

CoCo: Collaborative Collections

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CoCo is a way to collaboratively create digital memories of events.

Team members and roles

Austin -- team manager (both coordination and big picture), design (interaction), development

Jeff -- development, user testing, design (interaction)

Tom -- documentation, design (visual), development

Introduction and Mission Statement

CoCo is a tool that enables the capturing of moments, gives people ways to re-experience them, and is a platform on which to share moments with friends. This report is the summary of the pilot usability testing for CoCo's low-fi prototype. The low-fi prototype consists of a deck of index cards with all the major screens we will eventually implement in the application. The purpose of the pilot usability testing was to determine what about the app worked well and what about it didn't. This testing is important because it is our first opportunity to confirm both what we think we know about how a customer would accomplish tasks with our interface and also what we don't know about what the customer might struggle with or *want* to do with the application. The statement that best describes CoCo's mission is the tagline above. CoCo is a way to collaboratively create digital memories of events. It allows users to curate, experience, and share the best of any event.

Prototype Description

The CoCo low-fi prototype simulates a modern smartphone interface. It is touch-based and moves through visual screens. The default screen shows the finished event collections most relevant to the user. This screen has 3 panels along the bottom that allow the user to toggle the view between upcoming events, event collections currently in the curation phase, and finished event collections for viewing. It also has a camera button in the nav bar for quick access. This screen is shown in figure 1 below. The screen flow in figure 2 displays how the customer completes the task of capturing and sharing content. Figure 3's screens show the flow for voting on content in "recent" collections still within the 36-hour voting period. The screen flow for sharing finished connections is shown in figure 4. Figure 5 shows the layout of the screens from the entire application. Screen flows are read left to right, top to bottom.

