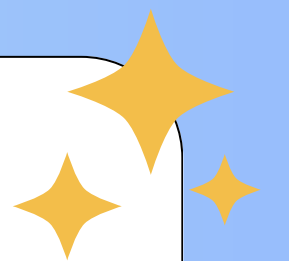
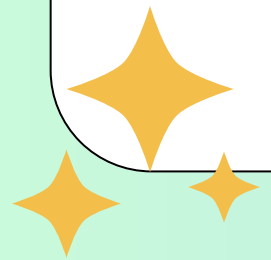


CS 147 AUT 2023



# CheckUp

Medium-fi Prototype



Abbie, Delali, Susan, Angela

# Roadmap



**1** Value Prop

**2** Problem  
Solution  
Overview

**3** Values In  
Design

**4** Tasks

**5** Usability  
Goals

**6** Revised  
Interface  
Sketches

**7** Medium-Fi  
Task  
Flows

**8** Prototype  
Implement  
ation

**9** Link to Figma



# CHECKUP

Care on your calendar.

# Our Value Proposition

## Problem

Too many students and working adults **forgo** seeking routine medical care because of **friction in finding and scheduling** that care.

## Solution

CheckUp is a digital assistant that **seamlessly syncs** with your calendar and **recommends care** that fits right into your schedule.

# Values in Design

Values we want to encode in our project



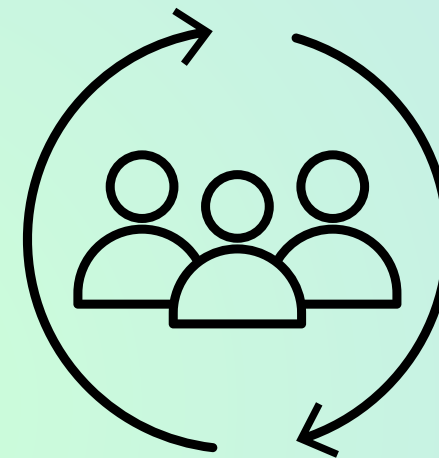
## Intuitive

Users should be able to **easily understand** how to **book an appointment**



## Flexible

Users should be able to **customize their preferences** for appointment times and doctors



## Inclusive

People of **all demographics** (age, gender, income, insured or not insured) should be able to use CheckUp



## Privacy

Users should be confident that their **private health information** is safe

# Expression of Values

How our design values are reflected in our features



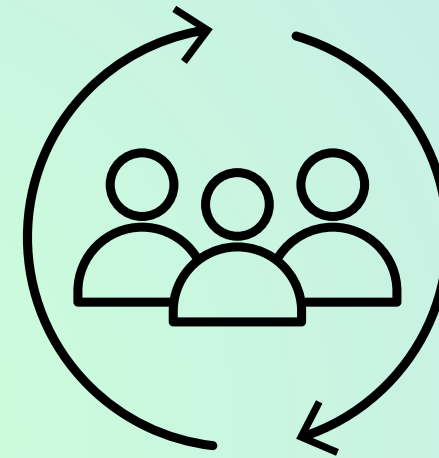
## Intuitive

- **Chat function** to communicate with CheckUp
- Returns top 3 appointment times / doctors, **easily clickable**



## Flexible

- Allows user to input **doctor preferences** (location, gender, language, etc)
- Integrates with **multiple types** of digital calendars



## Inclusive

- Allows for paper calendars to be scanned for **older people**
- Option for **uninsured** people to find cheapest doctor without insurance



## Privacy

- All user information will be kept **confidential**
- **Verification with FaceID** every time you enter the app

# Value Tensions

## Inclusion vs Intuitive

While we want to have CheckUp cover **multiple demographics**, taking into account many cases might make the app **unintuitive** to use.

## Privacy vs Flexibility

By having users enter their **personal** doctor preferences, **insurance information**, and **past health information**, users might not feel comfortable with their **private information** stored in our app.

# Tasks

Simple

Users can **communicate** with CheckUp that they **want to book** an appointment

Moderate


CheckUp connects with the **user's calendar** and **doctor preferences** to suggest them the **best availabilities** and **provider**

Complex

Users can **view** past and upcoming appointments and **reschedule/cancel** upcoming appointments

# Design Change #1: Before

## CREATE YOUR PROFILE

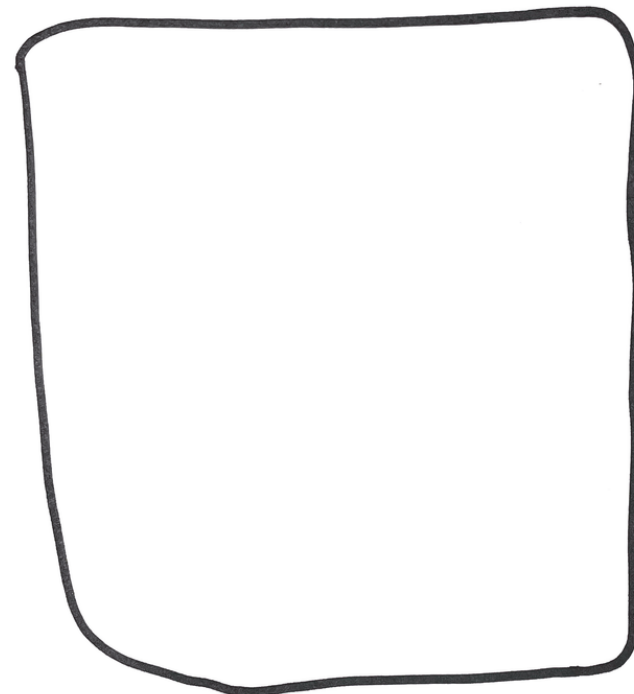


Insurance

Calendar

Doctor Preferences

Place insurance card in the border



## Sync CheckUp with calendar

## Doctor Preferences


Location

Gender

Language

Race/Ethnicity

## PROFILE COMPLETE

 Susan Lee   
susan@email.com  
123-456-7890  
Stanford, CA

Insurance   
Anthem Blue Cross  
- Advantage PPO

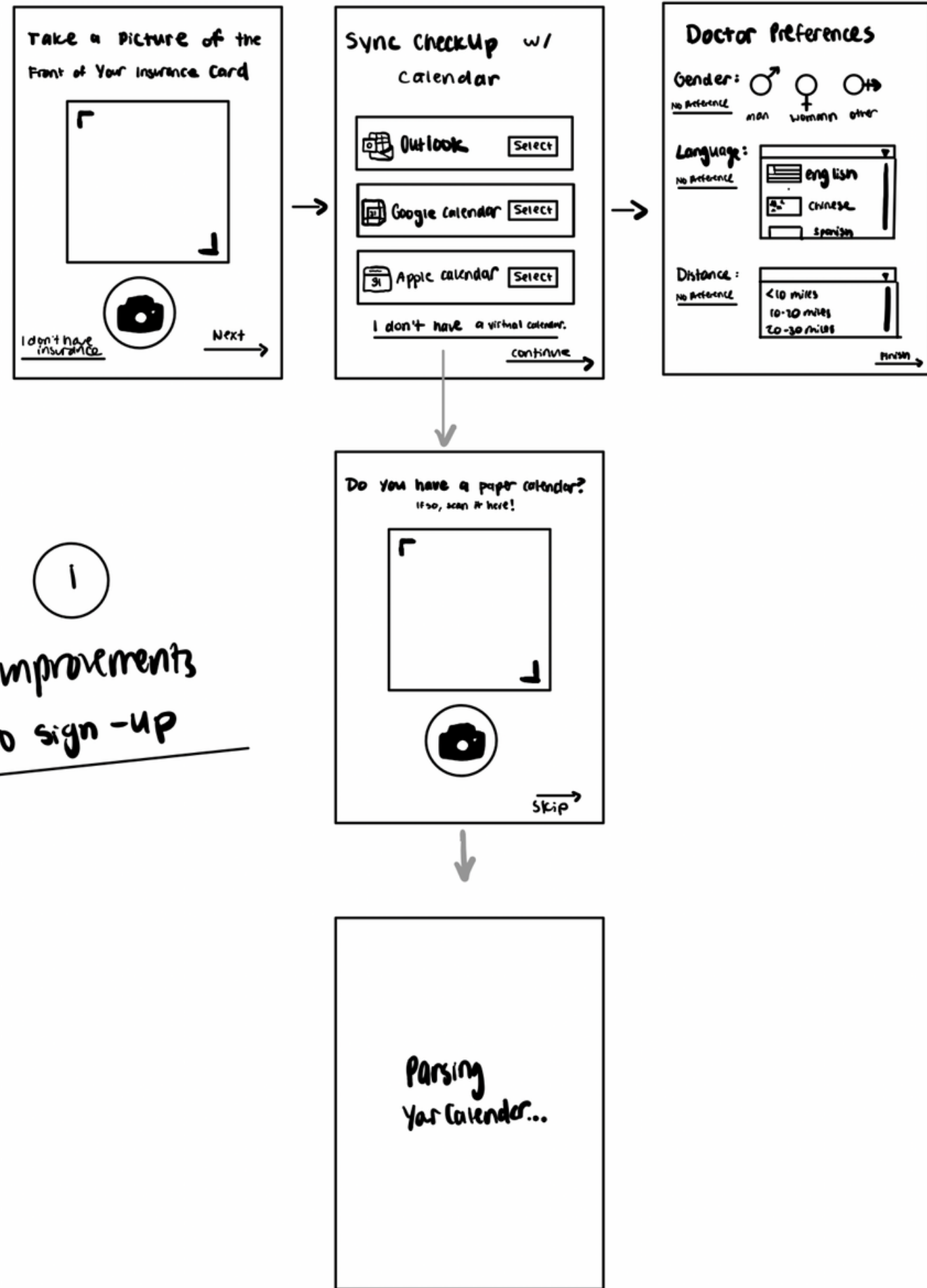
Calendar   
 susan@email.com

Doctor Preferences

# Design Change #1: After

- To maintain **inclusivity**, one of our core design values, we added a functionality that **allows a user who does not use a digital calendar to scan a paper calendar** in, which then gets parsed and then digitized.
- From our feedback, we **simplified our doctor preferences** to include gender and distance, but also **introduced key factors like preferred language** which is vital when seeking care

