Low-Fi Prototype
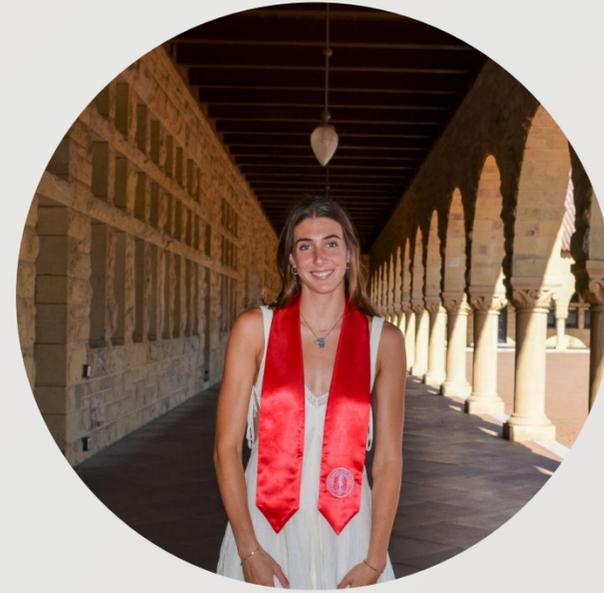
Group 1
Ashley, Maya, Graham, Emma

ROAD MAP

Graham
'25
Indiana

Ashley
'26
Georgia

Maya
'24 & '25
California

Emma
'25
Virginia

ABOUT US

PLATED

Elevate your cooking one swipe at a time..

Value Proposition:
Discover and share recipes from local chefs, friends,
and family effortlessly based on your current pantry.
Gain the technical skills to be self-expressive and
independent in the kitchen.

Problem & Solution

Primary User:

We aim to help amatuer chefs learn how to cook and enjoy the process.

Problem:

Many amatuer chefs feel like cooking is a chore that always takes longer than expected and has no room for creativity.

Solution:

Plated presents the user with a curated selection of recipes from other users that align with the users' preferences and current ingredient inventory. Plated also incorporates an in-app chef helper, chef su, who can answer any common cooking questions during the process. With this solution, the plated team hopes to make the cooking experience more exciting and less tedious for amateur cooks through shared discovery and collaboration with chefs of all abilities.
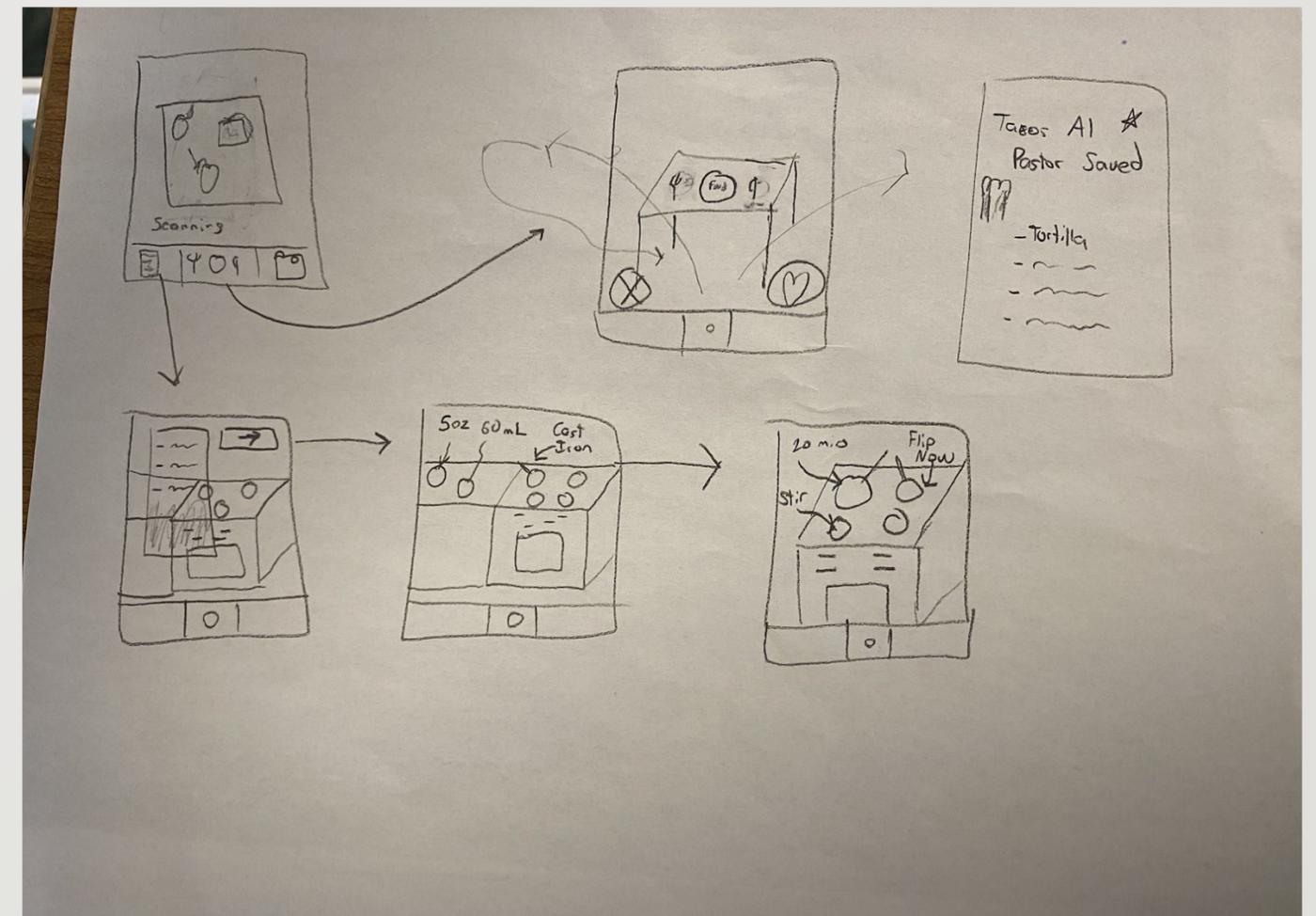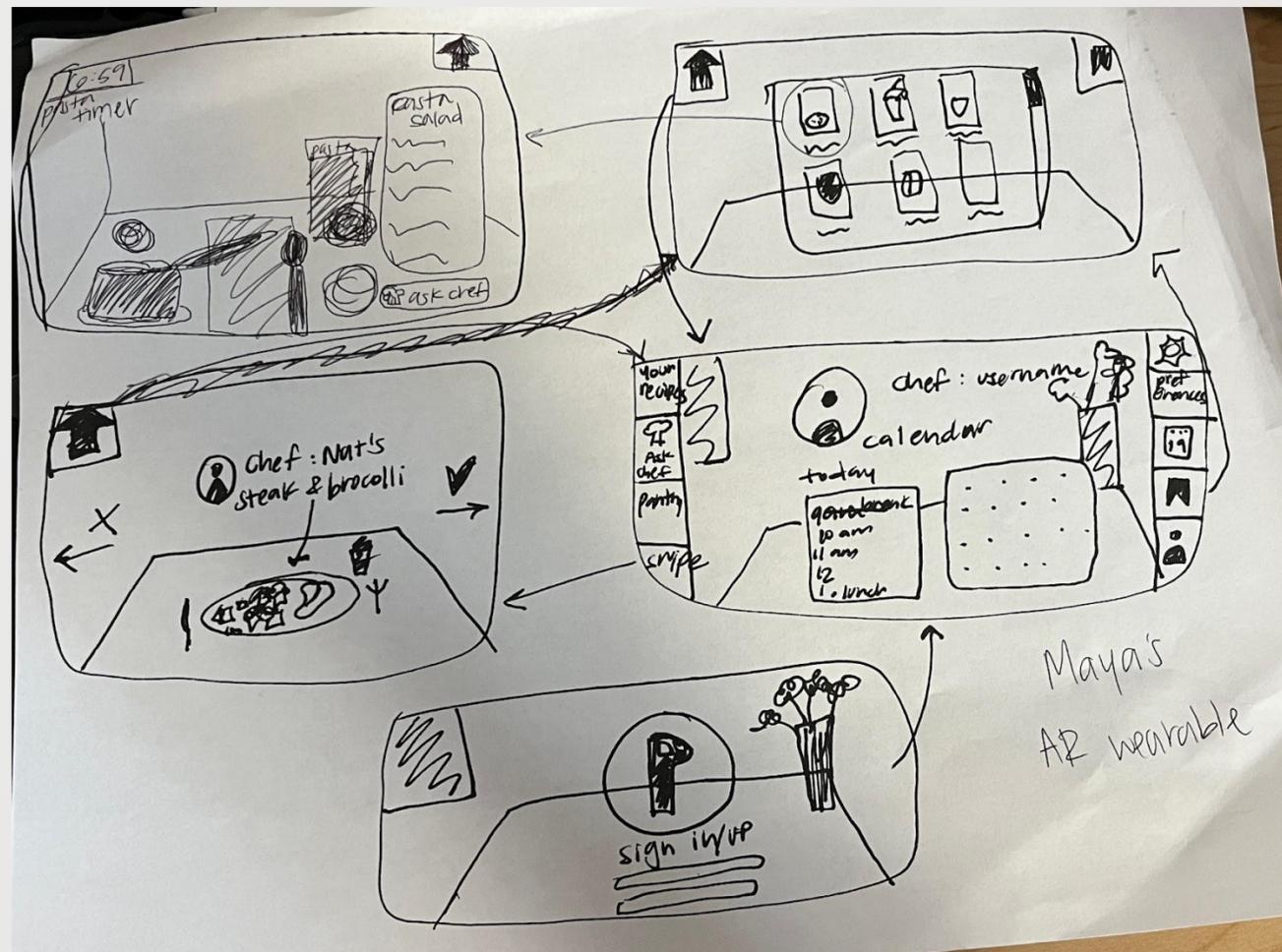
Concept Sketches

