Peekaboo!

Check in with loved ones — while having fun!

CS147 Fall 2022
Jason, Derek, Karson, Winston

Team Presentation

Jason Lin

Sophomore

Last called mom yesterday

Derek Hwang

Coterm

Last called family earlier today

Karson Lippert

Senior

Last called family 2 days ago

Winston Shum

Senior

Last talked with parents today

Problem

People cannot check up on others in an easy manner without being intrusive

Solution

Upload a picture or tap a button to instantly share updates to all family/close friends on a widget

Value Proposition

Share photos and send updates to family and close friends for a ***simple check in***

Outline of Presentation

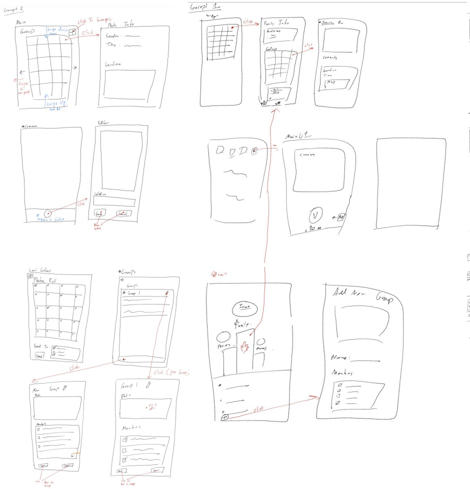
1. Concept sketches and selected interface
2. Our low-fi prototype
3. Testing our low-fi prototype
4. Results and discussion

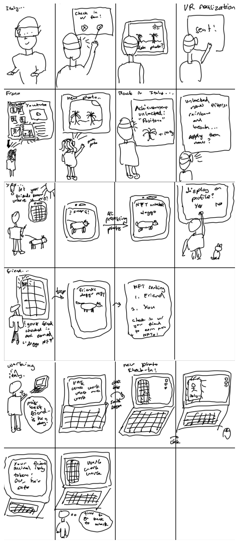
1.

