



CS 147
AUT 2023

CHECKUP

Hi-fi Prototype

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CHECKUP[↑]

Care On Your Calendar.

CheckUp Team



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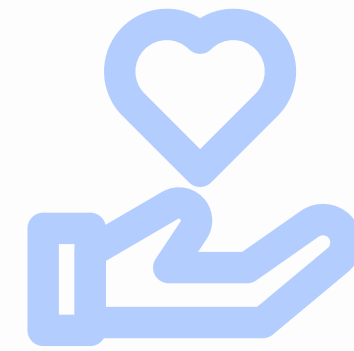


Abbie Maemoto



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.

Roadmap

01 Heuristic Evaluation Results

02 UI Revisions

03 Prototype Status

04 Demo

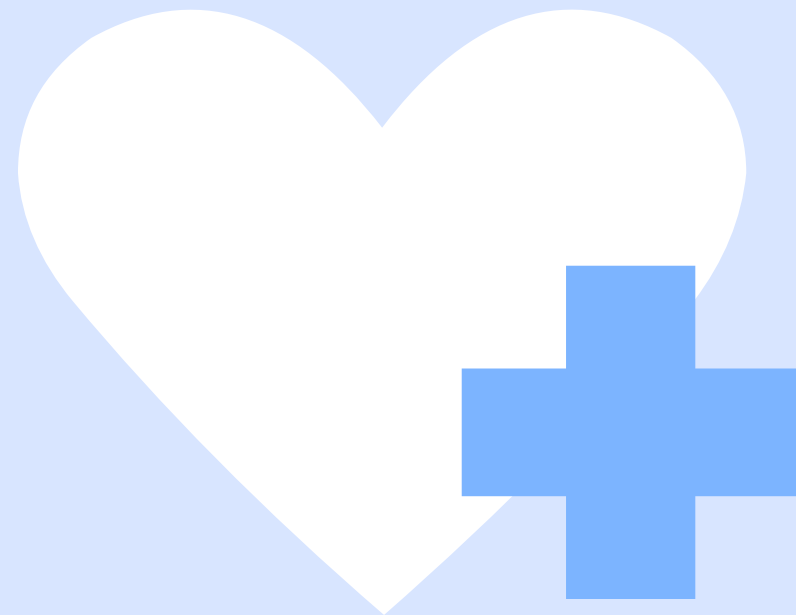


Heuristic Evaluation Overview

- 1-2 severity violations: 19
- 3-4 severity violations: 14
- Most violated heuristics
 - Consistency and standards
 - Efficiency of use
 - Minimalist design