①  
Improvements  
to sign-up



# Design Change #2: Before

My Schedule ←

OCT 2023 @ @

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Thurs, Oct 19th

---

Appt w/ Dr. Smith BOOKED  
102 Starlake Dr  
12:30 - 1:30 PM ⋮

CS Scanned with CamScanner

My Schedule ←

OCT 2023 @ @

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Thurs, Oct 19th

---

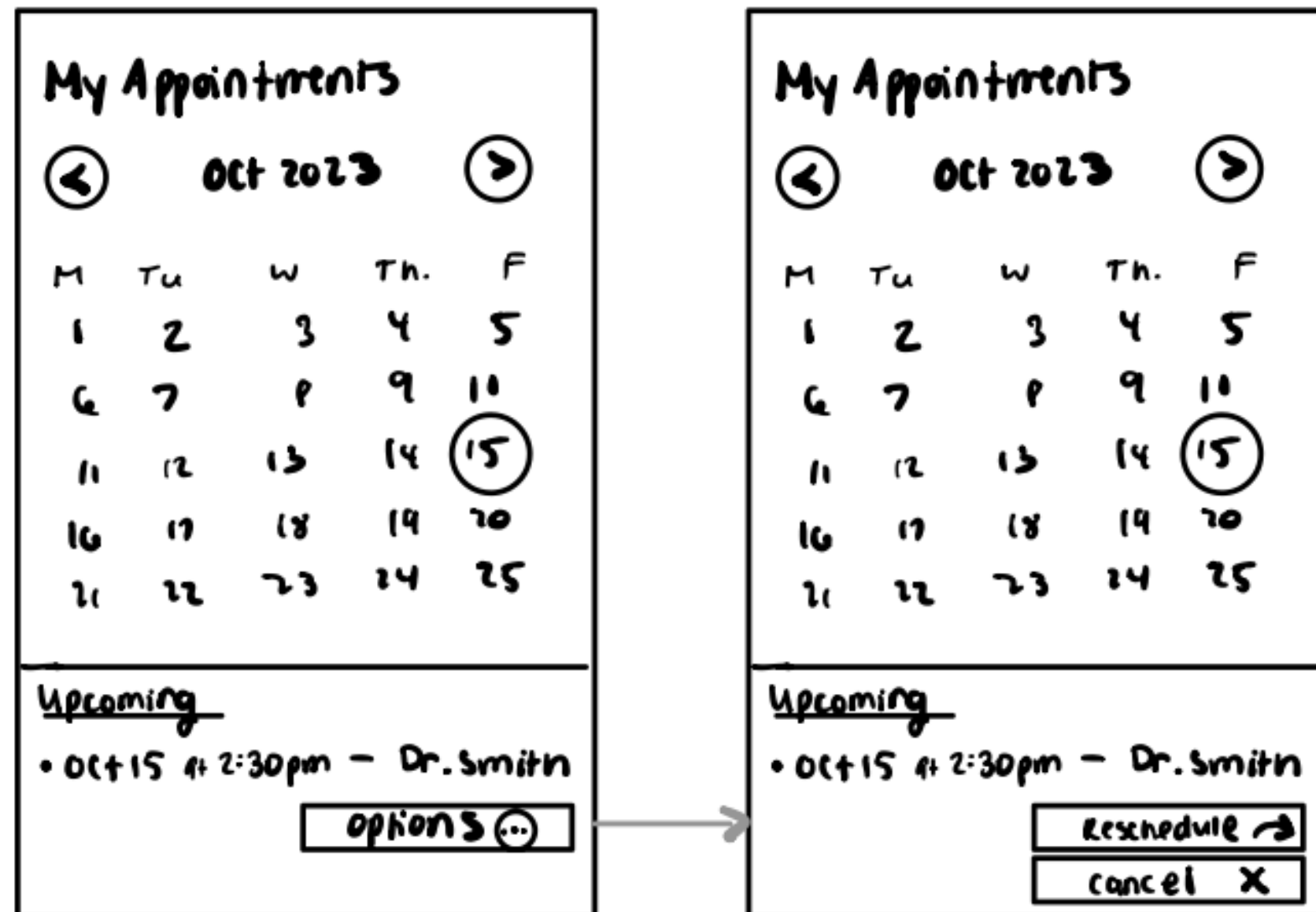
Appt w/ Dr. Smith BOOKED  
102 Starlake Dr  
12:30 - 1:30 PM ⋮

RESCHEDULE APPT  
CANCEL APPT

~~CANCEL~~

CS Scanned with CamScanner

# Design Change #2: After



- In our lo-fi prototype, if a user wanted to **reschedule an appointment** they had to click the three dots in the corner, which would then display more options
- In our prototype testing we found that this was not intuitive / apparent for most of our users
- We revised it, removing those three buttons and instead **adding clear options that are embedded directly in the appointments interface**

# Design Change #3: Completely New!

HOW WAS YOUR  
appointment w/  
Dr. Smith?



REVIEW

TYPE...



- We added a feature page in our appointment flow that allows the user to **rate their experience with a medical practitioner.**
- Ideally, this data will help our system and other users recommend the best care
- This feature also **allows the user to set that doctor as their primary**, which will further the ease of scheduling appointments, **or find a new one**

# Usability Goals & Measurements

1

## **Ease of Use**

Measured by number  
of misclicks

2

## **Intuitive Interface and Workflows**

Measured by number of  
questions asked

# Progress

## 1 Ease of Use

To increase ease of use, we've made **screens simpler** and **less cluttered**, **reduced the number of buttons** on each page, and made **buttons more descriptive** in their function (e.g. "Options" instead of "...")

## 2 Intuitive Interface and Workflows

To reduce confusion, we've made tasks like **onboarding simpler** (e.g. allowing users to skip steps, making the initial profile page have only one task to complete) and **clarified how unique cases** work (not having a digital calendar or insurance card)

# Revised Interface Sketches

1

## Skipping Onboarding Steps

Instead of displaying all the steps needed to onboard at once, we show **only the first step** and automatically have the flow go through the entire process, **allowing users to skip steps** if they wish to.

2

## Editing Appointments

We revised the “View Appointments” page to be clearer, editing the “...” button into “**Reschedule**” and “**Change**,” clearly delineating the two options.

3

## Viewing and Following Up Past Appointments

Users are able to view **past appointments** in addition to future appointments, and can **flag past appointments** for **scheduling a follow-up**.

# Revisions Rationale

1

## Skipping Onboarding Steps

- Users were **confused by all the steps** they had to complete to finish creating a profile and expressed a desire to **skip some of the steps**.
- To reduce confusion, we simplified the initial onboarding pages and created **skippable, simpler steps**

2

## Editing Appointments

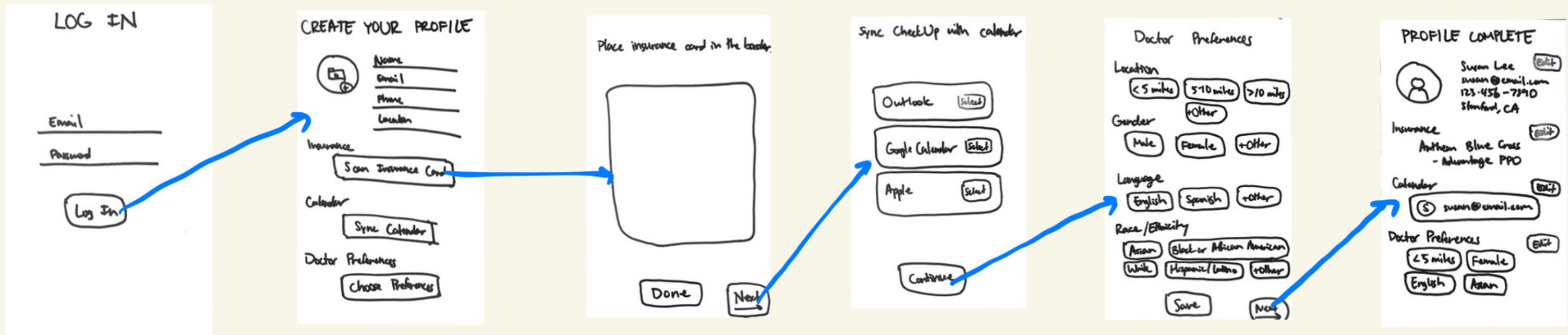
- **Older users** were **confused** how to **reschedule** an appointment at the view appointments page.
- To make the app more intuitive, we made the **tasks easier to see**, allowing older users to have the same experience as younger users.

3

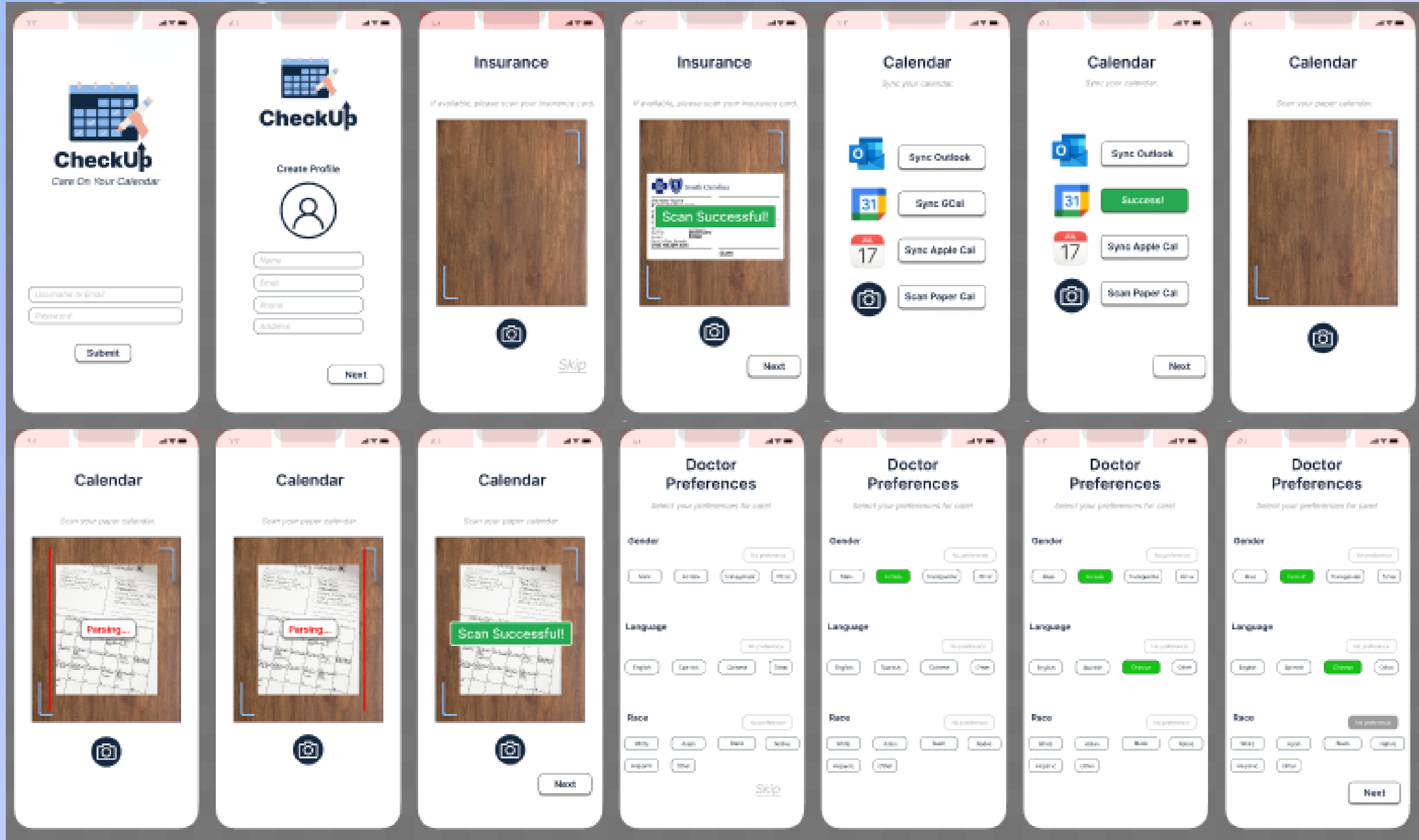
## Viewing and Following Up Past Appointments

- Viewing and following up on past appointments makes it easier to **continuously schedule appointments** and **follow up on appointments**.
- **Users expressed** wanting to **see the appointments they had scheduled before**, not just the future appointments.