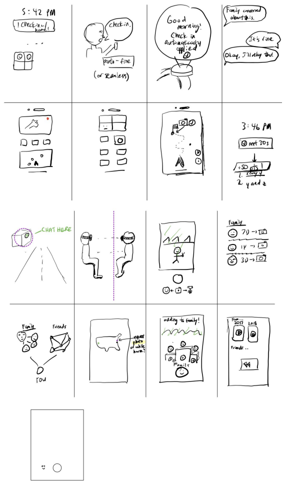
Concept Sketches and Selected Interface

Exploring designs and narrowing down…

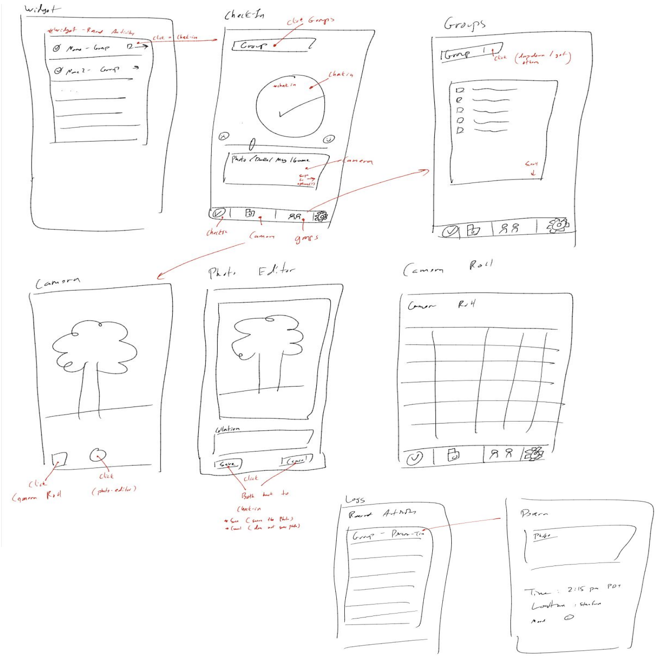
Concept Sketches Overview





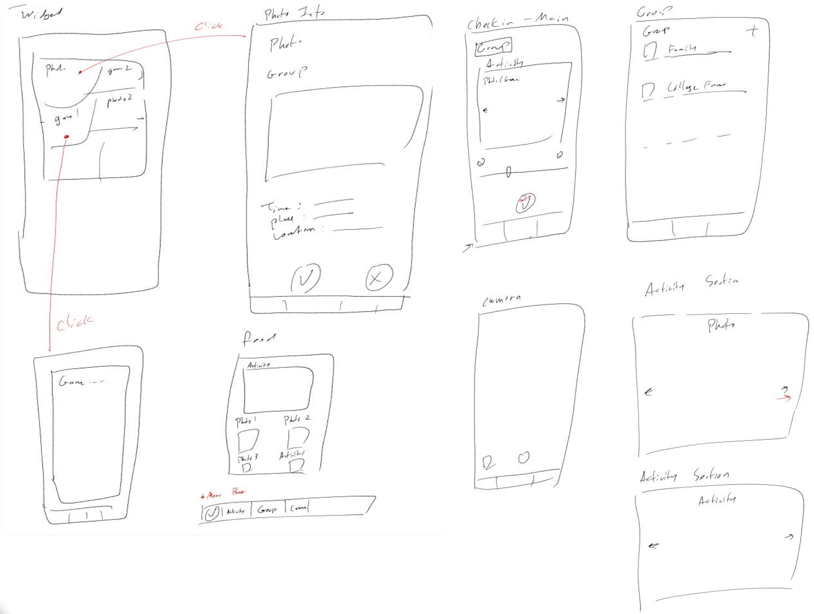

5:42 PM
check-in
Good morning! Check in automatically applied
Family concerned about this.
It's fine
Okay, I'll delay that
3:46 PM
CHAT HERE
You

Fleshed Out Realization #1



Pros	Cons
❖ App opens on check-in page ❖ Power users can edit photos	❖ Can’t see specific content on widget, only text-based information ❖ Too many buttons on home screen

Fleshed Out Realization #2

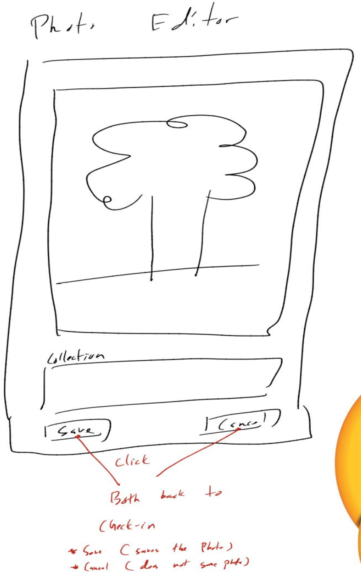


Pros	Cons
❖ Multiple levels of checking in ❖ Can see various types of content on widget	❖ App opens on feed page that displays content shared with you instead of check in page ❖ Have a lot more different screens to navigate to

Why We Chose Realization #2

- Users want a **check-in** app, not a **photo-sharing** app
  - Photo editing doesn’t solve any of users needs
  - But simple activities can help users check in via a fun way

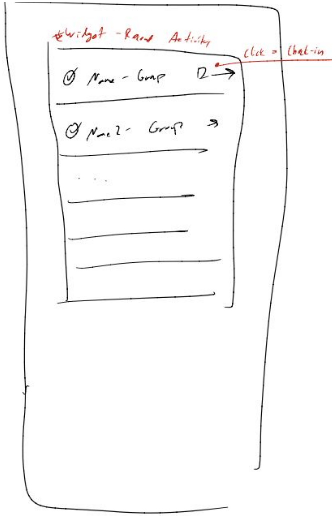
From realization 1:



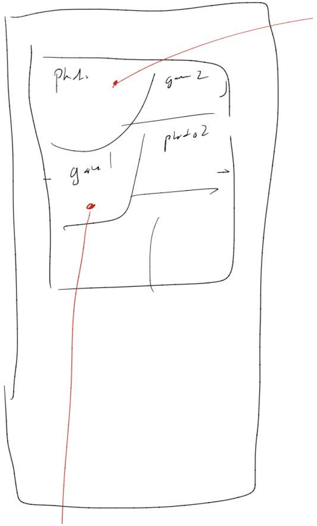
Why We Chose Realization #2

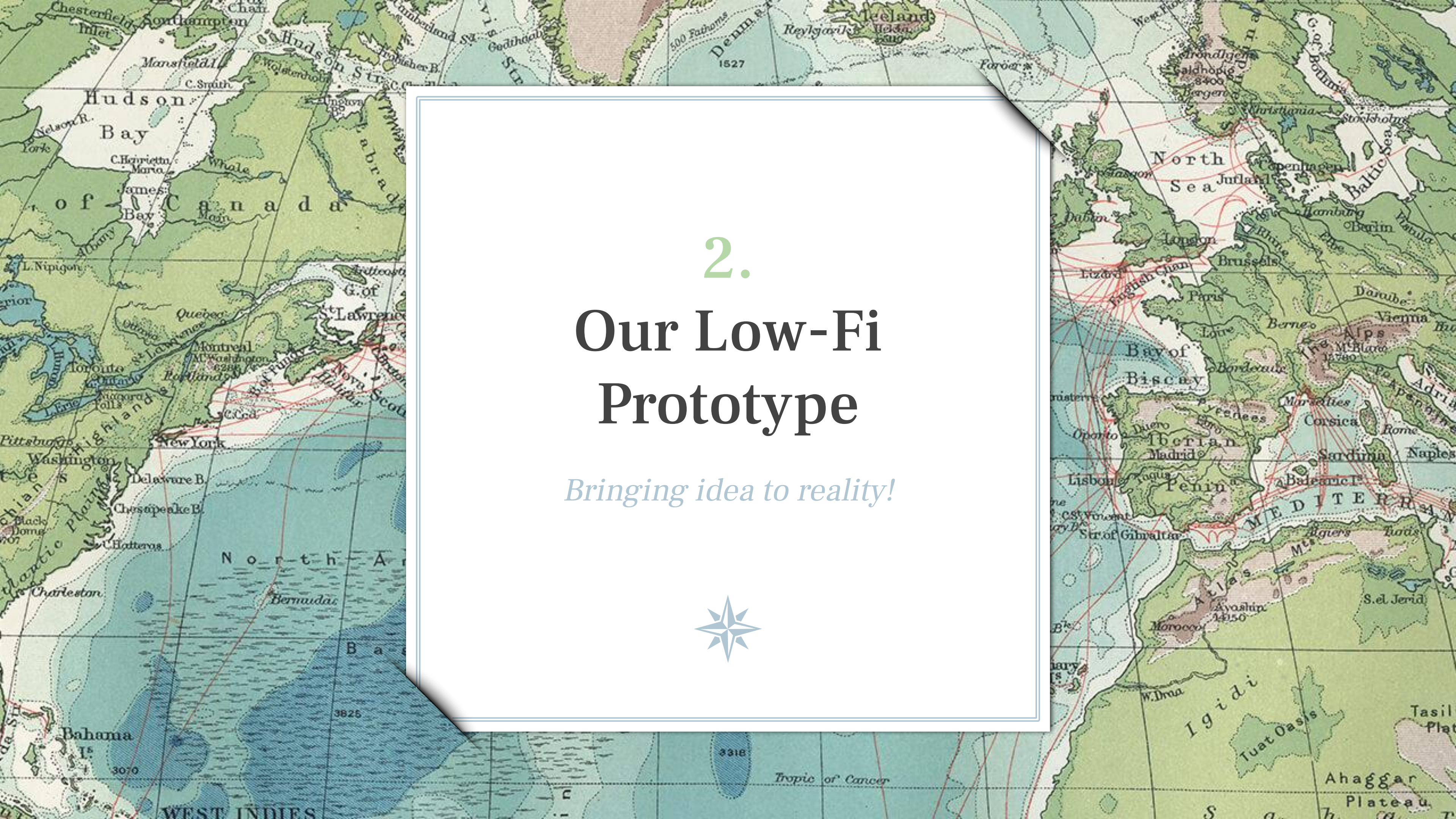
- Reading words on a screen is more **intrusive** than a dynamic display of photos and games
  - Users can easily see what family and friends are doing via photos and games in comparison to a string of texts

Realization #1



Realization #2





2.

Our Low-Fi Prototype

Bringing idea to reality!

How We Built Our Low-Fi Prototype

Paper Prototype

- Used red pen and paper
- Drew real dimensions of a phone on paper

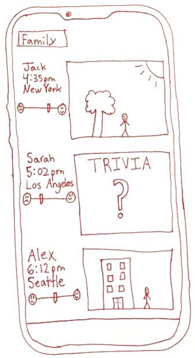
Interactions

- Users simulate movements of tapping, swiping to access different screens, setting sliders with fingers

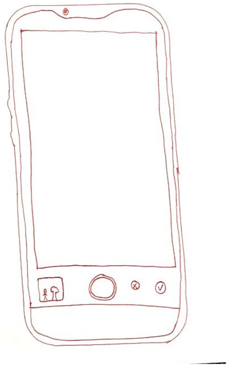
Key Features

- 3 ways to check in: photos, activities, or tapping check in button
- Create and choose groups to check in with
- Play and create activities shared by other users or yourself

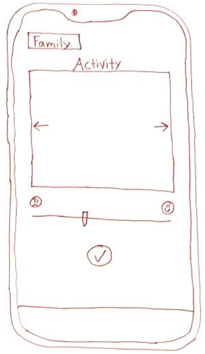
Our Low-Fi Prototype



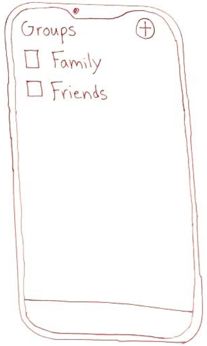
Home Screen



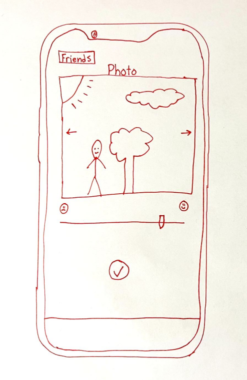
Camera View



Check-in View (Empty)