Severity 3-4 Violations



Authentication Flow

- Only scanning insurance is allowed, need to allow for manual entry

Scheduling Flow

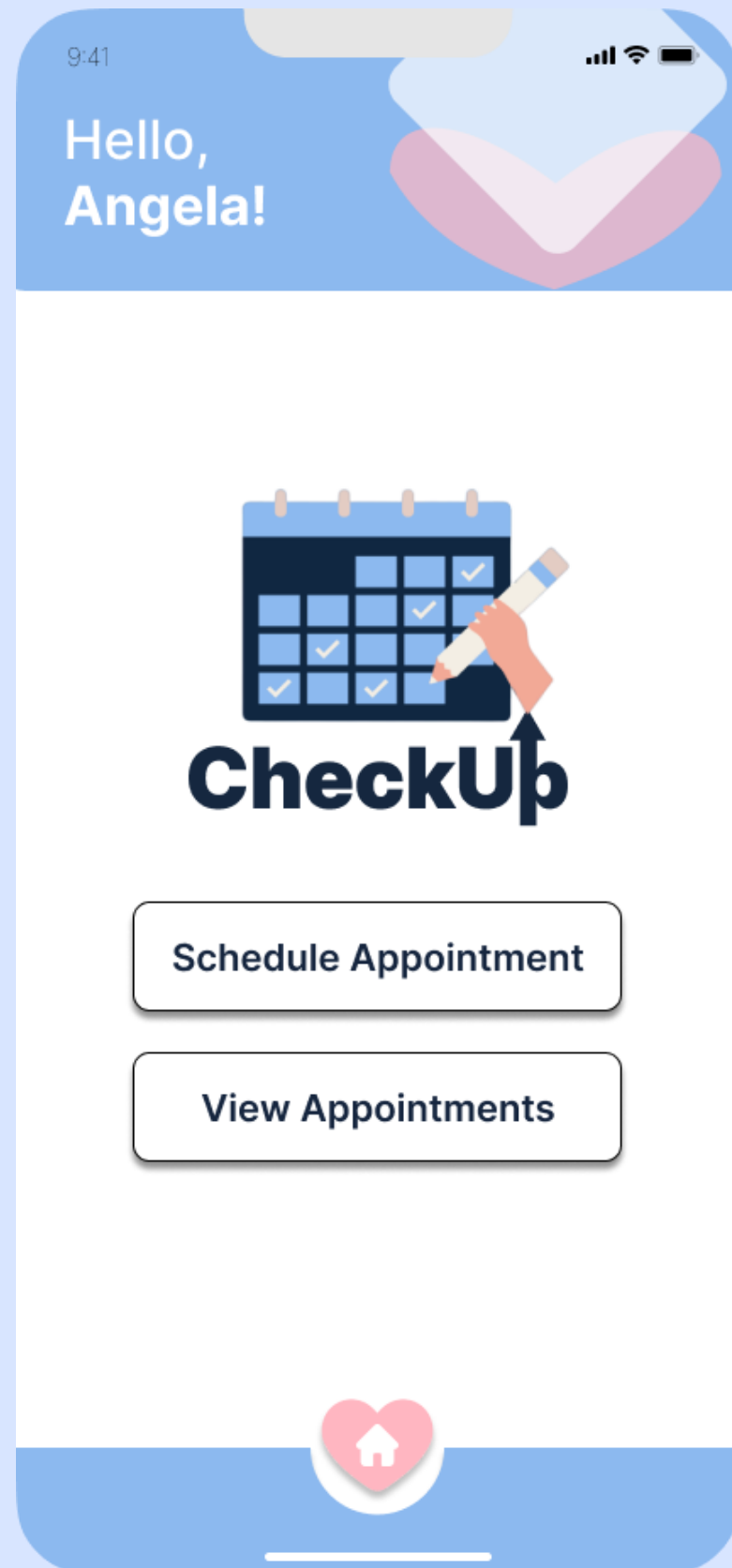
- Lack of back buttons in the flow
- Atypical home screen layout
- Chatbot-only scheduling
- Lack of confirmation after clicking choice of doctor
- UI is very crowded in the screen frame, leading to certain things being cut off

Appointment Follow-Ups Flow

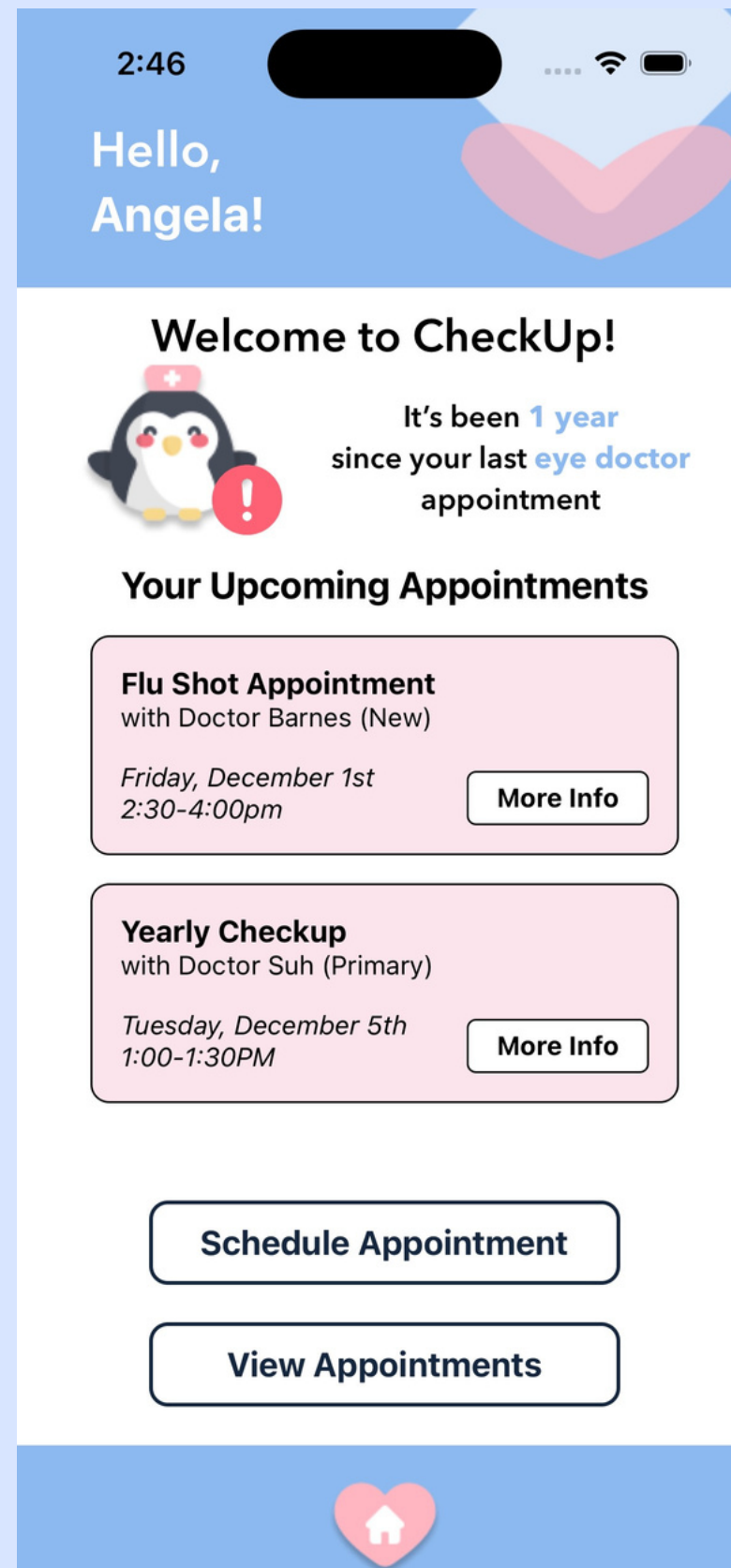
- No indication of progress or time elapsed to complete rescheduling task