Sketching Explorations
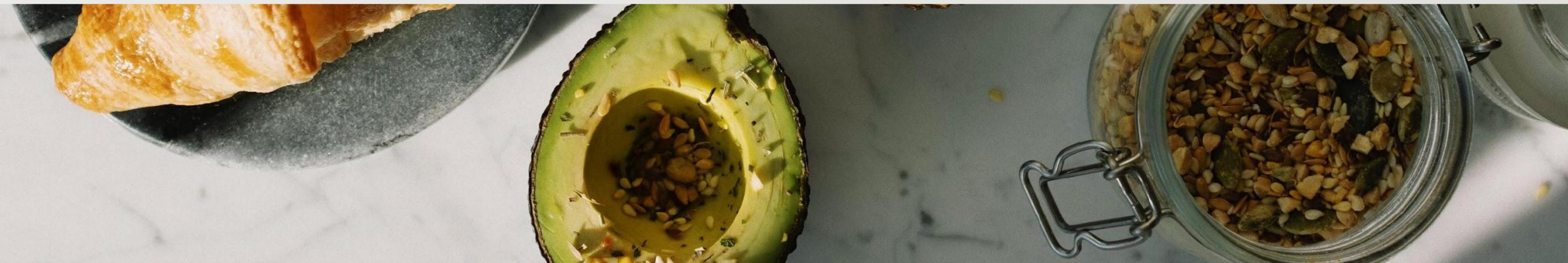
Realization 1: Mobile App
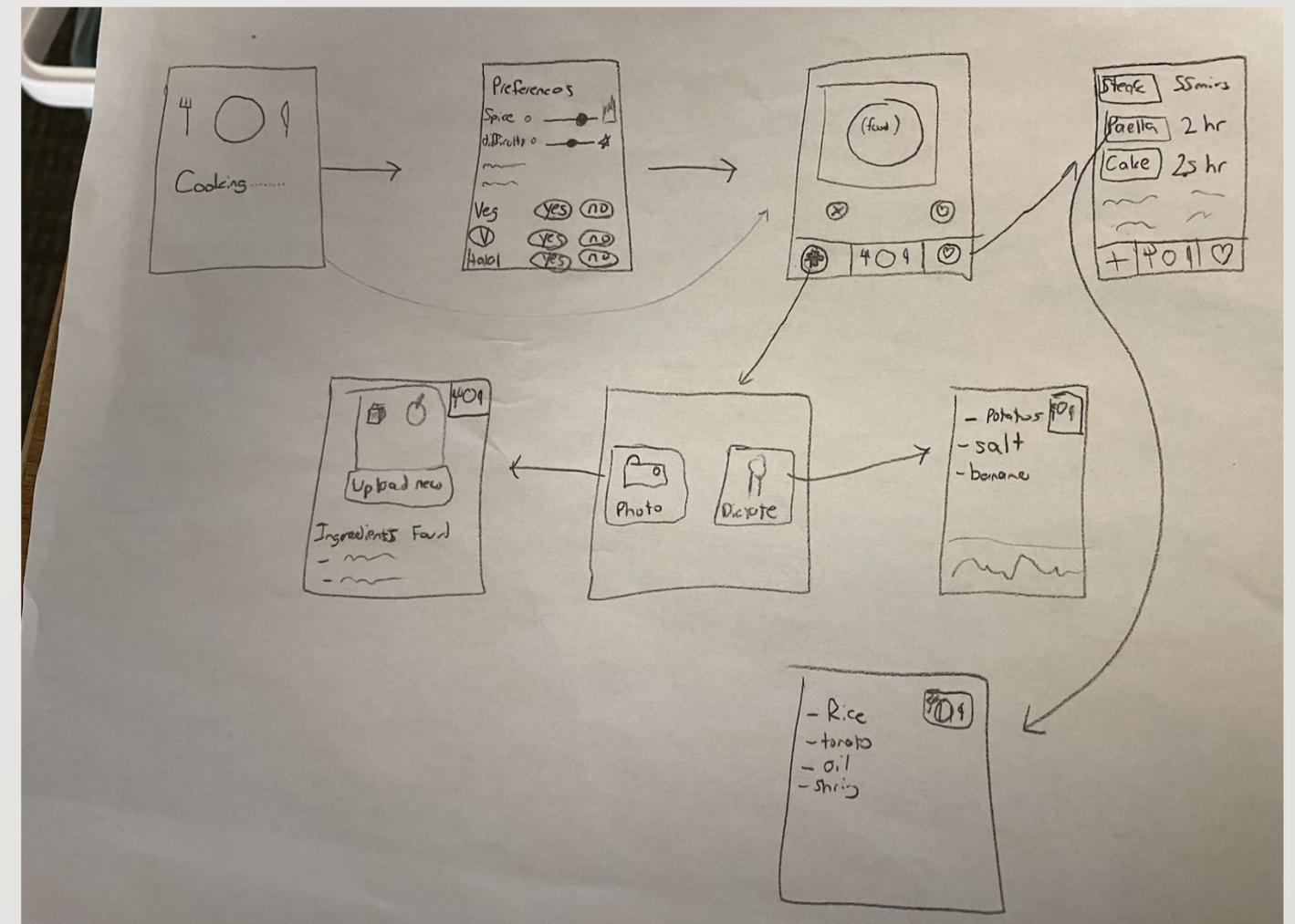
Realization 2: AR

Comparison

Mobile App

- Pros
  - **Intuitive and familiar interface**
  - Low barriers to development, implementation, and use
  - Social media is more commonly presented on mobile apps
- Cons
  - **On a singular screen, does not travel with your line of sight**
  - More direct competition
  - Have to keep phone with you at all times
  - Not eye-catching technology

AR

- Pros
  - **Cooking assistant could be (almost) literally there with you**
  - All ingredient information on one screen
  - Keep track of cooking times for everything at once on AR
- Cons
  - **Would only make sense to use *while* cooking**
  - Need access to camera that has AR functionality
  - Privacy (camera always on)
  - Many are unfamiliar with AR interface

Selected Interface: Mobile App!

Flexible

Can use anytime with a user's current technology

Seamless

No technological learning curve preventing creativity

Trustworthy

Some people are hesitant to explore AR/VR

A mobile app aligns with Plated's <u>core values</u>.