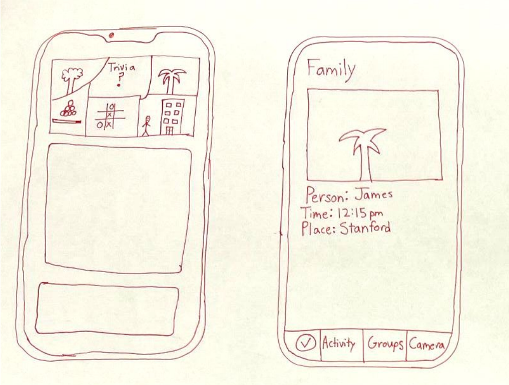
Group View



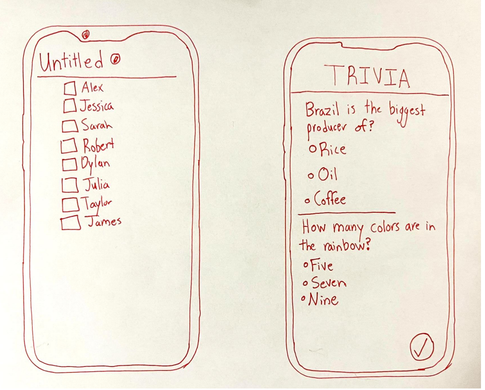
Check in View (Filled)