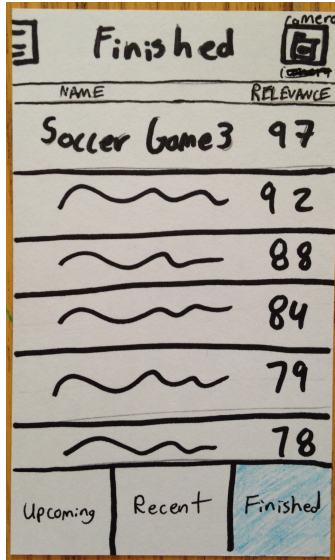


Figure 1 - CoCo Home Screen

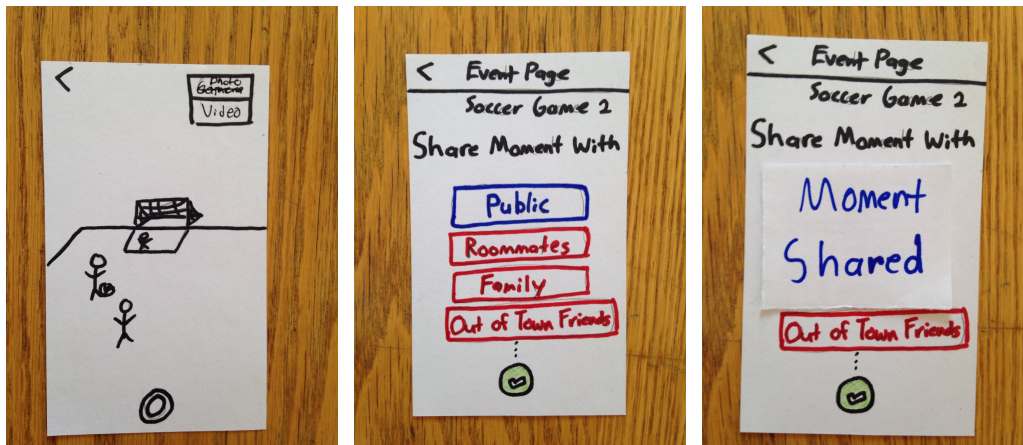


Figure 2 - Capturing & Sharing a Moment

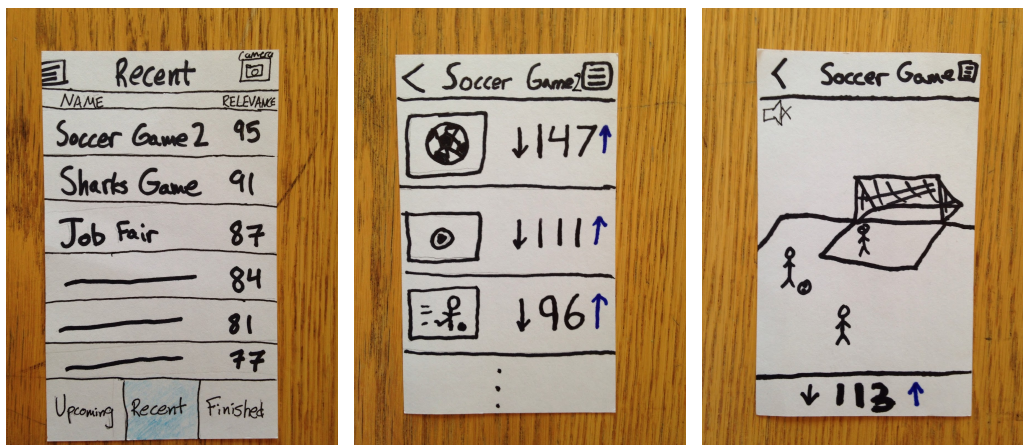


Figure 3 - Voting On Recent Content

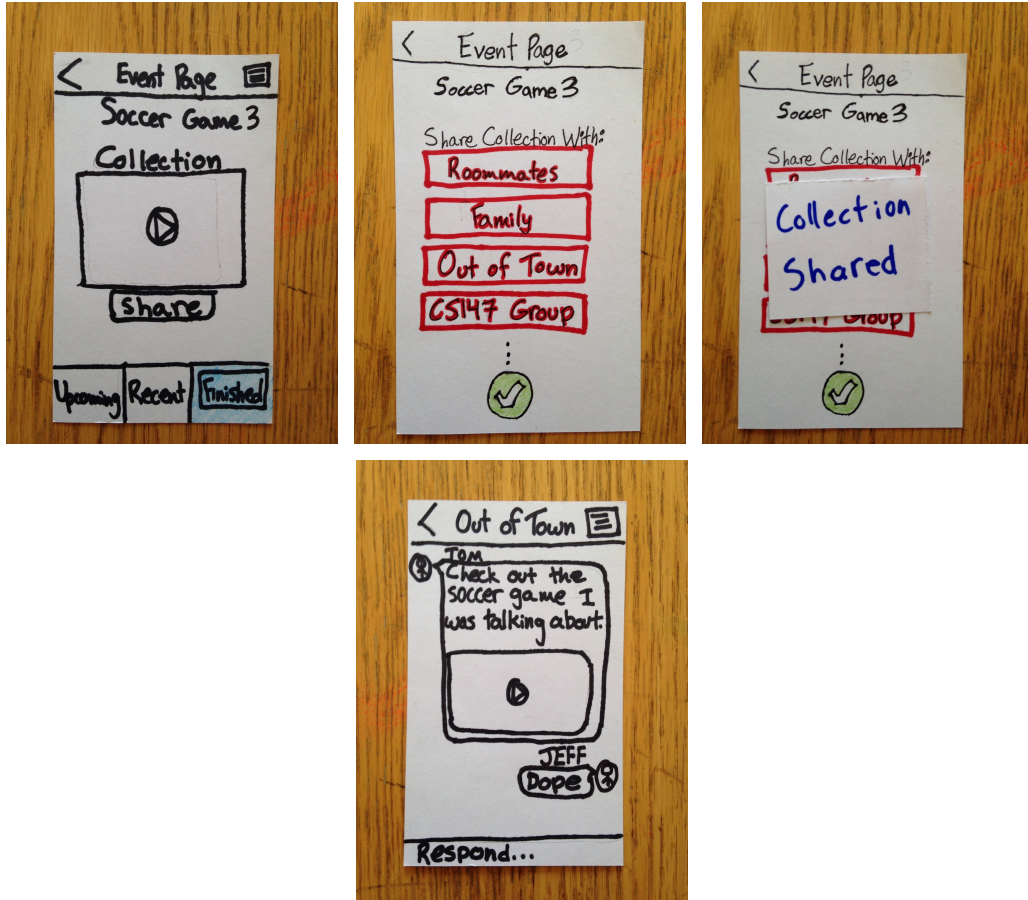


Figure 4 - Sharing a Finished Collection With a Friend Circle

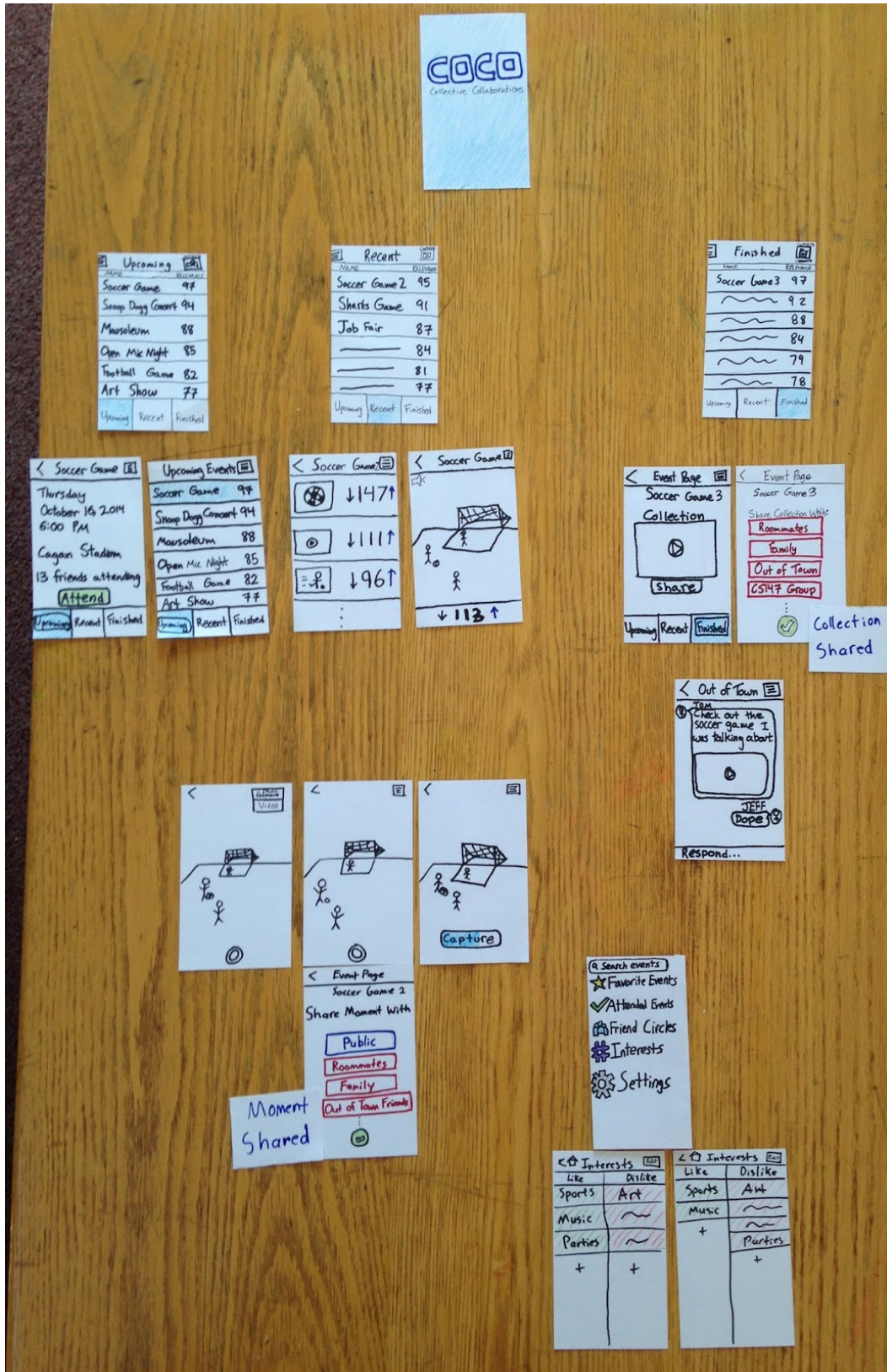


Figure 5 - Entire Application Prototype Laid Out

Method

The participants in the experiment were 3 graduate students recruited during a meal in a dining hall on campus. They were selected at random. The experiments were conducted separately at one table in the hall. Tom played the greeter/facilitator role, and was the only one who spoke. Jeff was the “computer” in the experiment, controlling the prototype’s logic. Austin was an observer, taking notes and recording information throughout the process. We read each participant the script we created and confirmed that they understood the tasks at hand. We had each participant attempt the 3 main tasks of the application, creating/sharing content, voting on content within a collection, and sharing a finished collection. Tom presented the testers with the home screen of the application and demonstrated an unrelated task (changing the settings that calculate event relevance to the user) in order to familiarize the testers with the process of navigating the low-fi prototype. We recorded all questions the participants asked during the process, and care was taken not to steer participants through the process when questions arose. The test mainly measured the number of times participants were confused about performing a task.

Results

The first participant had no trouble capturing content but was unclear as to what sharing a moment with “Public” actually meant. The participant also ran into confusion regarding what a “recent” event was -- finished or unfinished -- for the second task, although the participant found the second task most intuitive. The participant wondered why, during the third task, that collections could only be shared with friends and not with the “public.” The participant also had a thought-provoking question about what they would do in the app in the event that they changed their mind about attending an event.