Low-Fi Prototype

Prototype Construction

- Drawn on an **iPad** and printed on **paper**

- Implemented screens for **home page**/recipe finding, user **profiles**, user's **calendar**, **posting**, **Chef Su**, and **pantry tracker**
  - Did not fully draw out grocery cart screens or instructional video screens

- Used **black bars** to indicate scrolling, **dark highlight** to indicate button selection or background, and icons to encourage interface intuition

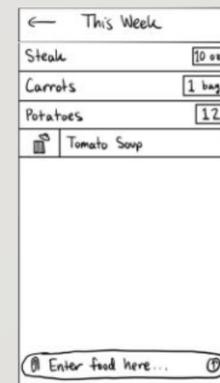- As users interacted with the prototype, we switched out papers accordingly

Paper screens
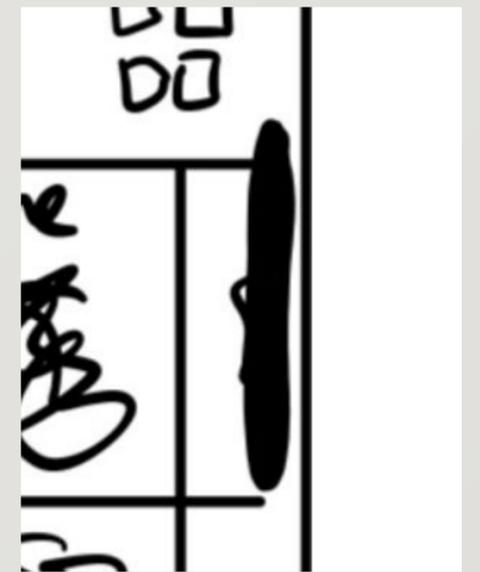
Scroll bar

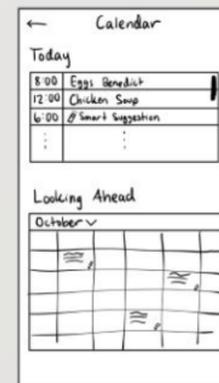# Prototype Construction
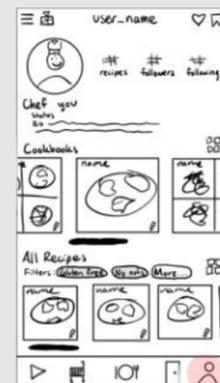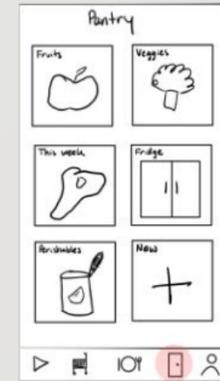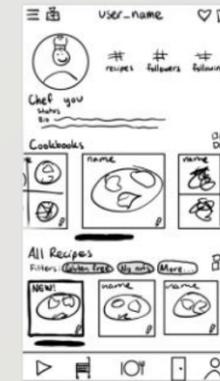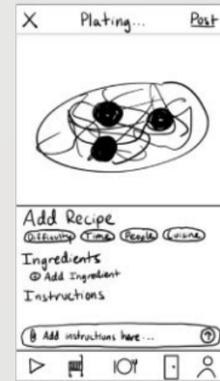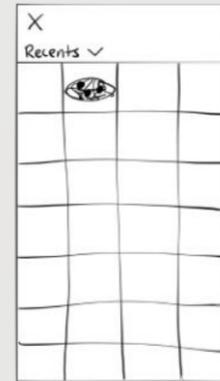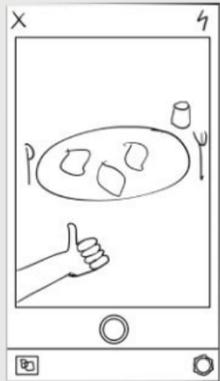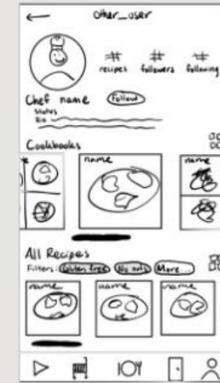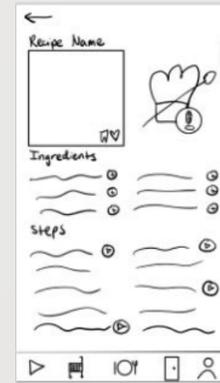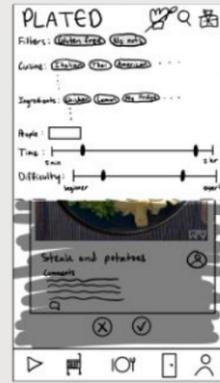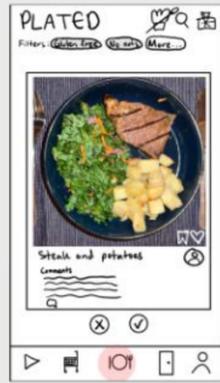
Task Flows