Camera View

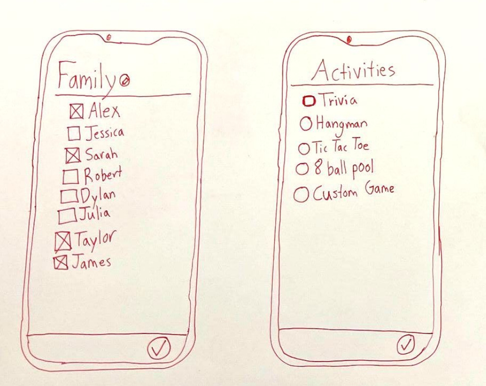
Our Low-Fi Prototype



Widget (Outside of App) *Photo Info View*



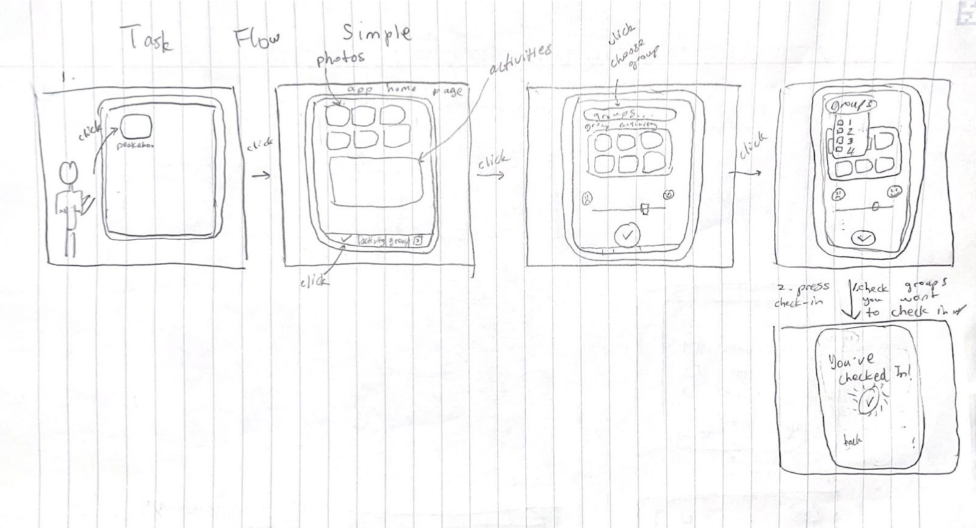
New Group View *Activities View*



Set Groups View *Set Activities View*

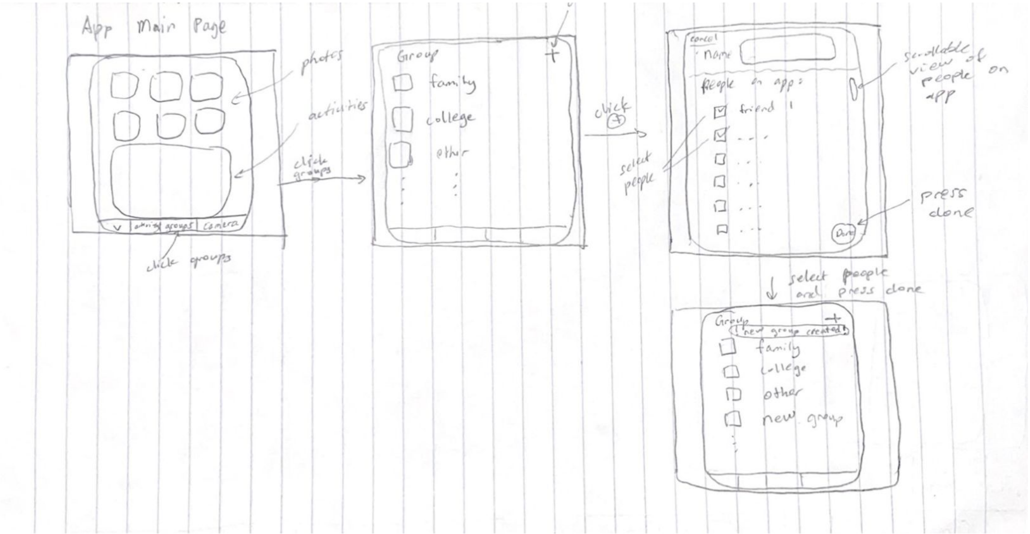
Task Flow (Simple) – Checking in Without Photos

1. Open app
2. Click check-in button on bottom menu bar
3. Tap group button on top to choose group(s) to check in
4. Confirm check-in



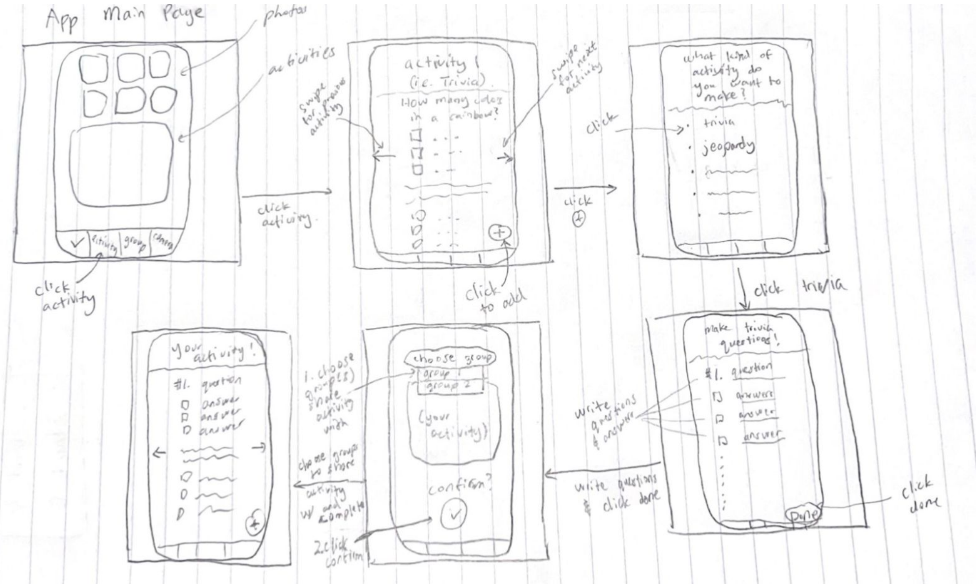
Task Flow (Moderate) – Creating Group

1. Open app and click on groups in bottom menu tab
2. Press add group button
3. Choose users to add into group
4. Press done to finish creating group



Task Flow (Complex) – Making an Activity

1. Open app and click activity on bottom menu bar
2. Click add button on activities page
3. Click activity to add
4. Customize activity and press done
5. Choose group to share activity with
6. Confirm to share activity



3.

Testing Our Low-Fi Prototype

How do users vibe with our prototype!

Usability Goals

Efficient

- Users can complete simple, moderate, and complex tasks in a **timely manner**
- Key measurement metric: how long they took to complete a task relative to the other tasks

Robust

- Users can naturally follow tasks flow with **minimal errors**
- Key measurement metric: how many errors did they make during each task based on a 0-4 scale
- 0 = no problem, 4 = usability catastrophe

Our Procedure

Our Roles

- Karson (Greeter) greeted our participants
- Jason (Facilitator) spoke to users and provided instructions
- Derek (Computer) simulated the response by changing the page users are on
- Winston (Observer) took notes and recommendations

Process Description

- Print out various copies of low-fi prototype
- Went around campus and other places near campus to find test users
- If users accepted to do our test, we would either test them on the spot or somewhere they feel comfortable
- Explain what our app is, how to generally interact with the app, and what the tasks are
- Ask users to complete tasks one by one and observe them
- Synthesize results and collect additional thoughts

Participant #1

Basic Info:

- White male in early 20s
- Found at Stanford track and asked him to do a test on the stands of the track

Participant #2

Basic Info:

- Asian male, late teens
- Found at main quad and asked him if he’d test our prototype there

Participant #3

Basic Info:

- Hispanic woman in her 40s
- Found at Walmart and ran tests directly outside

Participant #4

Basic Info:

- Asian women in her early 20s
- Found at EVGR and ran the test in her room at EVGR