# 1 Skipping Onboarding Steps: Before

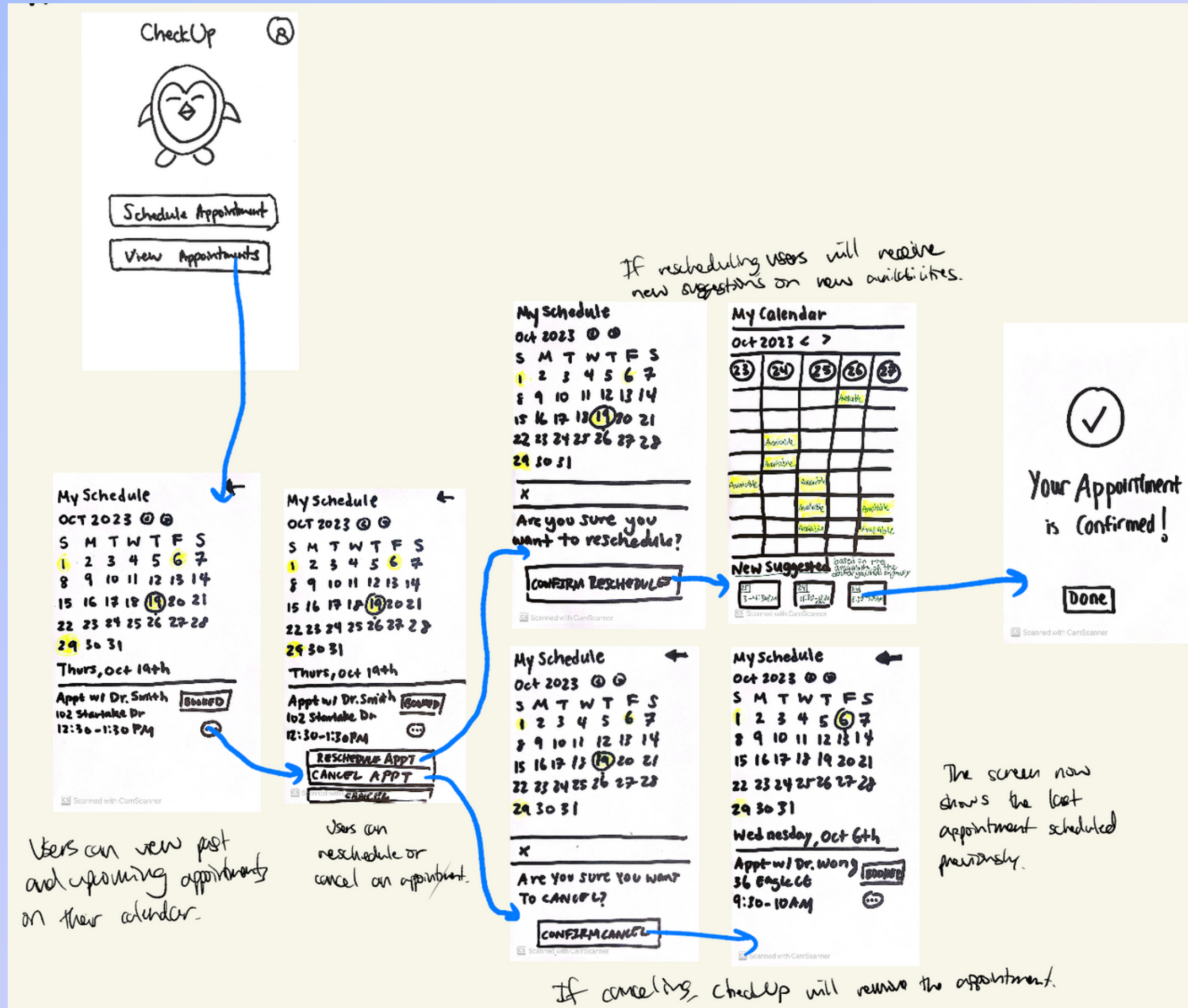


# 1 Skipping Onboarding Steps: After



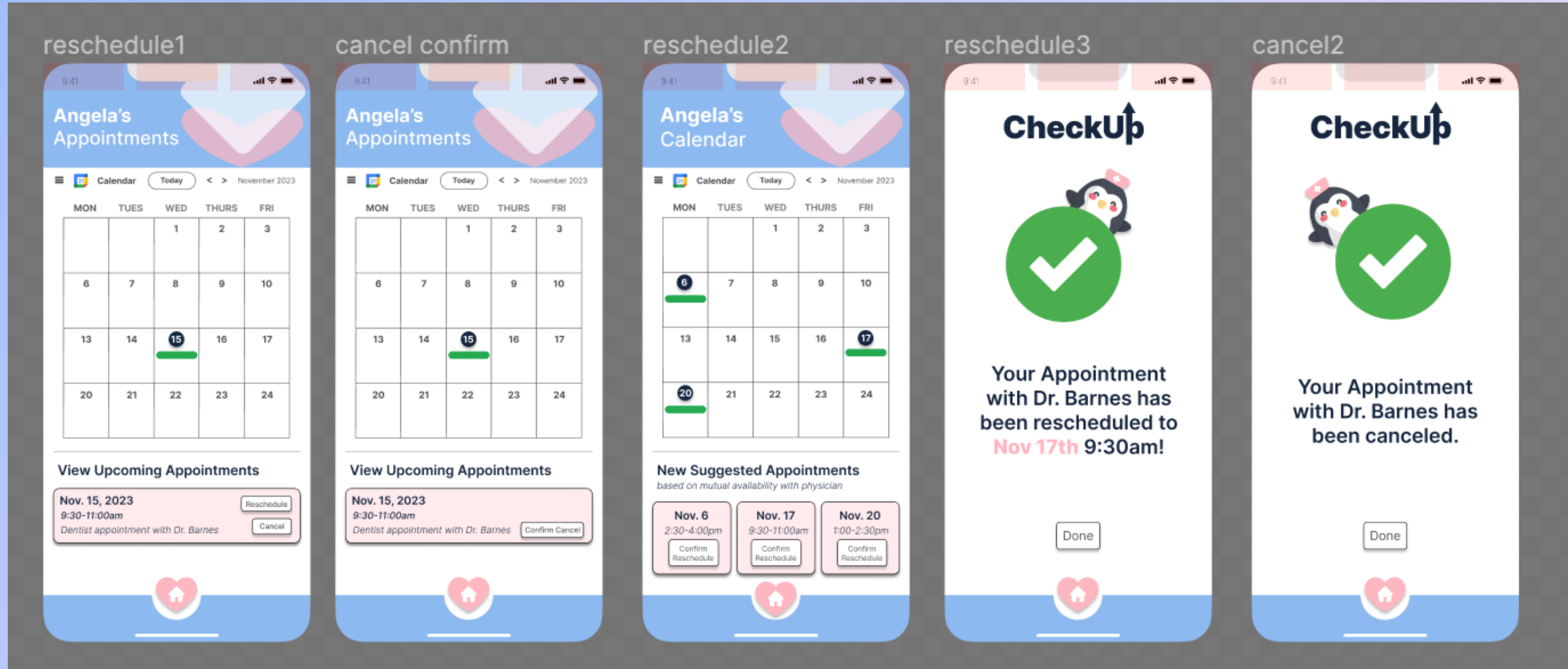
# 2

## Editing Appointments: Before



# 2

## Editing Appointments: After



# **3 Viewing and Following Up Past Appointments: Before**

**Did Not Exist!**

# 3

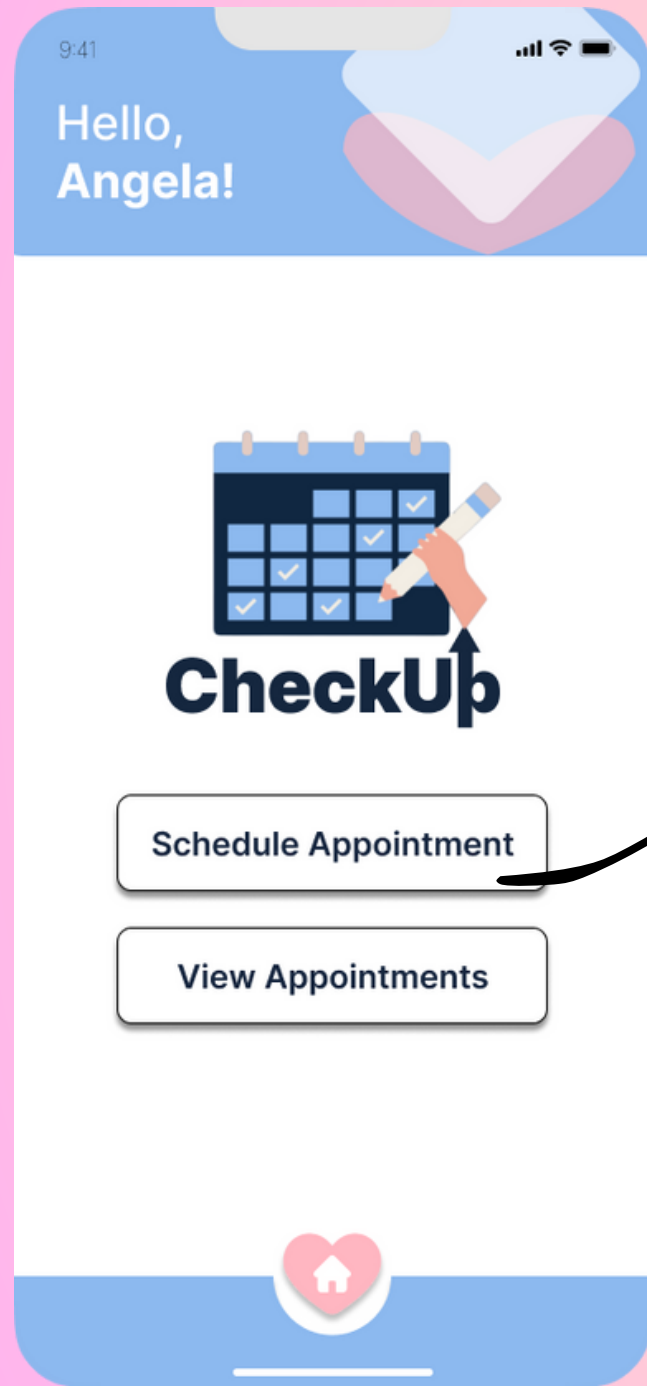
## Viewing and Following Up Past Appointments: After