Revision #1

Before



After



Increasing Functionality of the Home Screen

Rationale:

Our original home page design violated **H4, H7, and H8** because of the **lack of functionalities provided by the home page**. Logos and buttons were made unnecessarily large, taking up space that could be used for more useful functionalities.

Progress:

To address the above issues we included:

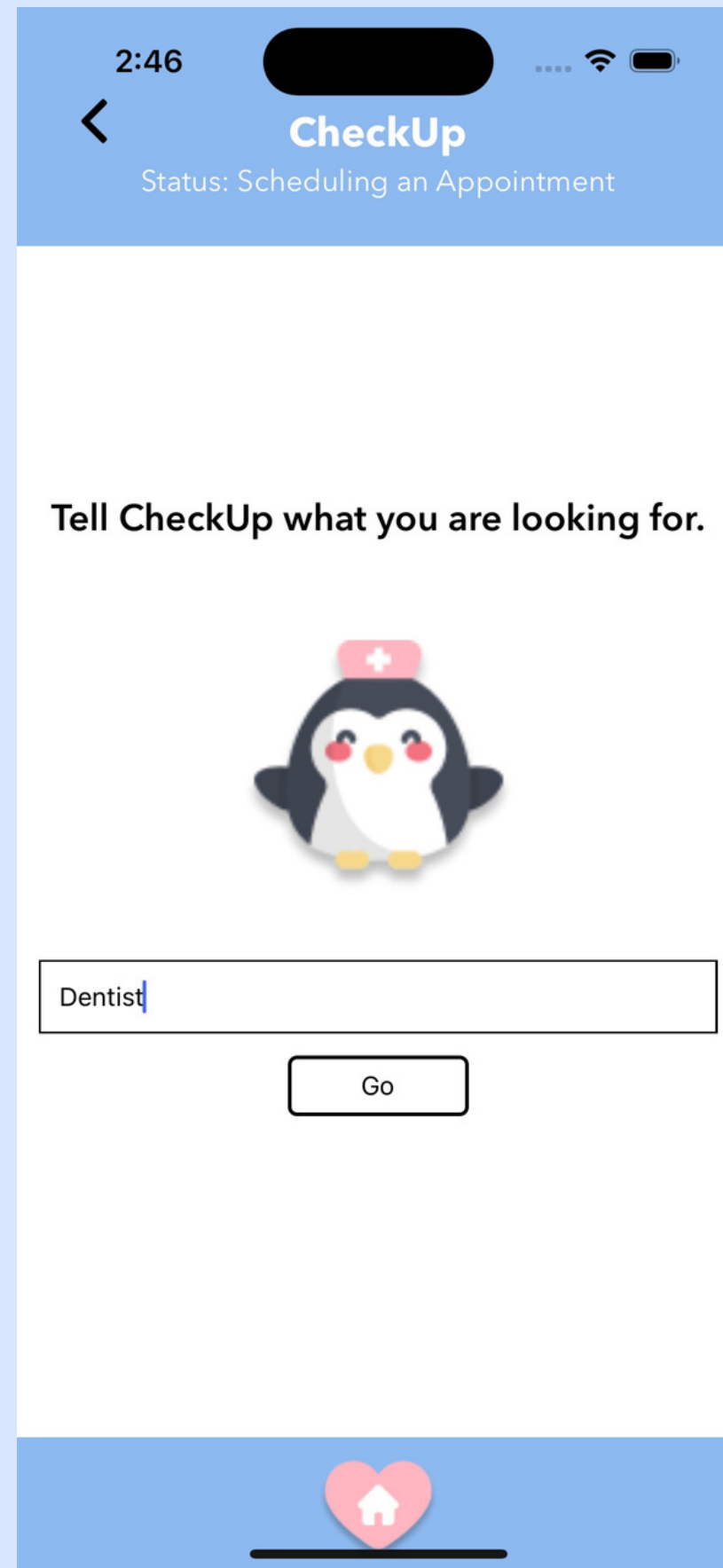
- **previews** of upcoming appointments
- **reminder** feature when the user is due for an appointment
- smaller logo & buttons