4.
Results and Discussion

Results in Numbers

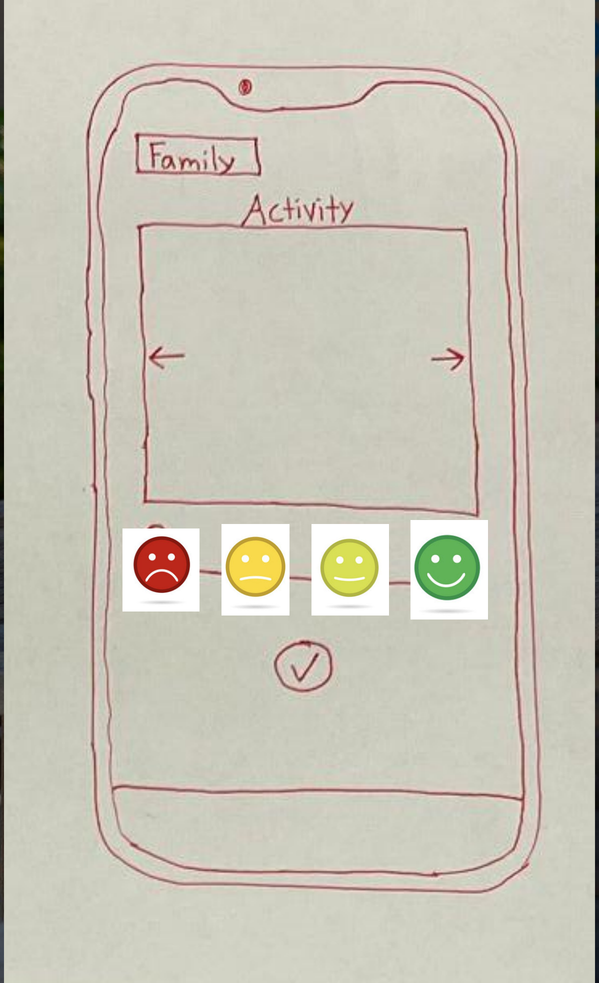
Based on a scale of 0-4 (0 = no problem at all, 4 = usability catastrophe)

User #	Simple Task	Moderate Task	Complex Task
1	0	0	2
2	0	0	0
3	0	0	1
4	0	0	2

Summary of Results and Feedback

Generally, quite easy to follow and use

- ➢ **Easy simple and moderate tasks**, but completing the complex task often induced minor errors and required our guidance
- ➢ Emotions are difficult to categorize on a **continuous** basis; would prefer **discrete** variables (i.e. sad, okay, happy, exuberant)



"I think the emotional scale is hard to quantify on a continuous basis. Instead, it would be easier to follow distinct choices such as sad, okay, feeling good, or feeling great"

— Participant 4

Other Relevant Observations and Feedback

- Users would use this app
- iMessage games already exists, so what makes activities on the app more convenient to use?
- Have the ability to swipe through older updates on the main feed homepage

Did we achieve usability goals?

Our usability goals:

➢ Completed task in a timely manner	✅ (except minor delay for complex task)
➢ Naturally follow task flow with minimal errors	✅ (except minor errors for complex task)

Limitations of Our Test

- Only tested users once, so no insight on how users might interact with the app if they used it multiple times
- Lack of color (only red and white) limits our understanding of how users might interact with colors in our design
- Limited sample size (only people within Stanford area)

Implications and Steps for the Future

1. Steps to complete complex task (i.e. create a new custom activity to share) can be shortened
2. Easier to define emotions based on a discrete scale rather than a continuous scale
3. Implementation of activities must be differentiated from other similar apps such as iMessage games
4. Address the limitations of our test (i.e. across a broader audience and use more colors in prototype)

THANKS!

Any questions?

Appendix.

Concept 4 (Chosen Interface)

Pros

- App opens on the feed section by default
- Mood, activity, and location information all can be added to check-in
- Clear and easy way to send check-in to specific groups
- Adding new groups is obvious and simple
- Swiping from feed page to check-in page is convenient and quick
- Can see everything shared with you through feed page
- Have the option of providing minimal information for simple use case

Cons

- Check-in page could feel overwhelming for new users (depends on the demographic of users we target)
- App doesn't open to check-in page (could be con for some)
- Have a lot more different screens that you can navigate to (given the fact that minigames are incorporated)
- Widget might need to be large to fit enough information

Appendix.