Simple

Swiping to discover recipes

Moderate

Adding items to your pantry

Complex

Upload your recipe

Simple Task: swipe to find recipes
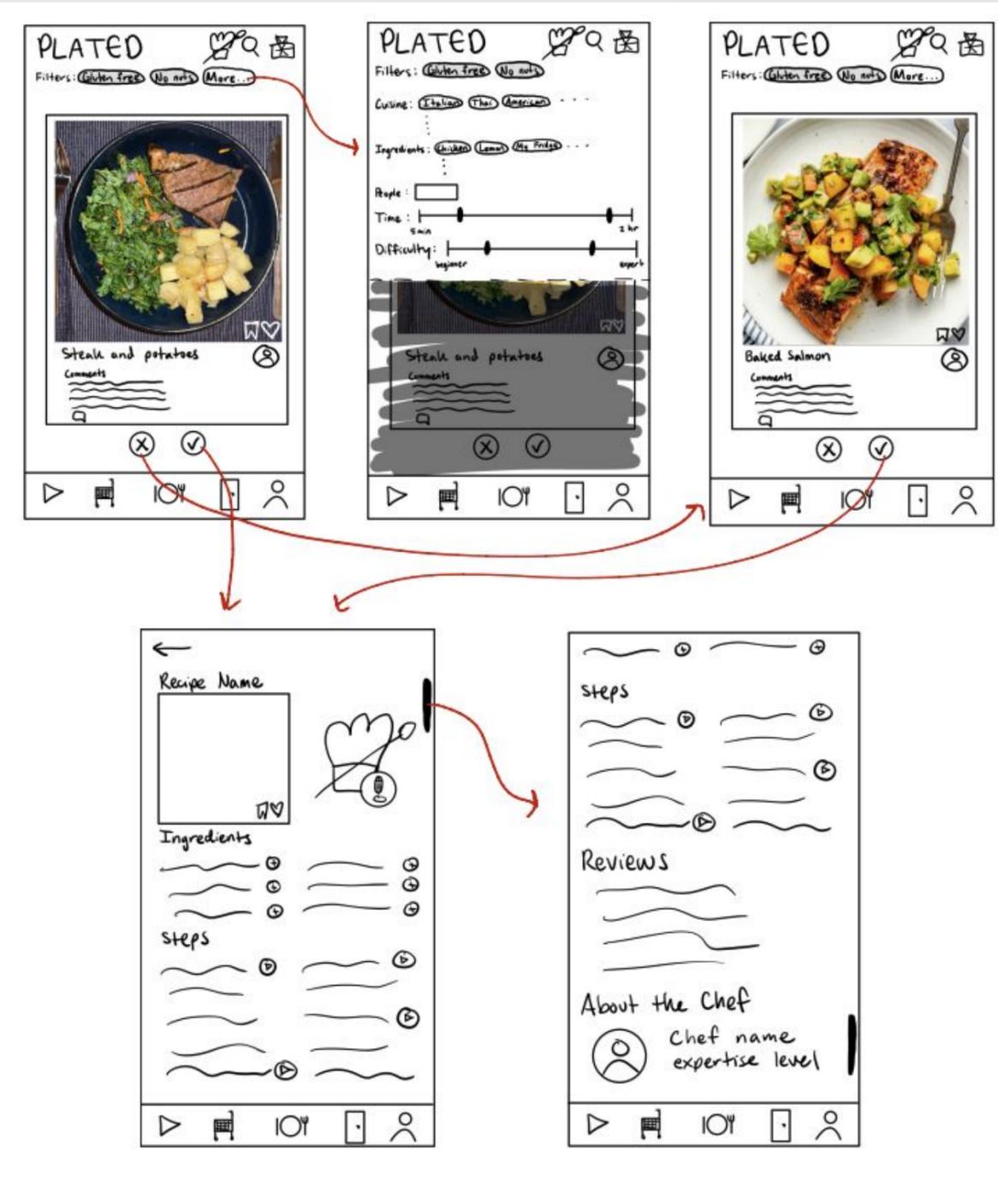