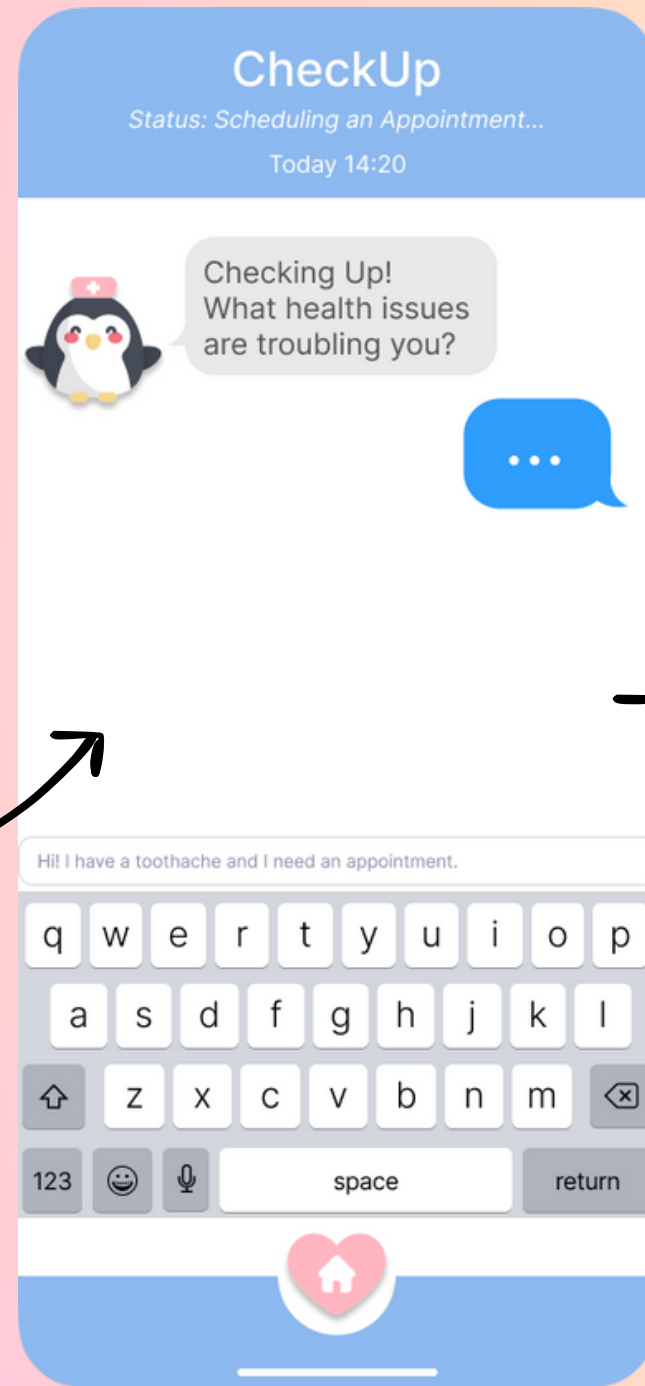
# Med-Fi Task Flows

# Simple

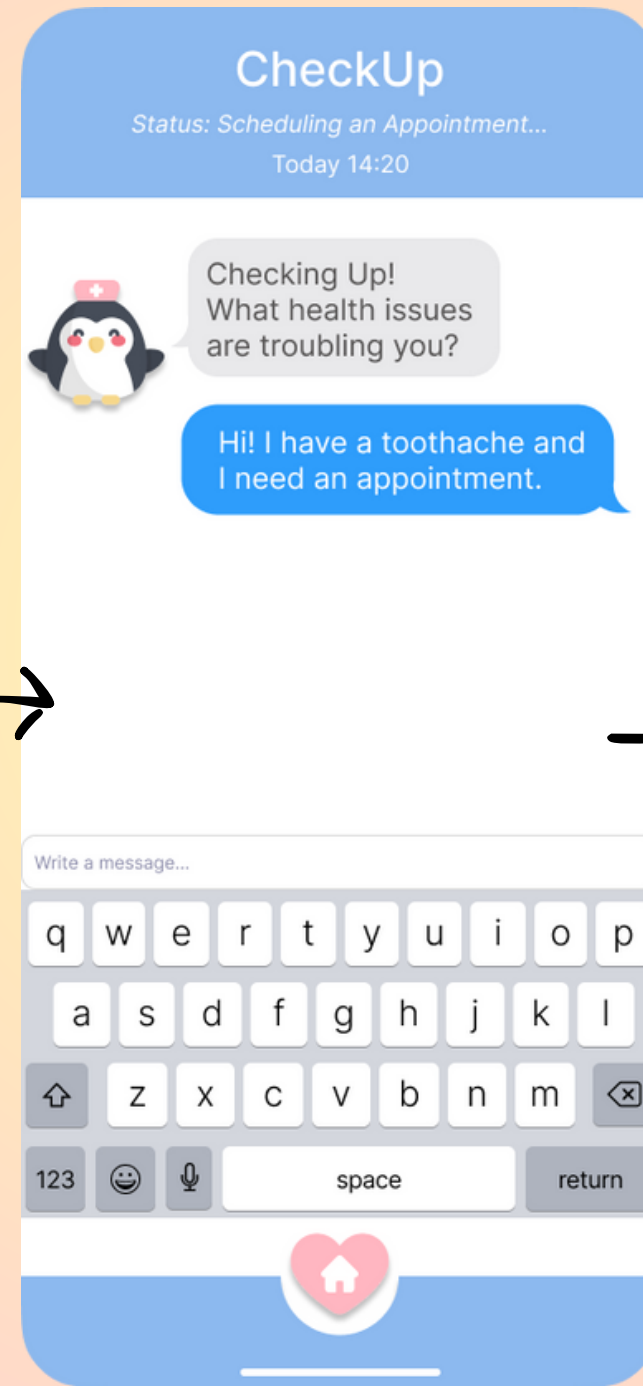
Users can communicate with CheckUp that they want to book an appointment



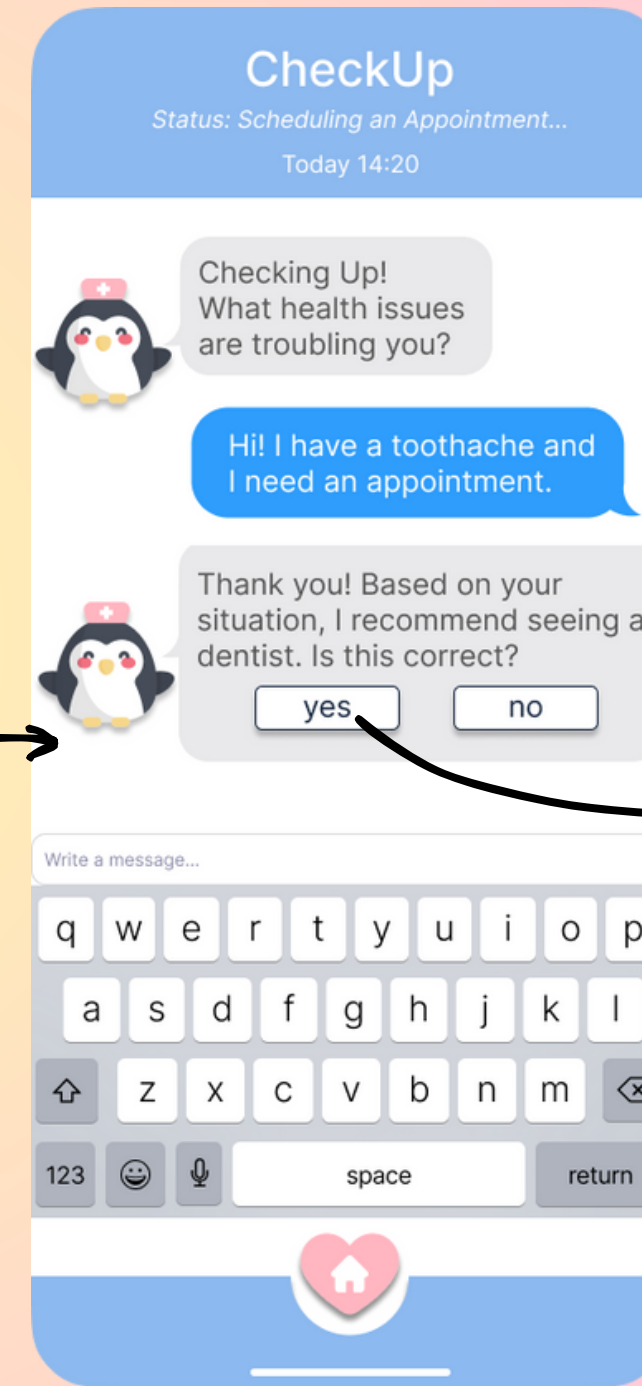
[Home Page of CheckUp, click Schedule Appointment]



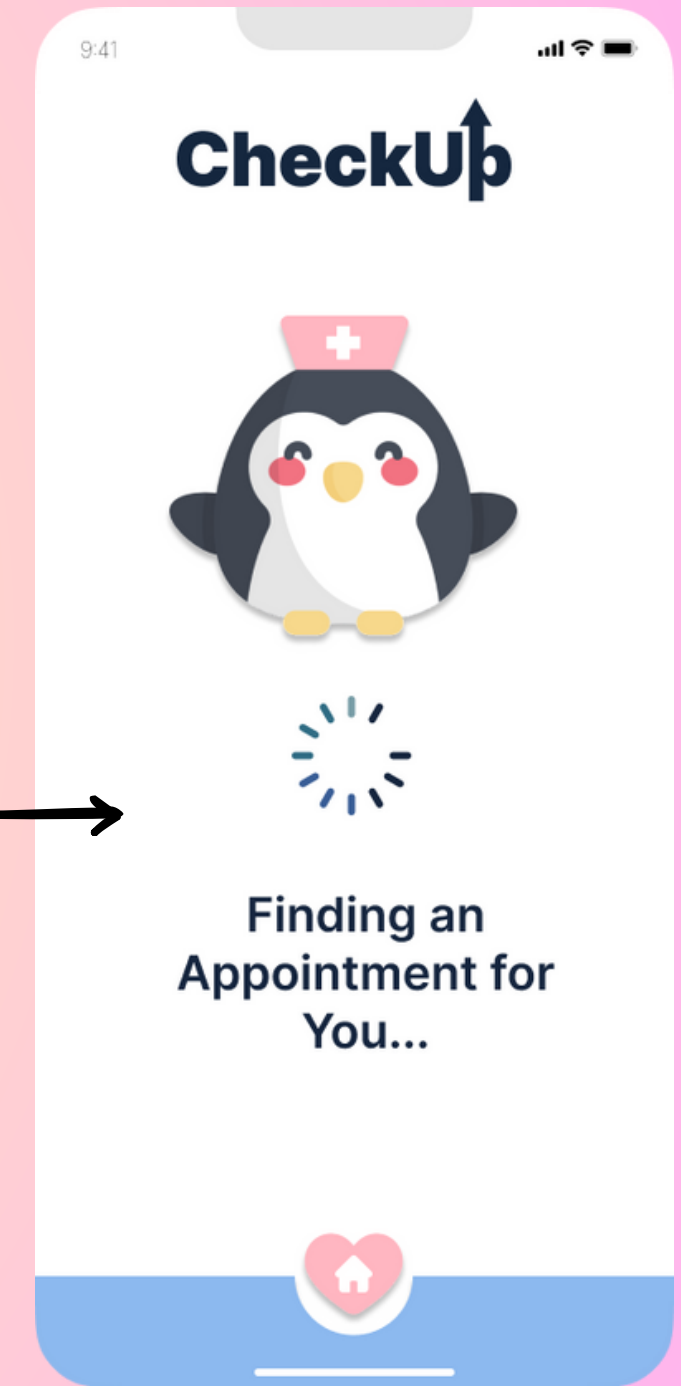
[Chatting with CheckUp page, CheckUp initial prompt always the same]



[Type in your health issue, hard coded in example]



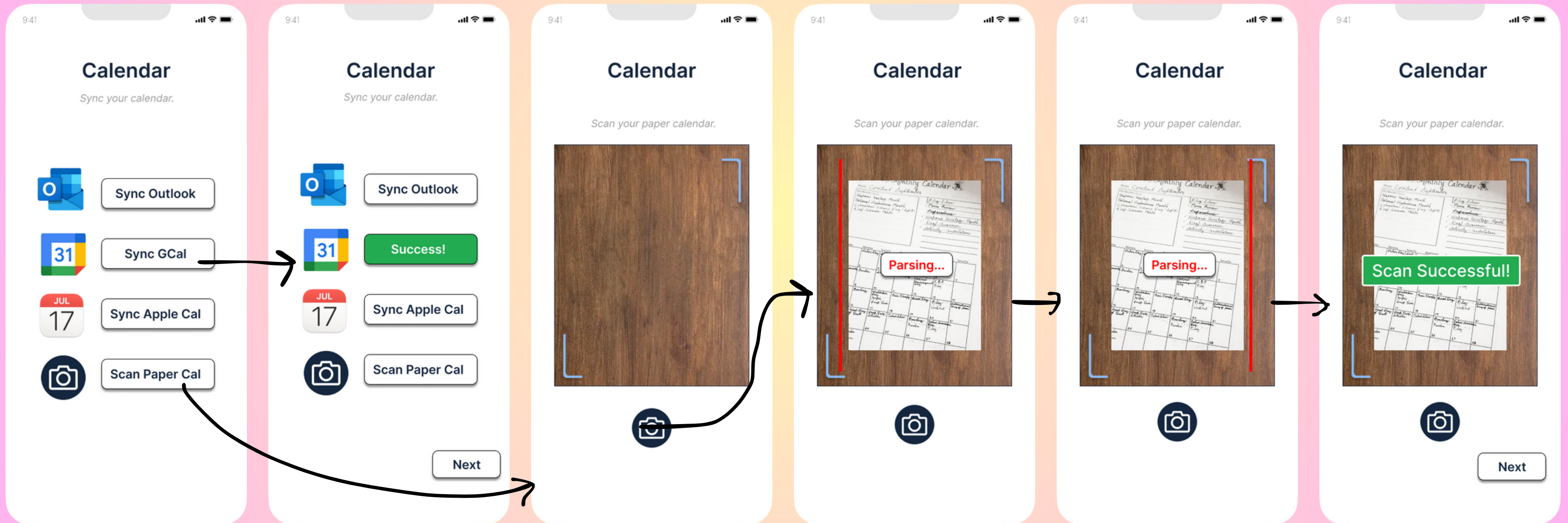
[CheckUp gives you a type of doctor advice, click yes to start the process of booking an appointment]