Revision #2

Before



After



Greater Flexibility in Scheduling an Appointment

Rationale:

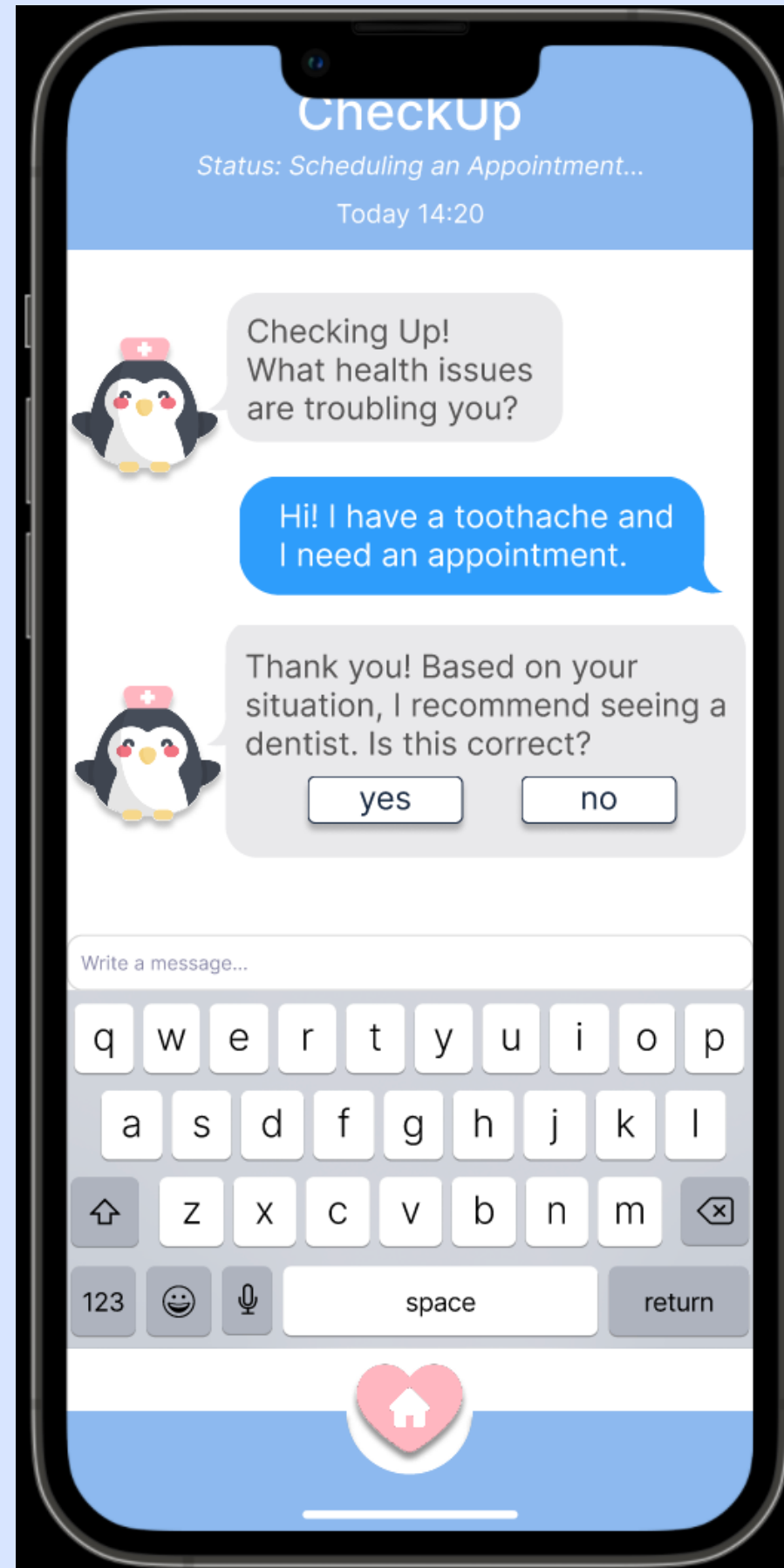
Our original chatbot feature violated **H7** because we **only offered one way to schedule an appointment**. This workflow of interacting with a chatbot for scheduling is **time-intensive and potentially bothersome** for those who already know the type of care they need.