Moderate Task: adding items to your pantry
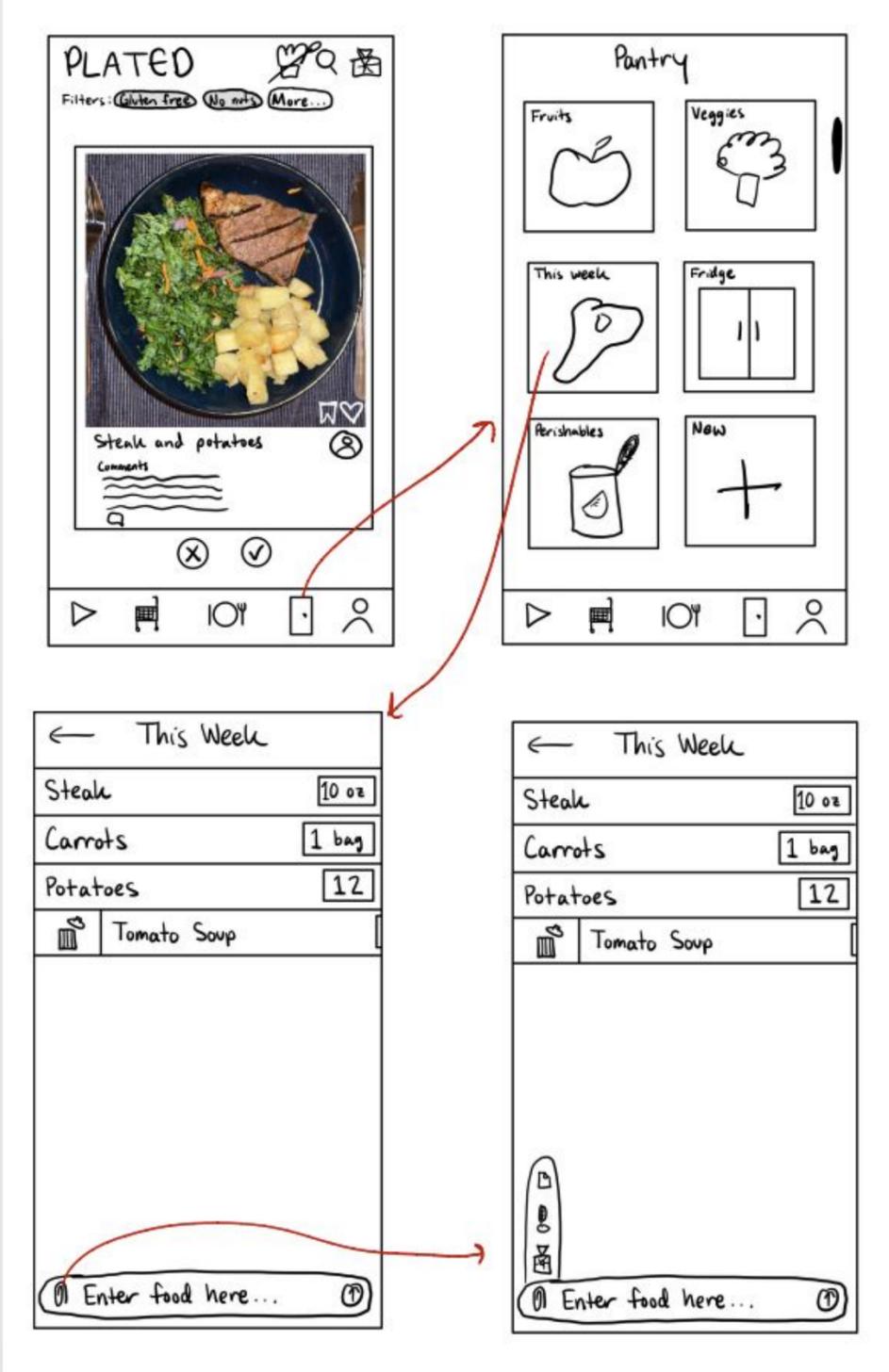
Complex Task: uploading a new recipe
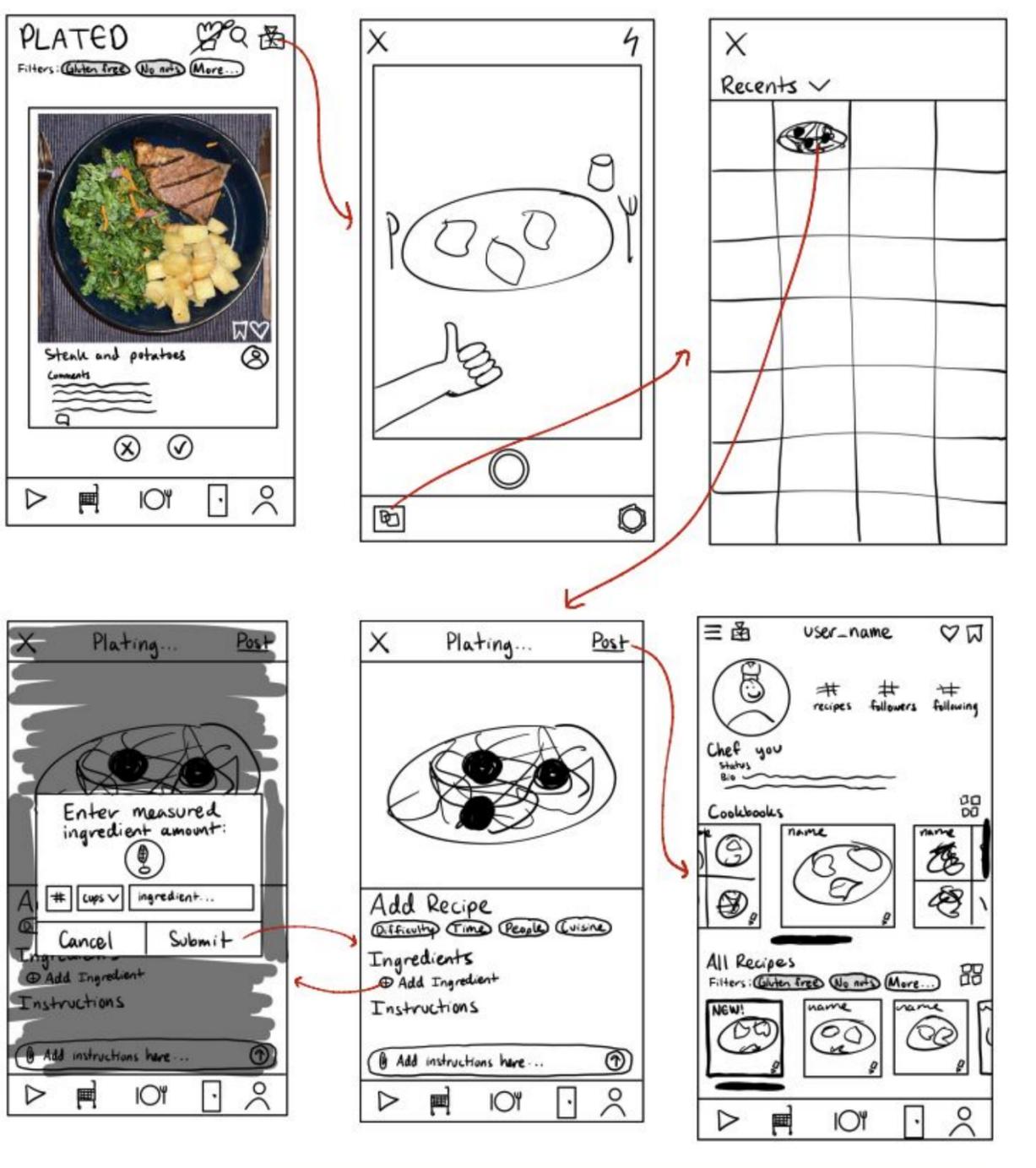
Testing Methodology

