon Student):

- Thought he could interact with the magnifying glass on the search bar
- Mentioned that the addition of local time for searched cities outside of the user's current time zone would be helpful.

Participant 6 (Physics Major, Senior, Gordon Student):

- Fahrenheit implied but no explicit
- No other feedback given, seemed to have no problem understanding the purpose of each section

Usability Issues

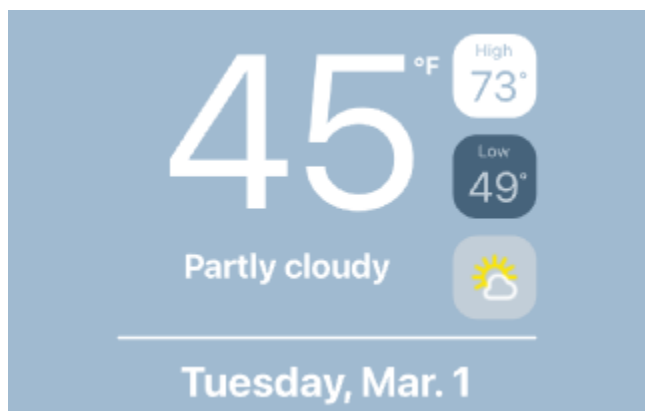
The usability issues are detailed below in order of severity, and pictures of the missing parts and updated design included.

1. Whether the temperature was in fahrenheit or celsius. All knew that it was the intended temperature, but it was not quick to see that it was fahrenheit.
 - a. This has been fixed as of the most recent commit and adds degrees Fahrenheit to relevant temperature components.

Before:

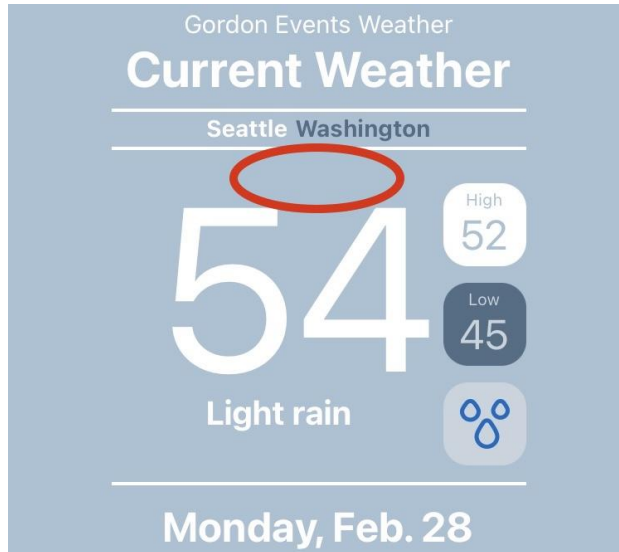


After:



2. What the current local time was for the current weather location (especially important in the search feature)
 - a. Now includes local time below the location to better indicate what time the weather is being pulled for

Before:



After

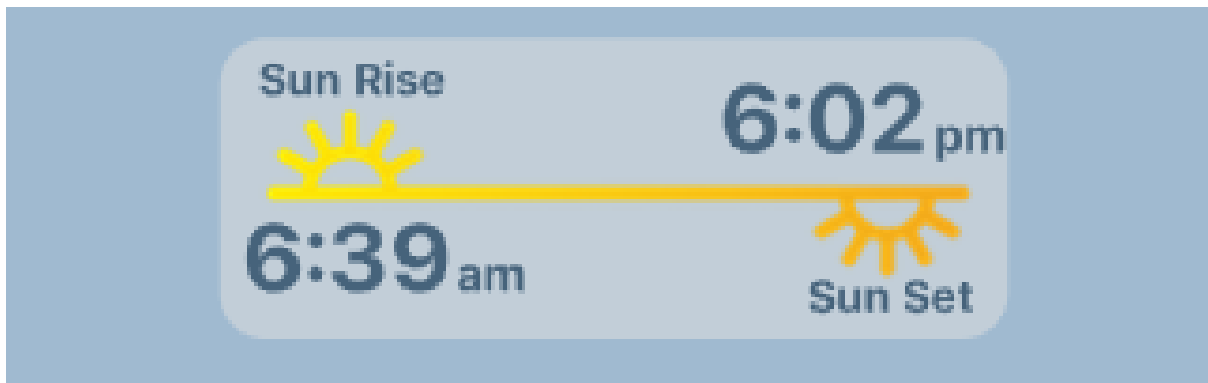


3. Sunrise and sunset did not have “am” or “pm” identifiers, like with the previous issues, this was intuitively there, but not explicitly
 - a. “am” and “pm” now are listed next to their respective sunrise or sunset times.

Before:



After:



Participant Feedback #2

Participant 1 (Kinesiology Major, First-Year, Gordon Student):

- No trouble accessing any part of the weather
- Everything seems straightforward

An informal comment was made about adding an x to the search bar in order to cancel search, but other than that, the app seems to be intuitive and user friendly at least for the tests that we did.