Progress:

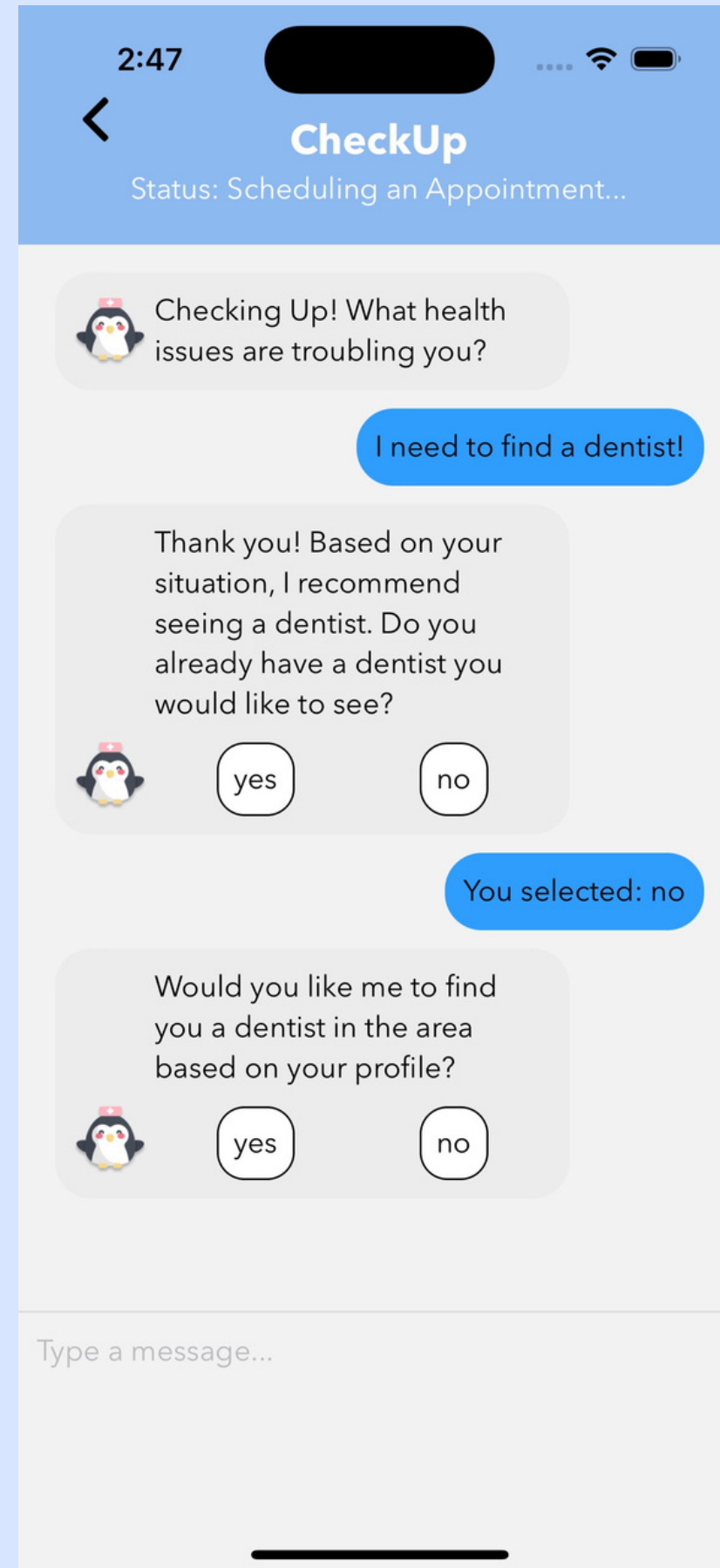
To address the above issues we included another scheduling option offering a **more direct way to search for care**. We implemented a search feature in which users can directly find the care they want.