Participants

- Amateur cooks aged 22-36
- Sought participants of different jobs
- Verbal gratitude as compensation
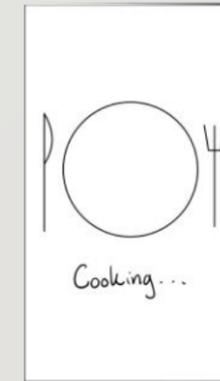

Neel
Post grad working at
Stanford Lab

Billy
Stanford Faculty

Alberto
Pro Baseball Player

Rick
Post grad living in SF

Environment and Apparatus

- Various campus locations, let users choose specific table

- Laid out paper screens beside their "main" screen

- Responded to user actions and consulted script

Procedure

- Gave overview of our background and project
- Prepared script and allowed them to explore the app first
- Asked them to complete our tasks and say their thought process aloud
- Asked users to reflect on which functions were intuitive and easy to find

Graham
Notetaker

Ashley
Developer
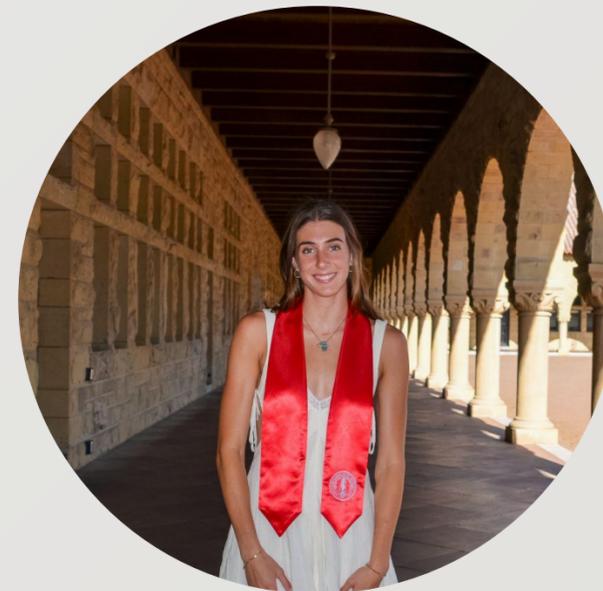
Maya
Tester

Emma
Tester

Usability Goals and Metrics

Flexibility

Number of unique paths users could find to access a feature

Efficiency

Time spent trying to recognize the task path (not including talking or while we switch screens)

Testing Results

Process Data

participants in agreement

4

1
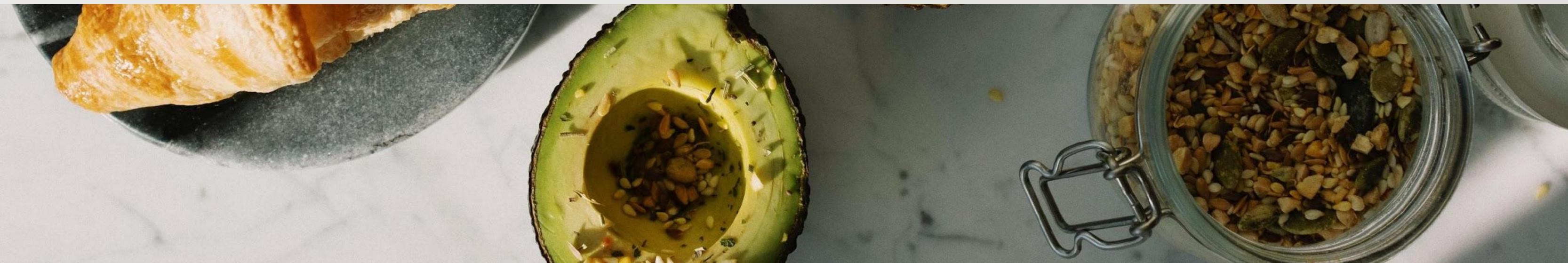
- confused on what was considered the **home page**
- used the **footer buttons** much more than back buttons
- small icons at the top of the home page were **hard to notice**
- liked **recipe saving** function
- the icons were **fun**
- wanted to add their **personal filters/food restrictions**
- swiping isn't as intuitive as pressing
- liked voice memo feature
- wanted to use the cookbook feature or organize their recipes
- purpose of some buttons was forgettable

Bottom-Line Data

Flexibility: When given an instruction, such a finding the Chef Su screen, most all participants could find **two** ways to access it.

Efficiency (time): The simple task took participants **3 sec** on average, the moderate task took them **15 sec** on average, and the complex task took them **30 sec** on average.
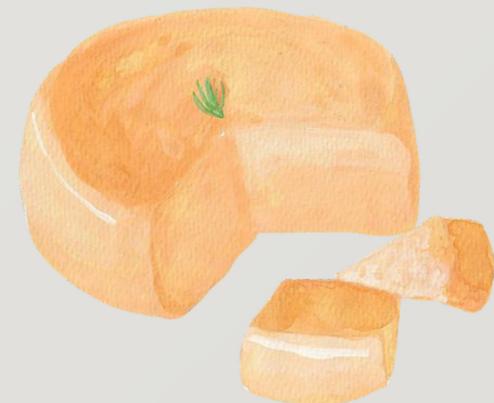
Implications

- Participants didn't feel like they had a home base to go to

- Figuring out where to post was a deterrent, but generally easy once it was found

- Features in the footer were significantly easier to find

- Personalization was top of mind for most participants

- Had fun, but could be more efficient

Changes

- Change the home screen icon to a figure that is intuitively "home" (ex. a house)

- Add the posting feature the the footer buttons

- Guide users to personalization features right when they first get on the app

What testing couldn't reveal…

- How much quicker users would pick up on the interface with transitional graphics to guide them between steps

- How long it would take to input an entire recipe start to finish

Feedback? :)

Thanks for listening

APPENDIX

Pros & Cons

Mobile App:

Pros:

- More intuitive and familiar user interface
- No expense
- Added onto currently owned device
- Easier for us to implement with the skills we have already
- Social media is more commonly and popularly presented on mobile apps

Cons:

- On a singular screen, doesn't travel with your line of sight
- Have to keep phone in the kitchen
- Not eye-catching technology
- More direct competitors

Augmented Reality:

Pros:

- All ingredient information on one screen
- Keep track of cooking times for everything
- Cooking assistant could be (almost) literally there with you
- Not many direct competitors (maybe none?)