Concept 3

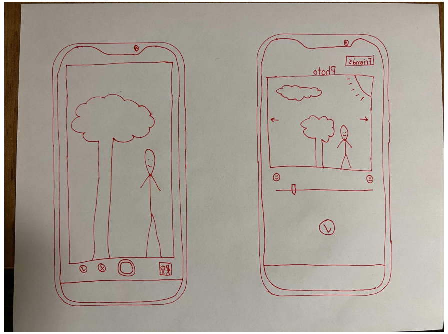
Pros

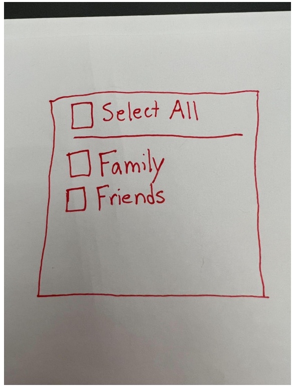
- Extremely clear how to check in (app opens on check-in)
- Photo editing option is a nice option for power users
- Viewing/adding members to a group is easy
- Easy to click on different groups on the widget
- Easy to take photos and check-in (relatively)

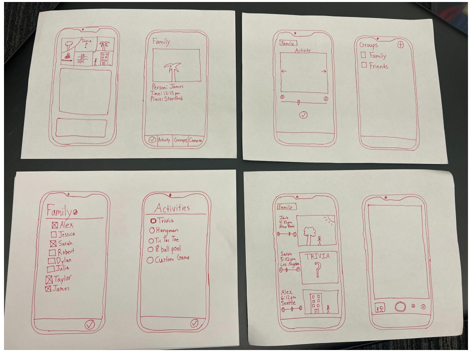
Cons

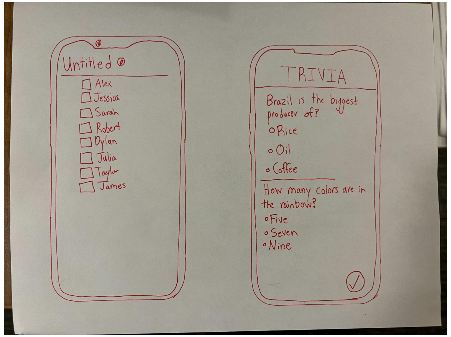
- Can’t see specific content on widget
- Initial screen has many buttons, potentially slowing down users
- Over emphasis of photo components (adding photo to groups)

Appendix.