The second participant was unclear at the home screen whether she was adding to an existing event or creating a new event. However, once the task was underway the participant had no additional questions.

The third participant had some trouble with the task of capturing a moment, specifically in regard to choosing to capture video or photo. This confusion prompted an upcoming UI change. However, after that the participant ran into no other issues that caused confusion.

A couple of the participants remarked that the camera icon wasn’t noticeable, but that may have been due to the rough, hand-drawn nature of the low-fi prototype.

Discussion

Overall the participants ran into the most trouble at the beginning of the first task. Generally only the beginnings of tasks were at all confusing for them, and all 3 quickly learned to navigate after their initial confusion. Tasks 2 and 3 went better than task 1 every time, indicating that the flow of capturing and sharing moments needs some modification.

The first participant's question regarding changing their mind about an event demonstrated the need for users to have the ability to "unattend" an event, which is a UI change we will have to implement. We might also have to add something to the camera icon to make it stand out better. Another UI change we will have to make is to the names of the panels on the home screen. The meaning of "recent" wasn't clear to all the participants, so we will change "recent" to "voting." Similarly, we will change "finished" to "archived."

Other UI changes suggested after the experiment included the ability to invite friends to events, or let them know about events ahead of time. A notification system was also proposed for events.

APPENDIX BELOW

Consent Form