[Loading page, CheckUp is finding appointments and doctors for you]

# Moderate

CheckUp connects with the user's calendar and doctor preferences to suggest them the best availabilities and provider



[Syncing calendar page, has 4 options to pick from, select Sync Gcal or Scan Paper Cal]

[Log into Google, will automatically Sync]

[Paper calendar scanner page, press camera button to take a picture of your paper calendar]

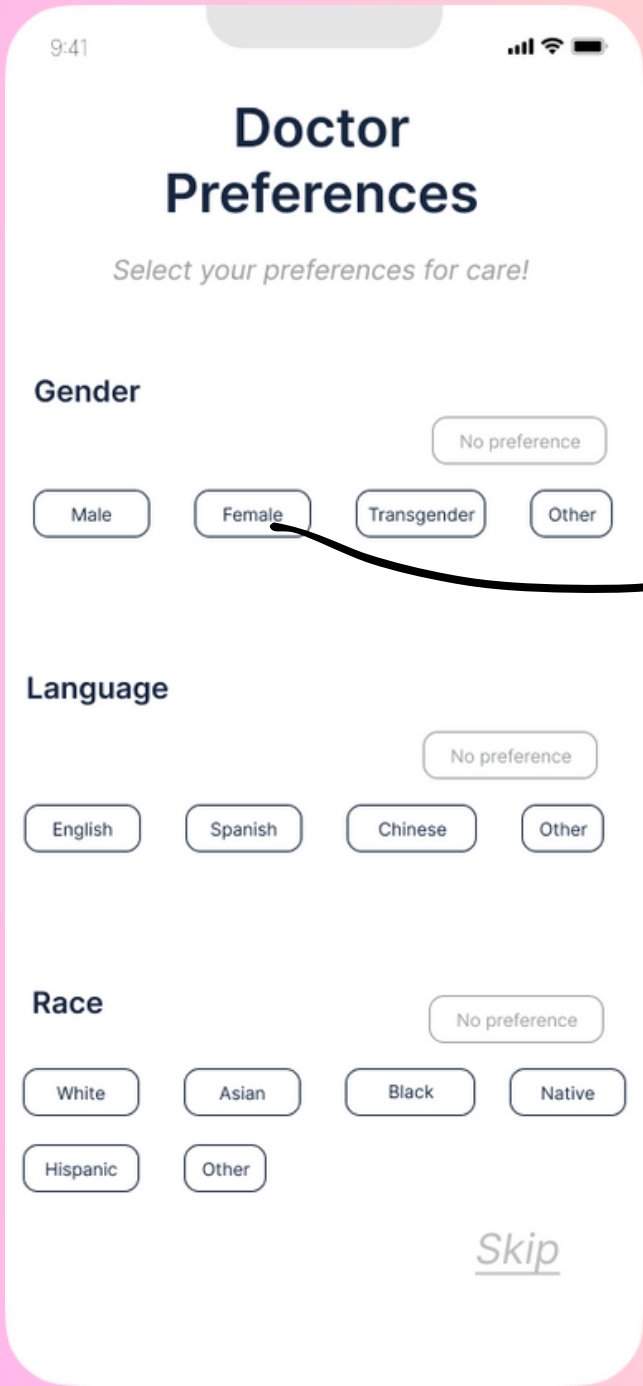
[Parsing paper calendar]

[Parsing paper calendar]

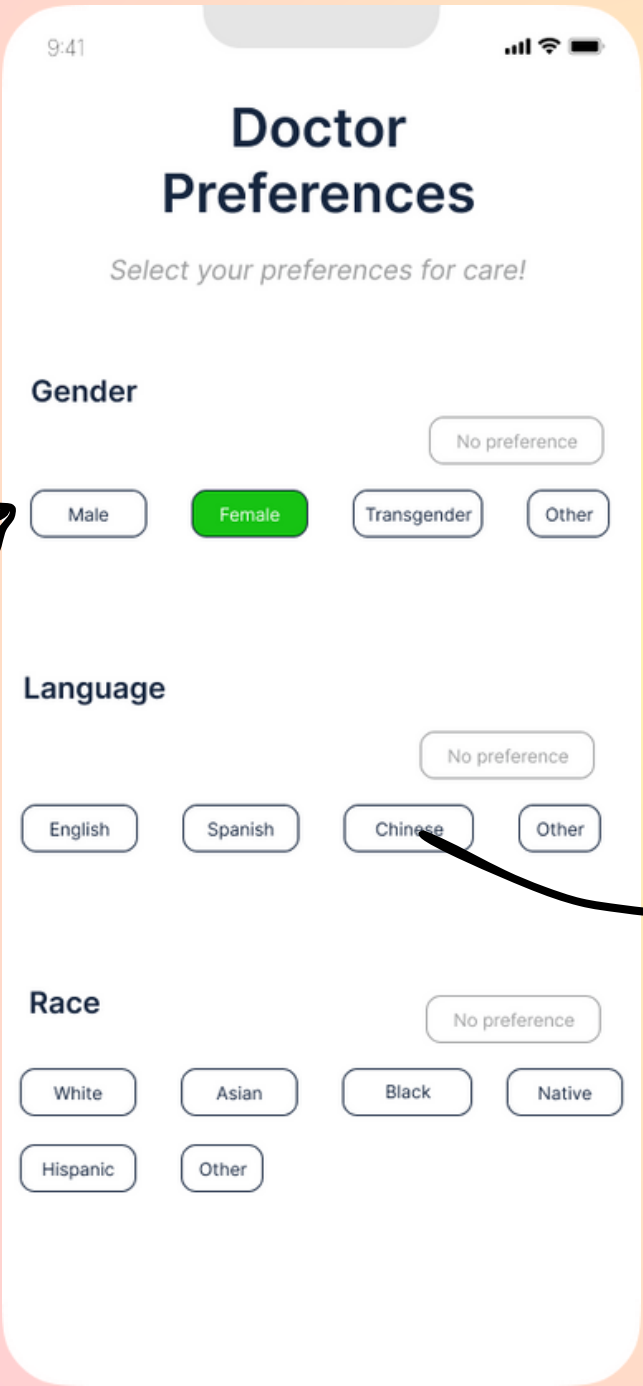
[Scan successful, press next to continue]

# Moderate

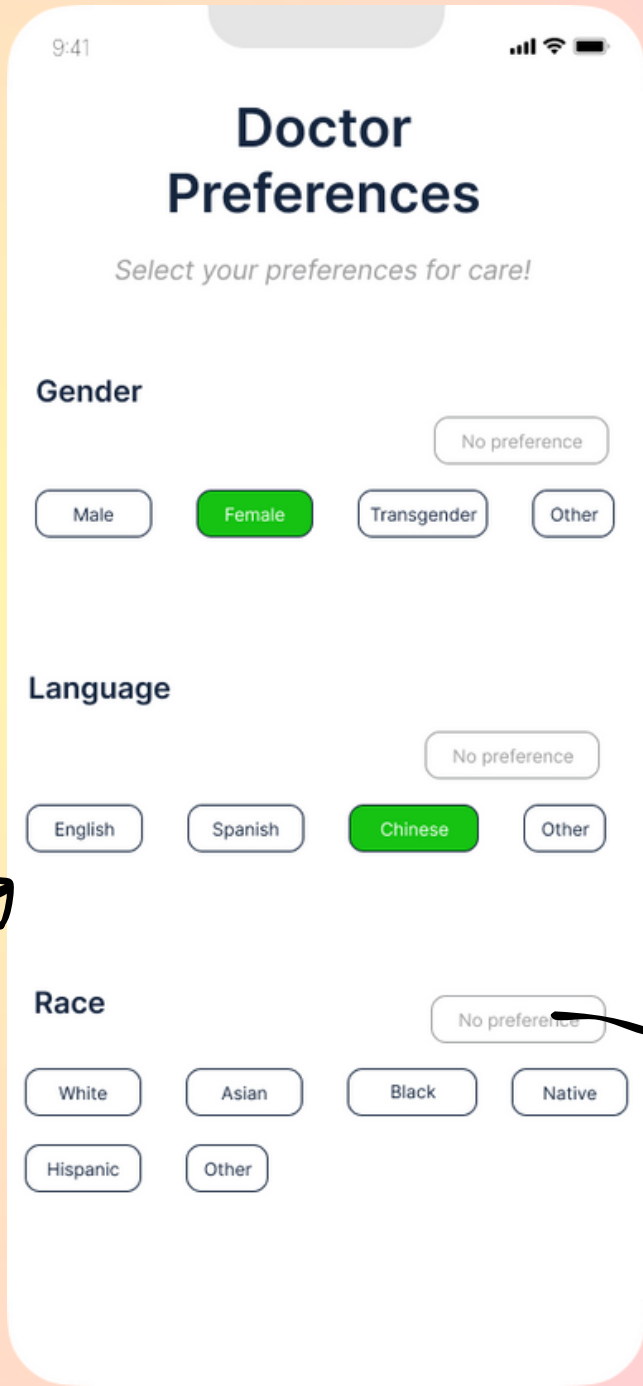
CheckUp connects with the user's calendar and doctor preferences to suggest them the best availabilities and provider



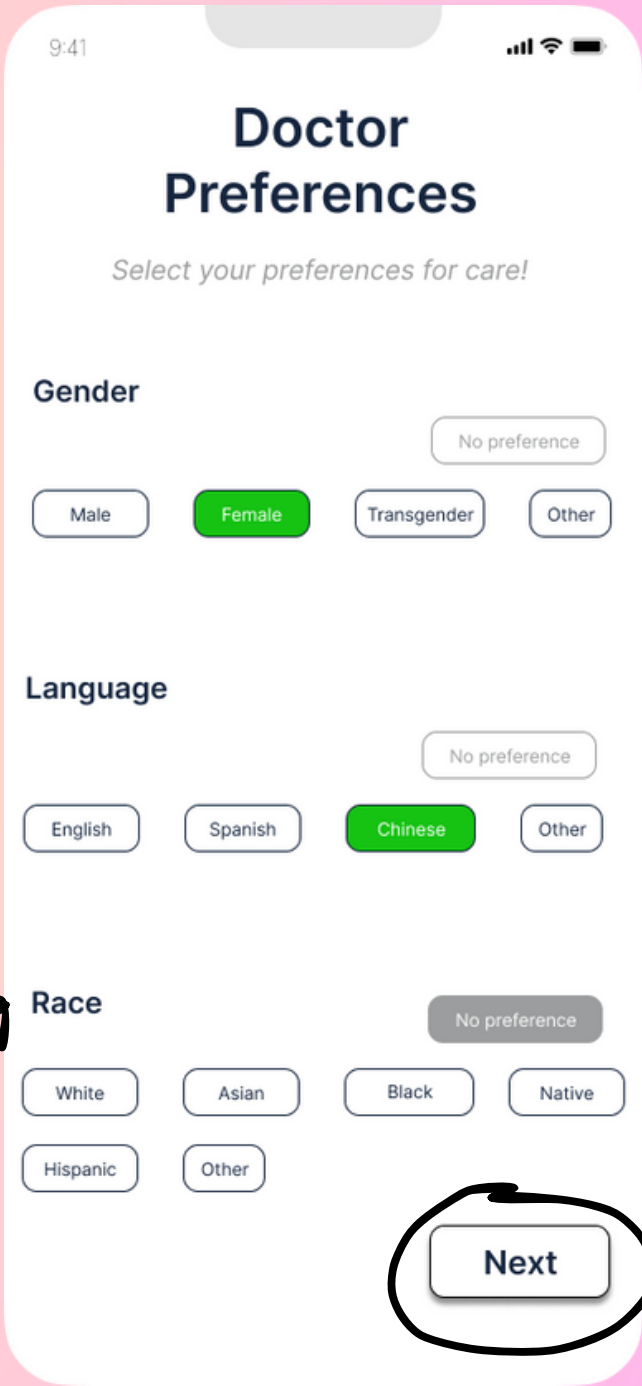
[Doctor preferences page, click buttons to make your selection, hard-coded to press Female]