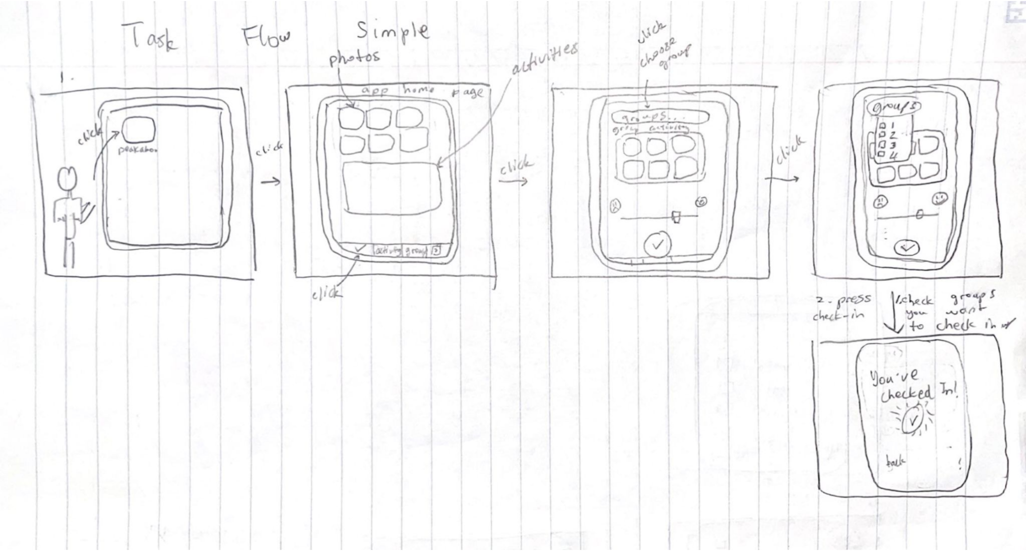

Friends
Photo


□ Select All
□ Family
□ Friends

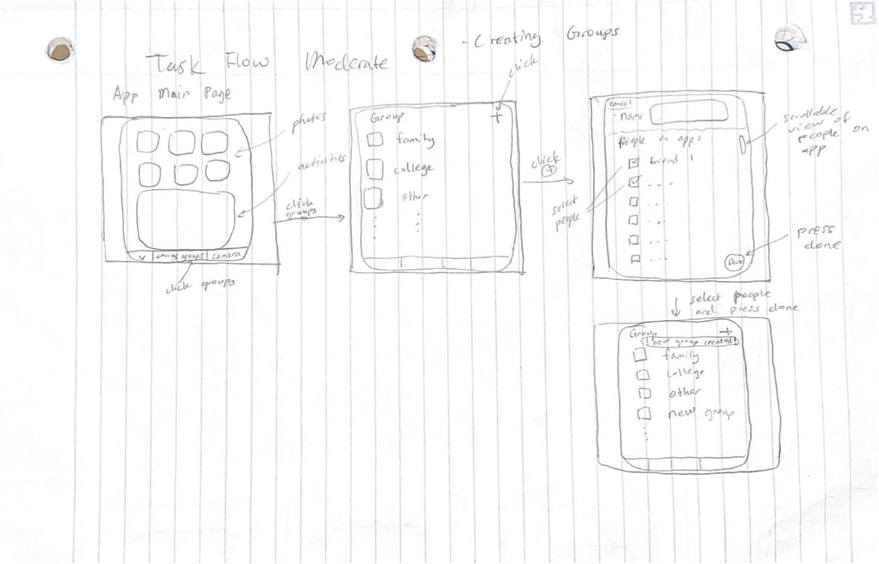

Trivia ?
Family
Person: James
Time: 12:15 pm
Place: Stanford
Activity
Groups
Camera
Family
Activity
Groups
□ Family
□ Friends
Family
☒ Alex
□ Jessica
☒ Sarah
□ Robert
□ Dylan
□ Julia
☒ Taylor
☒ James
Activities
○ Trivia
○ Hangman
○ Tic Tac Toe
○ 8 ball pool
○ Custom Game
Family
Jack
4:35pm
New York
Sarah
5:02pm
Los Angeles
TRIVIA
?
Alex
6:12pm
Seattle


Untitled
□ Alex
□ Jessica
□ Sarah
□ Robert
□ Dylan
□ Julia
□ Taylor
□ James
TRIVIA
Brazil is the biggest producer of?
○ Rice
○ Oil
○ Coffee
How many colors are in the rainbow?
○ Five
○ Seven
○ Nine

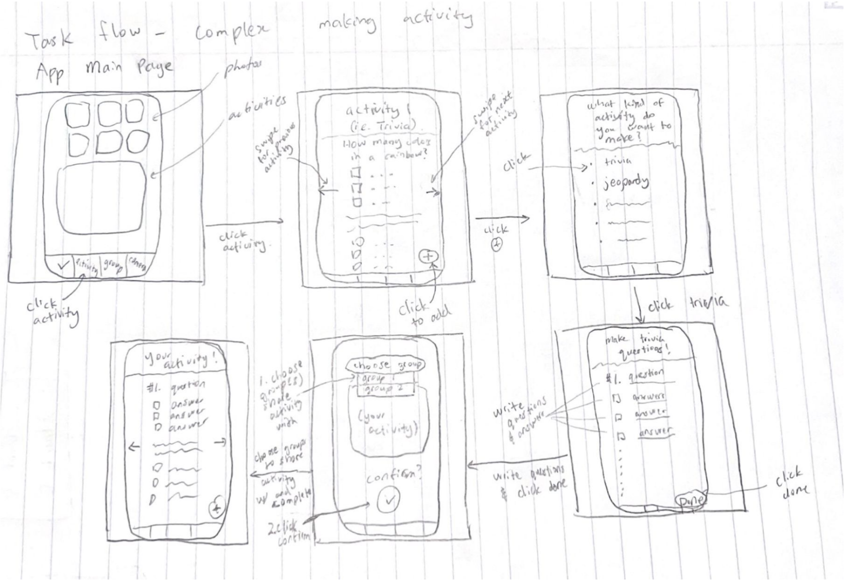
Appendix.


Task Flow Simple
1.
click
peekaboo
click
photos
app home page
activities
activity
group
click
click
click choose group
groups...
group activity
click
groups
1
2
3
4
2. press check-in
1. check groups you want to check in w/
You've checked In!
back

Appendix


Task Flow Moderate - Creating Groups
App Main Page
photos
activities
click groups
activity
groups
camera
click groups
Group
+
click
family
college
other
click +
cancel
name
People on app:
friend 1
select people
scrollable view of people on app
press done
Done
select people and press done
Group
+
new group created!
family
college
other
new group

Appendix.


Task flow - complex making activity
App Main Page
photos
activities
activity
group
camera
click activity
click activity.
activity 1 (ie. Trivia)
How many colors in a rainbow?
swipe for previous activity
swipe for next activity
click to add
click +
what kind of activity do you want to make?
click
trivia
jeopardy
click trivia
make trivia questions!
#1. question
answer
answer
answer
Done
click done
write questions & answers
write questions & click done
choose group
group 1
group 2
(your activity)
confirm?
1. choose group(s) share activity with
2. click confirm
choose groups to share activity w/ and complete
your activity!
#1. question
answer
answer
answer

Appendix.

Organized log of critical incidents based on a scale of 0-4 (0 = no problem at all, 4 = usability catastrophe)

User #	Simple Task	Moderate Task	Complex Task
1	0	0	2
2	0	0	0
3	0	0	1
4	0	0	2