The CoCo application is being produced as part of the coursework for Computer Science course CS 147 at Stanford University. Participants in experimental evaluation of the application provide data that is used to evaluate and modify the interface of CoCo. Data will be collected by interview, observation and questionnaire.

Participation in this experiment is voluntary. Participants may withdraw themselves and their data at any time without fear of consequences. Concerns about the experiment may be discussed with the researchers (CoCo) or with Professor James Landay, the instructor of CS 147:

James A. Landay
CS Department
Stanford University
650-498-8215

landay at cs.stanford.edu

Participant anonymity will be provided by the separate storage of names from data. Data will only be identified by participant number. No identifying information about the participants will be available to anyone except the student researchers and their supervisors/teaching staff.

I hereby acknowledge that I have been given an opportunity to ask questions about the nature of the experiment and my participation in it. I give my consent to have data collected on my behavior and opinions in relation to the CoCo experiment. I also give permission for images/video of me using the application to be used in presentations or publications as long as I am not personally identifiable in the images/video. I understand I may withdraw my permission at any time

Name _____

Participant Number _____

Date _____

Signature _____

Witness name _____

Witness signature _____

Demo Script

We have a basic paper prototype of a mobile phone application that we created for our HCI class called CoCo. CoCo is a way to collaboratively create digital memories of events. We are conducting an experiment to evaluate the usability of our user interface. We will show you different pieces of paper representing different screens and you will interact with the screens as if it were a real application on a phone. The goal of this experiment is to obtain information on the usability of our interface so it is important for you to ask any questions that come to mind. Please be honest and if you aren't sure what to do next it is crucial that you let us know and not just guess.