[Hard-coded to select language as Chinese]



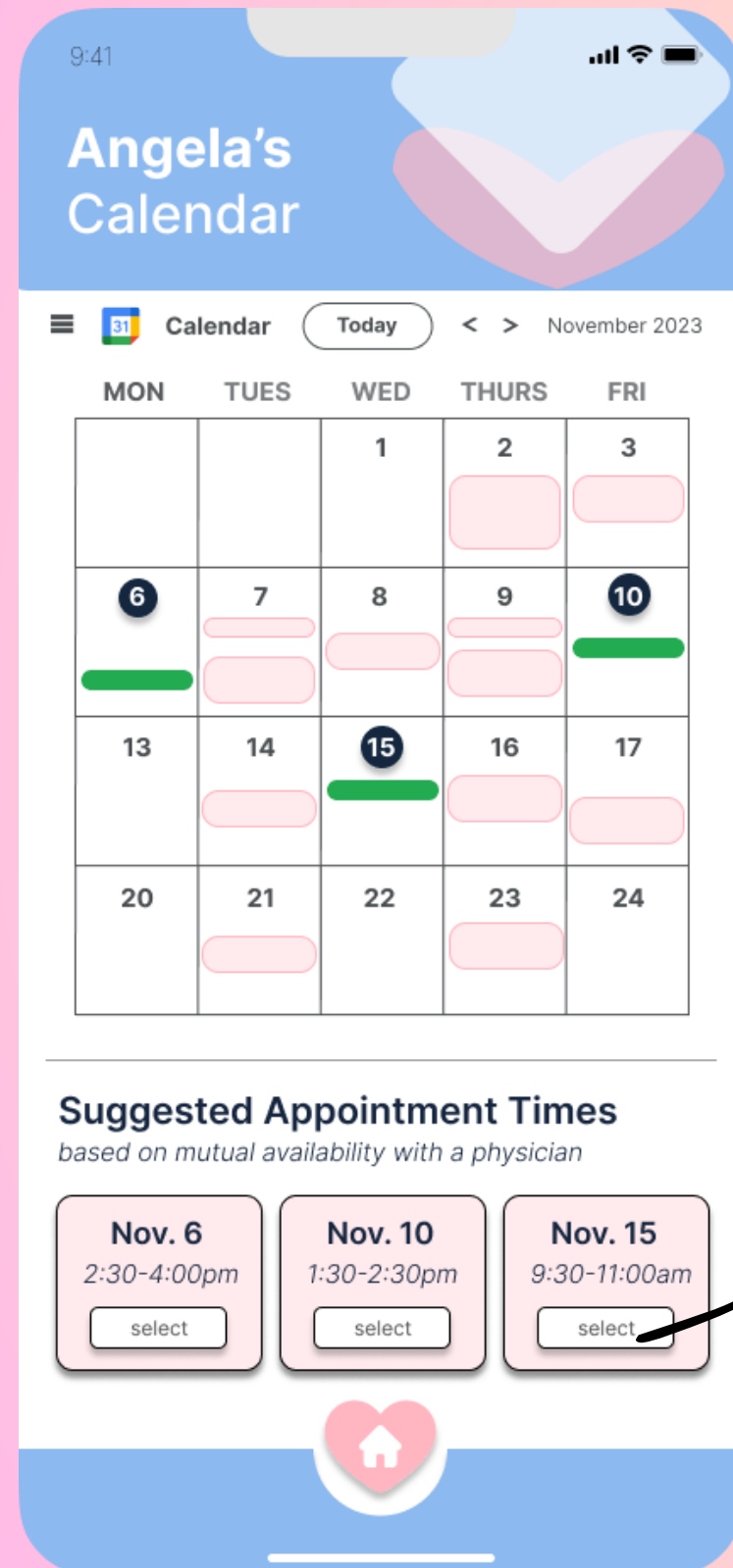
[Hard-coded to select Race as No Preference]



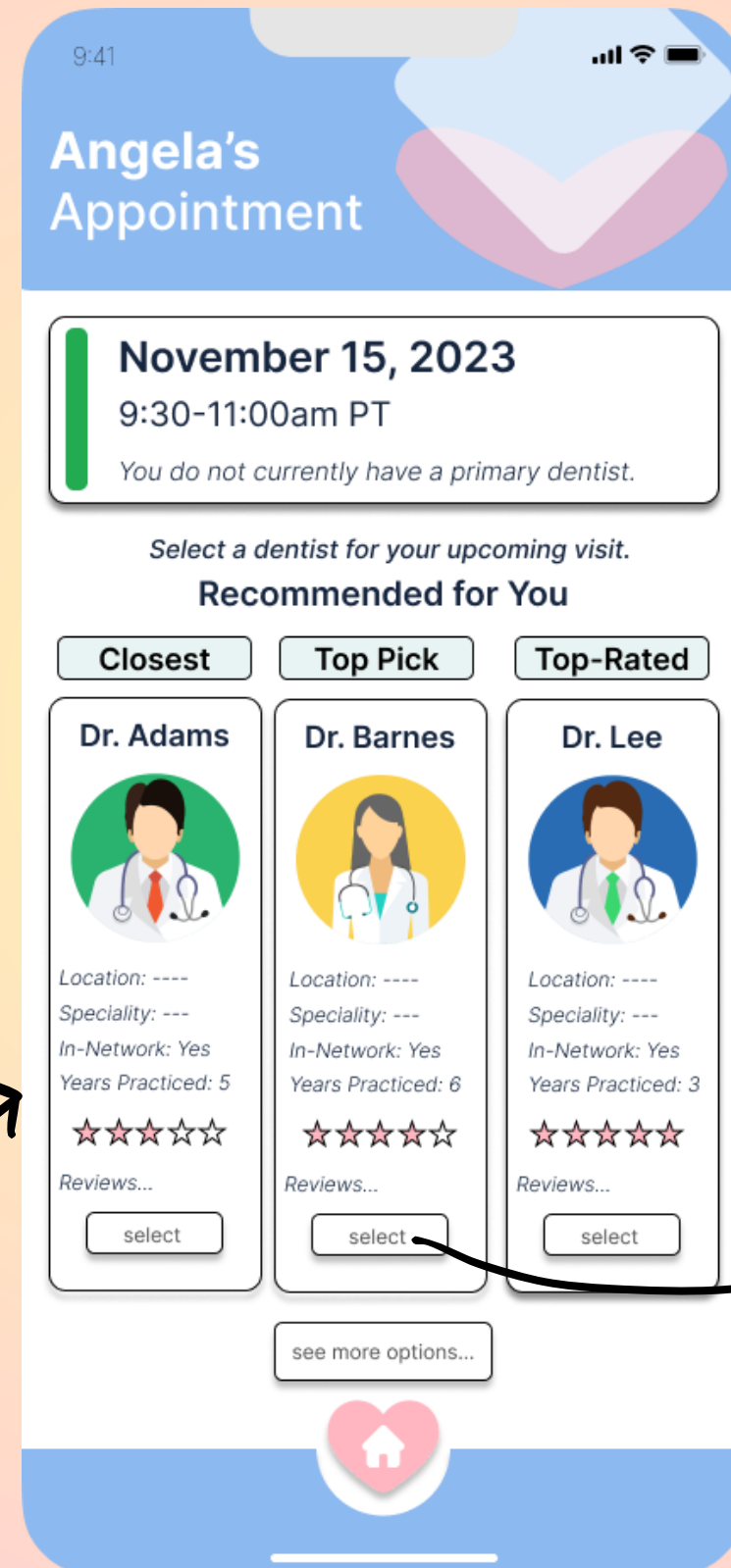
[After making your selections, press Next to continue]

# Moderate

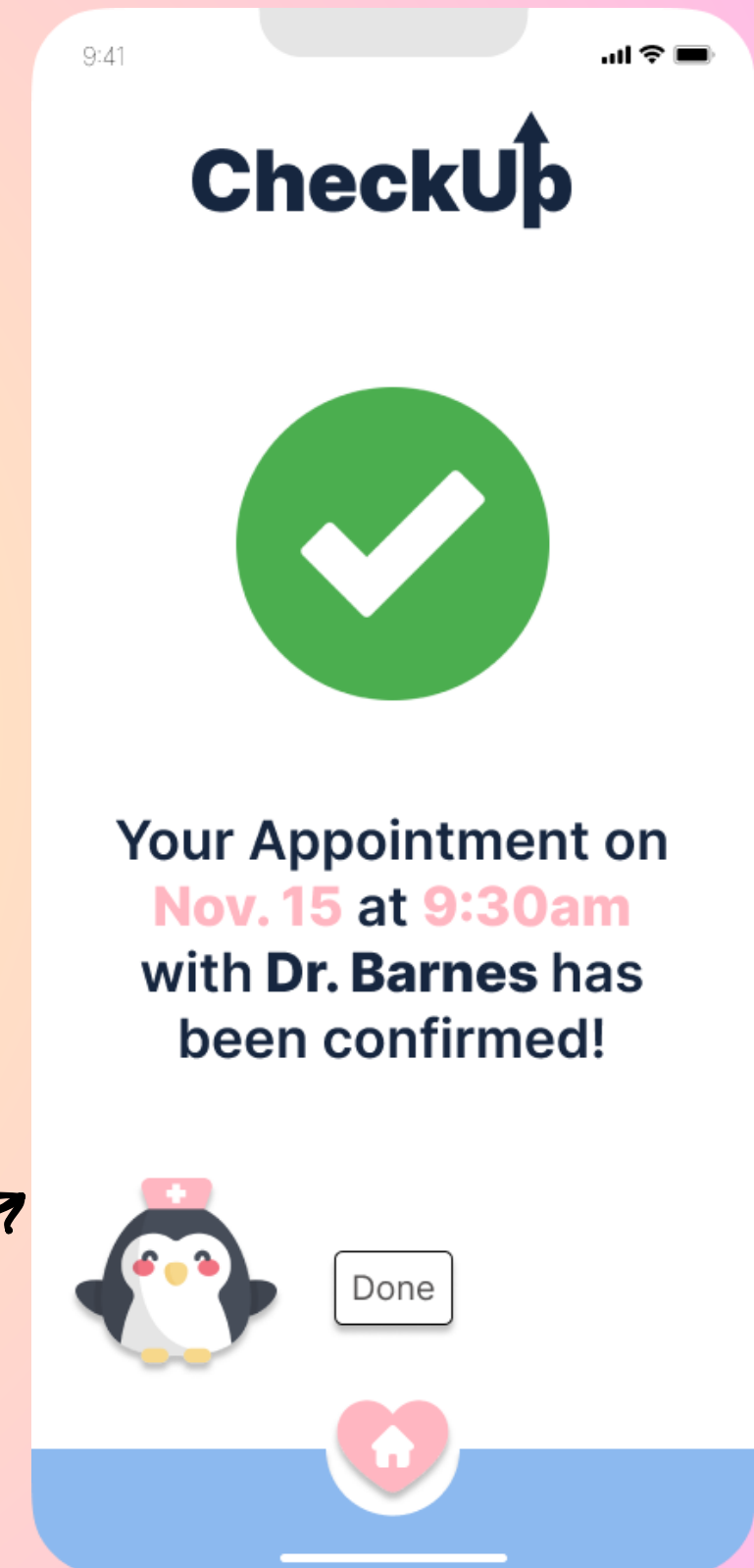
CheckUp connects with the user's calendar and doctor preferences to suggest them the best availabilities and provider