Cons:

- Have to keep your phone on you and turned on at all times (can't be hands free)
  - Would need AR goggles to really be useable
- Need access to a camera that has AR functionality
- Privacy (camera always on)
- Would only make sense to utilize the app exclusively when you're in the kitchen or cooking
- User testing for AR would be harder
- Lots of people are unfamiliar with AR interface

Testing preparations

Testing protocols:

ROLES: One person should be the facilitator (only one who speaks), One actually moving the cards as the computer, & one taking notes and observing

What to watch for:

- **qualitative process data** = This kind of data gives an overall feeling of what works and what doesn't
  - **critical incidents =** keep an eye out for instances in which they seem confused, say something negative, or even swear.
    - Use them as a starting point for places you will redesign.
  - **positive incidents =** cases in which the customer liked your site or things appeared to be going smoothly.
    - gives you a hint about which parts of your design work well, and you might be able to take advantage of some of the same ideas elsewhere.

- **Quantitative Bottom line data:** consists of hard numerical metrics where you're looking for statistical significance—a serious and reliable difference instead of one due to chance
  - especially important for simple, repetitive interactions; for example, "Are customers completing the task faster when this button is placed on the left or right side of the page?"
- **Our 2 Usability Goals & key measurements for each goal:**
  - Flexible - access chef sous from a ton of different ways, upload pantry items multiple ways, post a recipe by taking photo, uploading photo, uploading photo of ingredients/instructions
    - Key measurement - how many ways can people perform moderate task & complex task?
  - efficient - want users to be able to perform tasks quickly so cooking process isn't interrupted and to achieve our goal of making people's lives more efficient
    - Key measurement - Time each task
    - Key measurement - how many clicks does it take them to upload a recipe/ time the task

TESTING SCRIPT:

1) **First let's get to know the product**
   a) Problem: Many amateur chefs feel like cooking is a chore that always takes longer than expected and has no room for creativity.

   b) Solution: "Plated presents the user with a curated selection of recipes from other users that align with the users' preferences and current ingredient inventory. Plated also incorporates an in-app chef helper, chef su, who can answer any common cooking questions during the process. With this solution, the plated team hopes to make the cooking experience more exciting and less tedious for amateur cooks through shared discovery and collaboration with chefs of all abilities. "

   c) value prop: Discover and share recipes from local chefs, friends, and family effortlessly based on your current pantry. Gain the technical skills to be self-expressive and independent in the kitchen.
2) **Walk through how to scroll & press buttons**
3) **"Go ahead and explore generally the app, get your bearings of where things like your profile, pantry or calendar might live"**
4) **Ask the participant to do the following tasks & think aloud as they are doing them**
   a) Task flow simple:
      i) Try to swipe to discover and save new recipes
   b) Task flow moderate:
      i) Try Adding items to your pantry
      ii) Try to access chef sous from multiple different routes/buttons (Key measurement: **Note taker** → record if they can access the chef sous page from multiple routes)
   c) Task flow complex:
      i) Try to upload a recipe and recipe photo to your profile

      (1) Upload the recipe using a different way to enter recipe/plated photo (Key measurement: **Note taker** → count number of clicks/time this)
5) **Any final thoughts? Any suggestions? Any questions?**

Critical incident Logs

Critical incident log neel:
- Positive
    - Laughed while the screen was loading
    - Smiled while liking swiping right on a recipe/ scrolling
    - Celebrated saving a new recipe
    - Would be most likely to upload ingredient by photo or voice memo (needs to be well developed in our final proto)
    - Used the bottom navigation footer more often than navigating through back button
- Negative
    - Upset when he couldn't dive deeper into profile (followers, upload photo, look at cookbook) **3**
    - Couldn't find the difficulty level of someone else's recipe on the recipe page **2**

    - Wanted to press plus buttons on recipe information page to add them to your grocery list
    -

Critical Incident Log Billy:
- Positive:
  - Enjoyed using the recipe filters with sliders for time and difficulty.
  - Liked using voice input to add ingredients to the pantry.
  - Found the AI assistant useful once fully understood.
  - Managed to figure out how to use various features, like saving recipes and posting them.
- Negative:
  - Experienced confusion in identifying buttons and locating Chef Su. **3**
  - Unsure at first whether his posts were being shared on Instagram or just within the app. **0**

Critical incident Logs

- Positive:
  - Enjoyed the cooking-related loading screen, feeling it enhanced the immersion.
- immediately understood swiping idea and started doing that without even being prompted to
  - Liked the accessibility of filters and recipe-saving functions.
  - Strongly appreciated the meal planning and calendar integration.
  - Found the cookbook feature engaging and proposed ideas to make it more personalized.
- got really into it
        - started typing out full imaginary sentences
- recognized the upload photo from camera roll button in posting process right away, other people didn't

- Negative:
  - Confusion over the home button layout (thought it was the play button) and certain button functionalities [4]
- couldn't find camera button for posting on home page or on profile [2]
- couldn't find the second way to access chef sous [3]
- thought general swiping preferences was more information on the current recipe [2]
- Took time to figure out how to upload recipes, but eventually did so efficiently. [1]

- Positive
  - "This is good" (while exploring his preferences)
    - He's allergic to things so wanted to add those allergies immediately and then did
  - Understood the swiping right away
  - "I'm gonna take a picture of my wonderful plate"
    - Enjoyed uploading his picture and the idea that his friends will see the work he's done
  - Very fast with getting to all the chef sous
  - Once he found out what video tutorials were he liked it and called it "plated tutorial"
  - Imitated typing on the table → add a keyboard window for testing
- Negative:
  - Can't find home page button **3**
  - Didn't like pantry and grocery being separate categories on the footer bar **2**
  - Control flow of the swiping wasn't immediately intuitive **2**
  - Didn't understand the difference between the like button and save button **3**
    - Thought the saved and like were too small
  - Confused about the cook books and confused about what the "play button means" **3**

[Link to full Low Fi Prototype](#)