This test is completely confidential and we will not use your name or any other identifying information. Here is a consent form for you to sign. The test data will be kept private, and the results will only be used in modifying our user interface.

We are going to give you three different tasks to complete using our app. Interact with the paper screens just as you would a mobile app, and we will replace the screens when you navigate through the application. You can just push a button with your finger. Please say aloud which button you are pressing so that we can react accordingly.

First we will have a person demo the system for you to show how you would interact with the prototype. They will complete the simple task of changing what events they are most interested in. (Demo changing interests).

Do you have any questions?

Ok, let's begin. Please remember to think out loud when navigating the app.

Task #1:

Your first task is to submit content to a specific event. Imagine you are at a soccer game and want to capture and share a moment. (share to who?????)

Task #2:

Ok the next task is vote on content from a recent event that just happened. Please try to vote on the pictures/videos from the soccer game.

Task #3:

The last task is share a finished collection of a finished event with a specific group of people.

Thank you for your time. We really appreciate your feedback! Have a nice day.

Raw Process Data

Subject 1:

I have to collect an item first. How do I collect an item?

I'll share the collection then!

Share with cs 147 group then boom, so I'll just click the check

Recent soccer game? I'll click the camera icon then.

Let's take a fucking video, boom.

Capture, ding ding ding. I'd either hold it down or click once to start and once to stop.

Gonna share it with my roommates and family. (Did not share with public until prompted).

Task 2 worked great. Very intuitive

Here's the finished tab. Ohhh gotcha. I'll watch it first before sharing it though.

Upcoming: Oh! A snoop dogg concert! *clicks that to see more*

Maybe have a difference between recent and current? (So change it to recently started?)

"what is sharing to public?"

"How come I could share to public for a moment but not for a collection?"

Subject 2:

No questions immediately

Task 1:

Is this soccer game 3 that I'm editing, or am I creating a new one?
Is this a new event? Maybe click on recent to find it.

Is relevance score based on the number of people that have clicked on it?

Ok, I'm gonna click on camera. Click on camera to take a photo. Then I'm gonna take a picture by clicking the button.
I'm gonna share it with the public. And my out of town friends. Is that it? ... Oh, I'll click the green check.

Task 2:

Maybe I don't like that one already, so can I downvote from here?
(yes) ok I'm downvoting it.

Task 3:

What's I understood what the app was doing, I thought it was very intuitive.
Maybe instead of camera, there's a tag of "new moment" above the camera so that I don't try to create a new moment by going to one of the tabs.

Upcoming: what does it mean when it's blue (You're attending it)

If he is attending an event, and wants to unattend, have the attend button change to unattend. "What if it says attending? And there's a little red x next to it to change your mind?"

"Can I share an upcoming event? To let my friends know that I'm going there?" (not yet) That would be really useful. Or like a notification sign to let you know that Jeff shared this moment with you, or Tom shared this event or collection with you.

Subject 3:

No initial questions.

Task 1:

"Am I at the game? I'mma click camera" "gonna record. Do I hold the button down for video?" "I'm guessing the bar starts loading as I click it? Then I'll just wait for the bar to fill up." "I would probably click on capture again when I'm done, even if it's not full yet." "Gonna share this with my roommates. So I'll click roommates.... then I'll click check."

- make it a camera/video slider

Public is clear. "The only reason I wouldn't want to share it publicly is if it had me or my friends in it." "I don't think I would really share it publicly."

Task 2:

Couldn't tell he was in a finished soccer game vs a recent game.

Clicks recent.

Clicks soccer game 2.

Down vote without even watching. Downvote all of them. (Do you want to see them first?) Oh, yeah! I'll click the video one. And then I'll turn the volume on. (mute button is obvious).

Task 3:

So this is a messenger thing insdie the app? Oh it's a group and you have a thread with them and you can like share stuff? Cool.

Is relevance like votes? (no) oh is it like score based on my preferences?

I think it would be pretty cool to have a list of all my friends and groups and stuff.

I think it would be cool, I mean the score thing is good, but if there was just a really quick way to see what my friends are going to.

13 friends attending, but out of how many people? That makes a big difference.