[Select appointment time page, GCal already synced and shown, press Nov 15th select]



[Select doctor page, shows 3 doctors based on category, select Dr. Barnes]



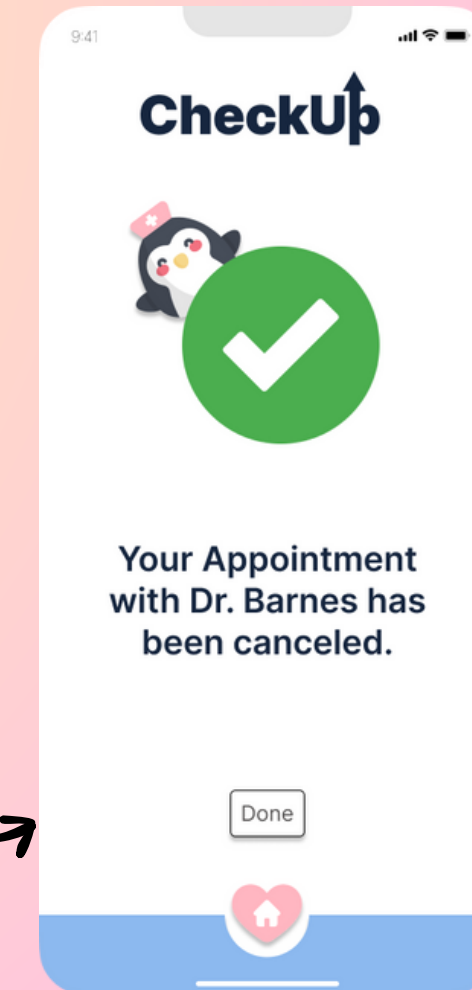
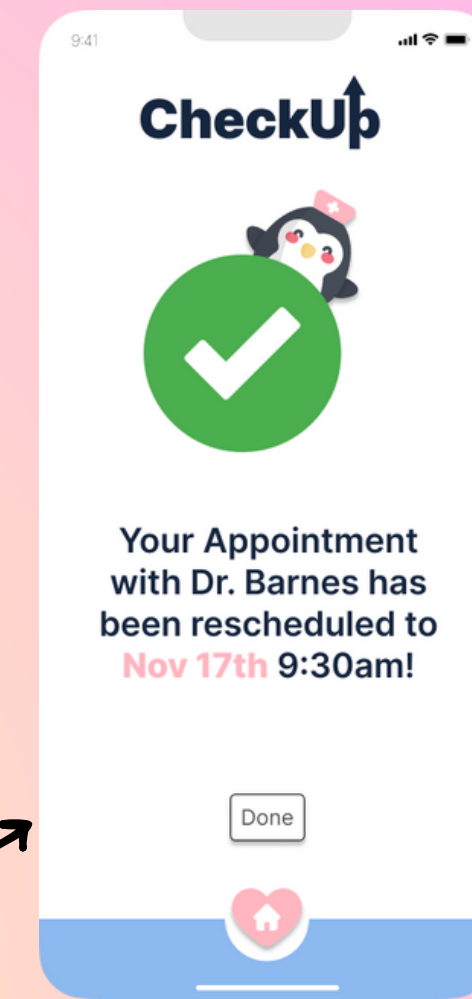
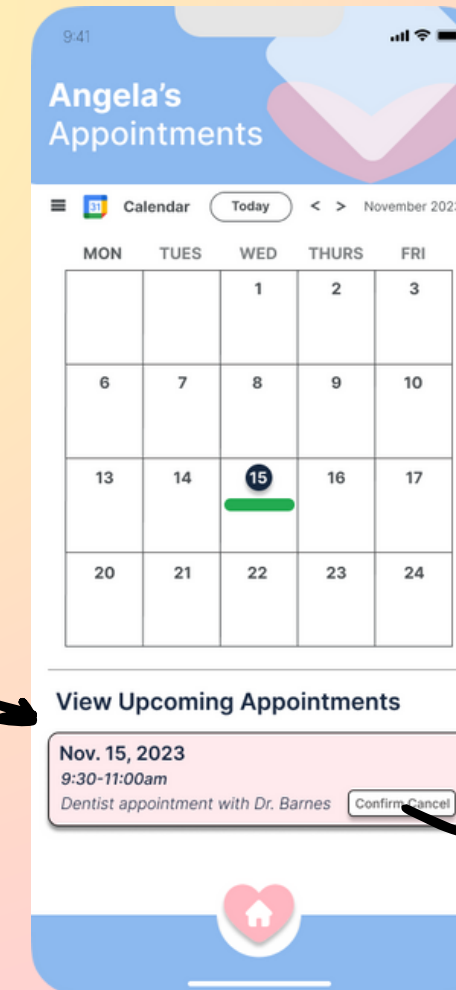
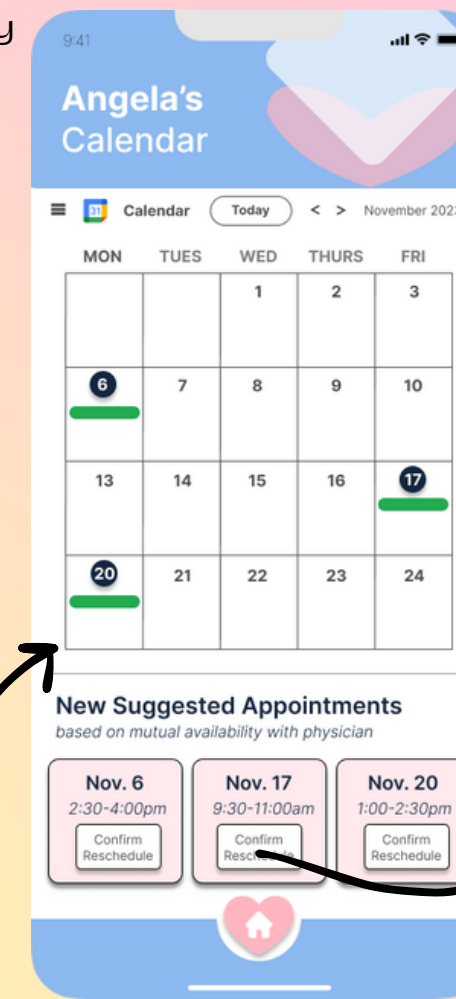
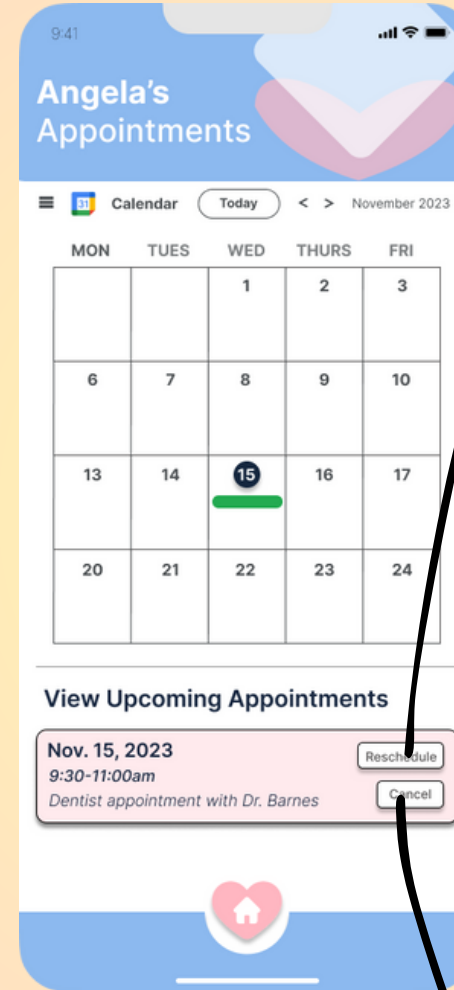
[Appointment Confirmation Page, press done]

# Complex

Users can view past and upcoming appointments and reschedule/cancel upcoming appointments

[Reschedule Page, click any option]

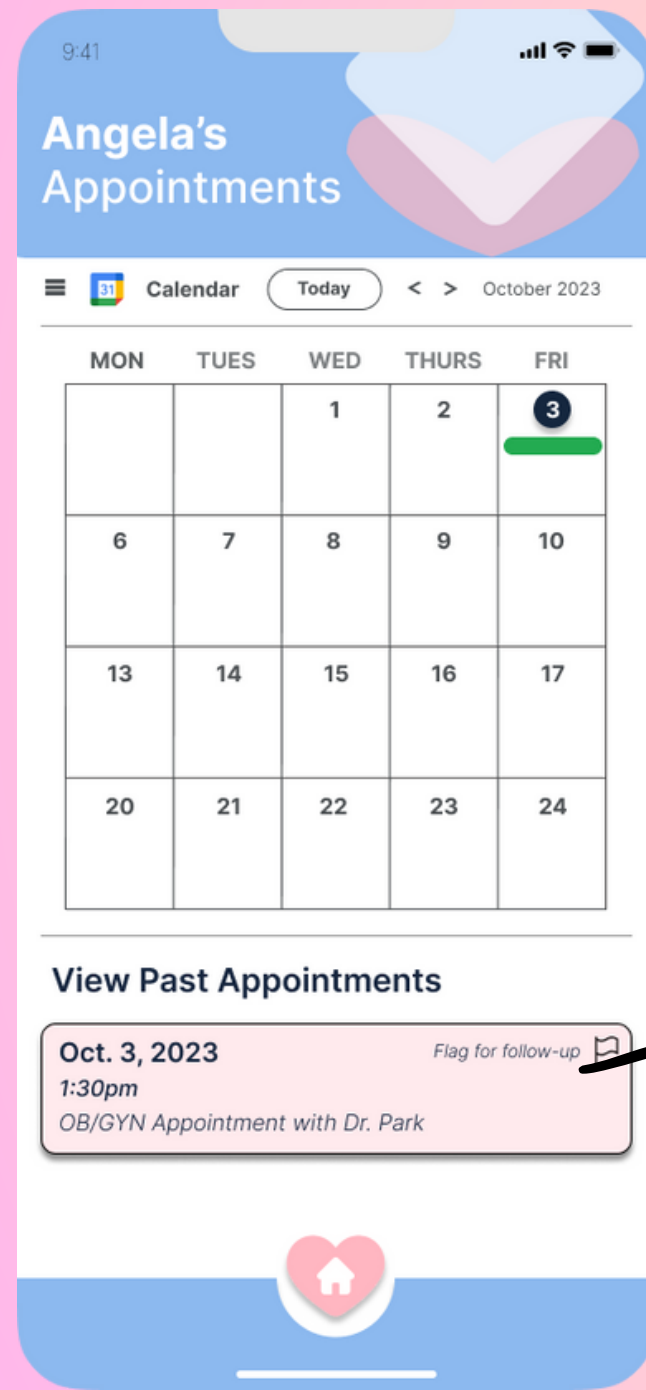
[View Appointments page, click Reschedule or Cancel]



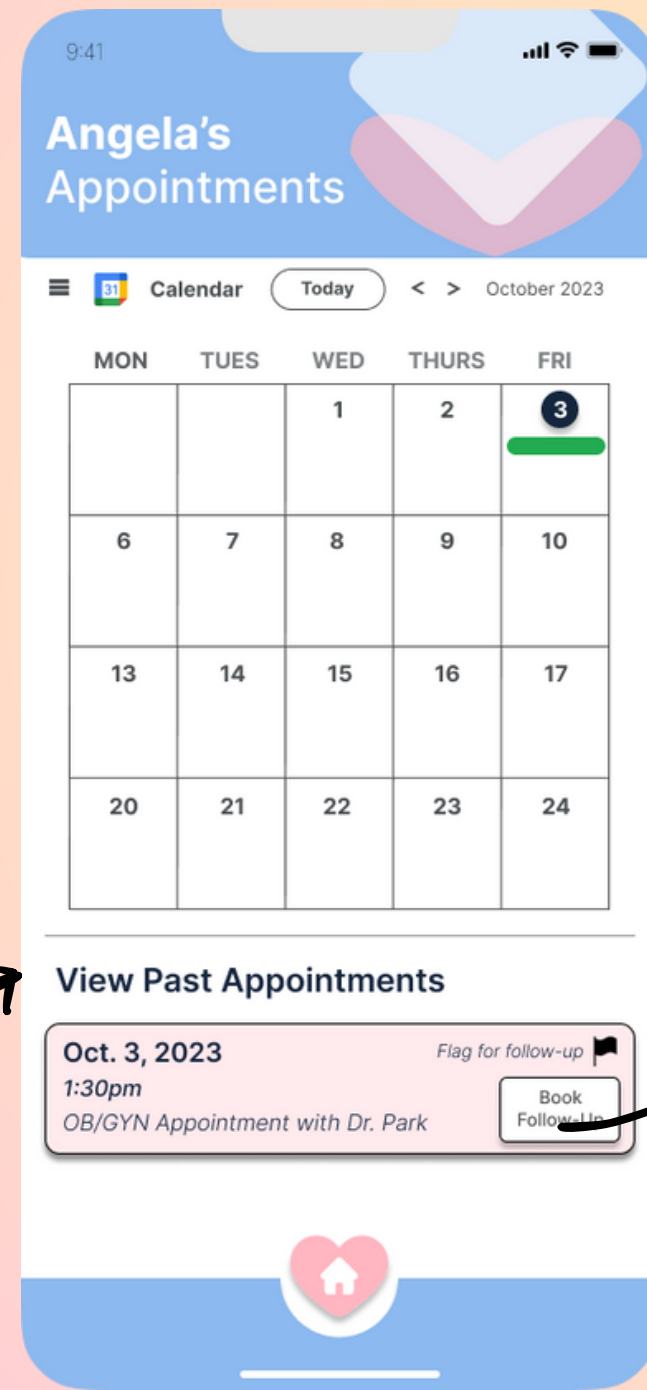
[Cancel Appointment, click Confirm]

# Complex

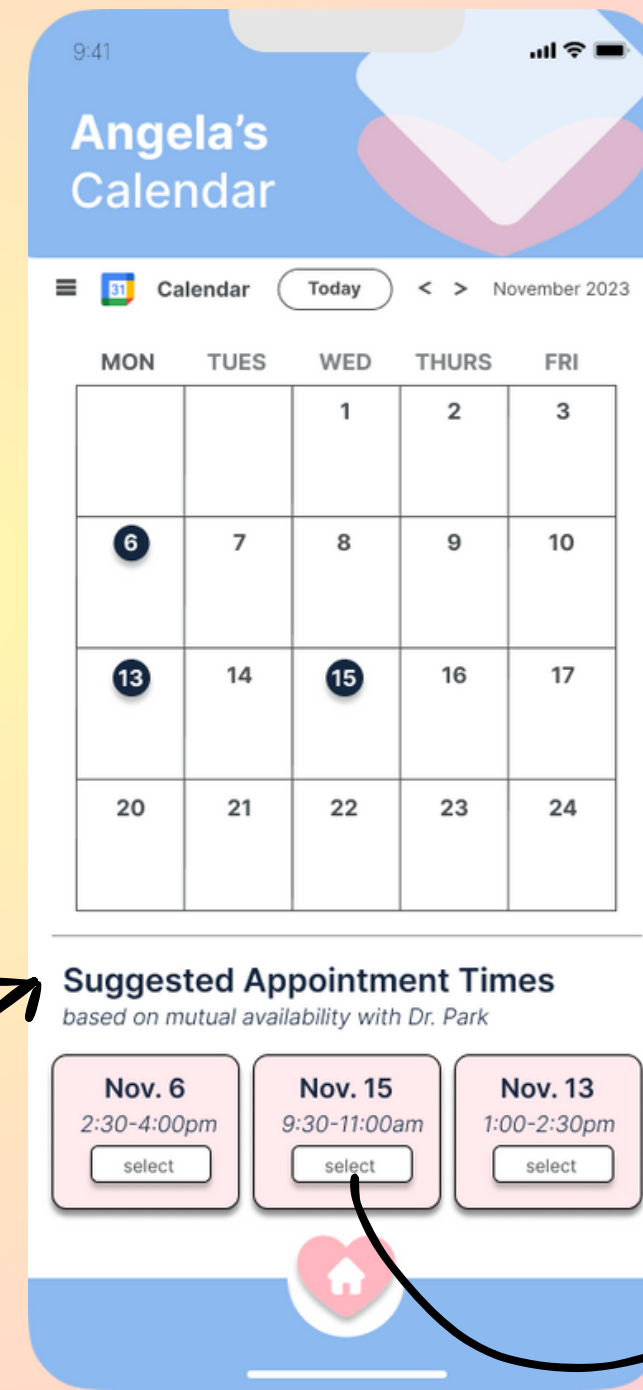
Users can view past and upcoming appointments and reschedule/cancel upcoming appointments



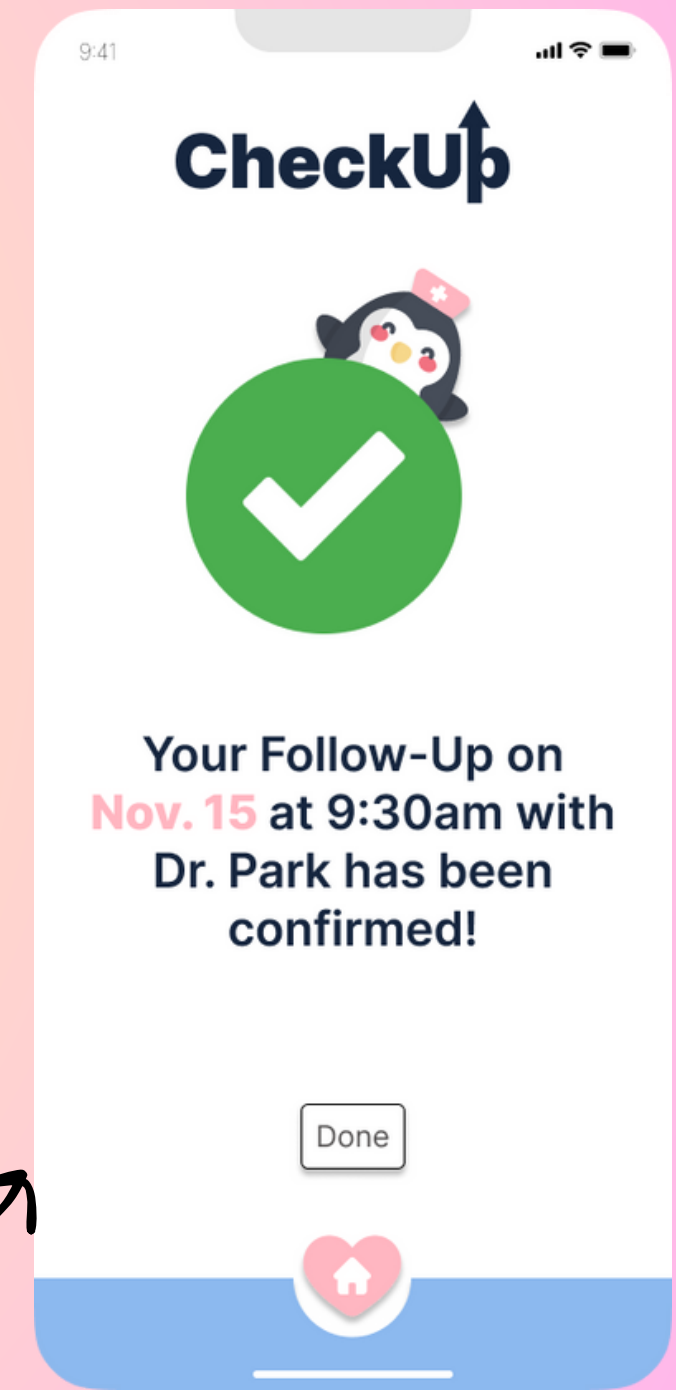
[View Appointments Page, currently at past month. Click Flag for follow-up]



[Book Follow-Up to schedule future appointment before forgetting!]



[User can select best appointment time]



[Follow-up appointment is confirmed]

# Prototype Implementation

## Tools

### Canva

- Open-source images and icons.
- Pros: Easy-to-use, free, customizable
- Cons: Hard to integrate (had to convert to PNG, get rid of background, etc.)

### Flaticon

- Open-source icons.
- Pros: Free, easy-to-use
- Cons: Hard to customize

### iMessage Features

- Used to book appointments
- Pros: Almost universal understanding of chat interface based on user familiarity with iMessage
- Cons: Open-endedness could confuse users; potentially excludes users more familiar with Android

### App Icons

- Outlook, Google Calendar, and Apple Calendar
- Pros: User understanding of icons based on familiarity
- Cons: Potential exclusion of non-digital calendar users

# Prototype Implementation

## Limitations

Users cannot truly customize preferences for sake of simplicity in minimizing screens.

Users cannot truly calibrate calendars and receive tailored appointment suggestions as it is a prototype.

Users aren't able to actually receive notifications for follow-up appointments as it is a prototype.

Could not include all the preferences and customizations when creating a profile due to simplicity.

Users cannot edit their profile or appointments for simplicity sake.

Couldn't actually recommend doctors based on preferences/location for simplicity and because it's still a prototype.

# Prototype Implementation

## Hard-Coded Features

Instead of **accessing user location**, a **real doctor database**, and the **inputted user's health insurance information**, we hard-coded these features. We also hard-coded the **user's responses** in the chat interface for booking an appointment and the **selection of the appointment and doctor** in the booking/reschedule process for the sake of simplicity in our medium-fidelity prototype.

# Prototype Implementation

## Wizard-of-Oz Features

The Wizard-of-Oz technique is implemented in key areas of our med-fi prototype that are currently **not possible to implement**. This includes the **chat responses** to the user's chats in the chat interface for booking an appointment and **generating top choices** for doctors based on preferences when booking an appointment. Since these are based on user input/preferences, which are currently hard-coded, we cannot generate these currently; in the future, we plan on utilizing **Chat-GPT and an algorithm** for choosing the best doctors for the chat and top doctors screens.

**Thank you!**

Figma Prototype