Revision #3

Before



After



Greater User Autonomy in Choice of Doctor

Rationale:

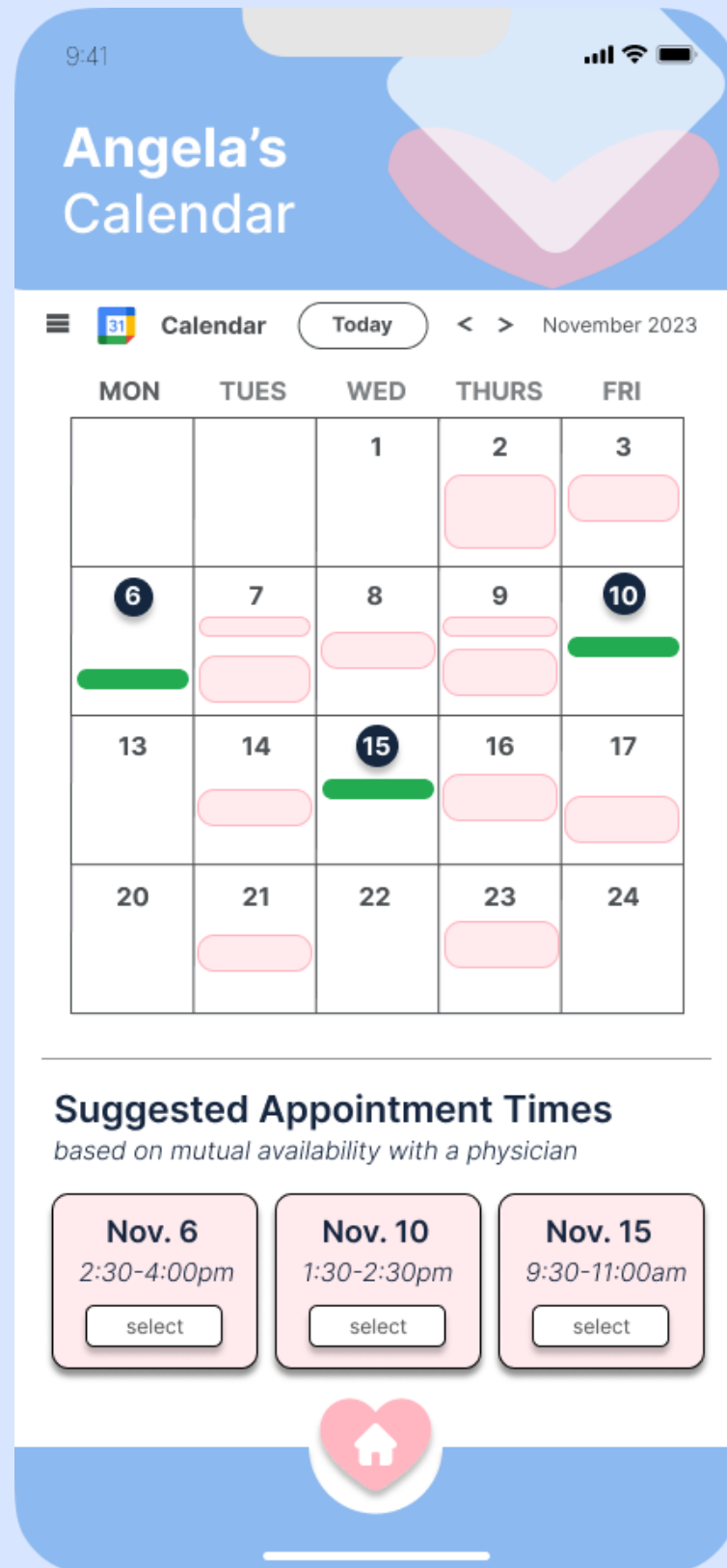
Our original chatbot feature violated **H7** because we forced users to search for a doctor every time they needed to schedule an appointment. This did not account for **the case where a new user already has a primary doctor.**

Progress:

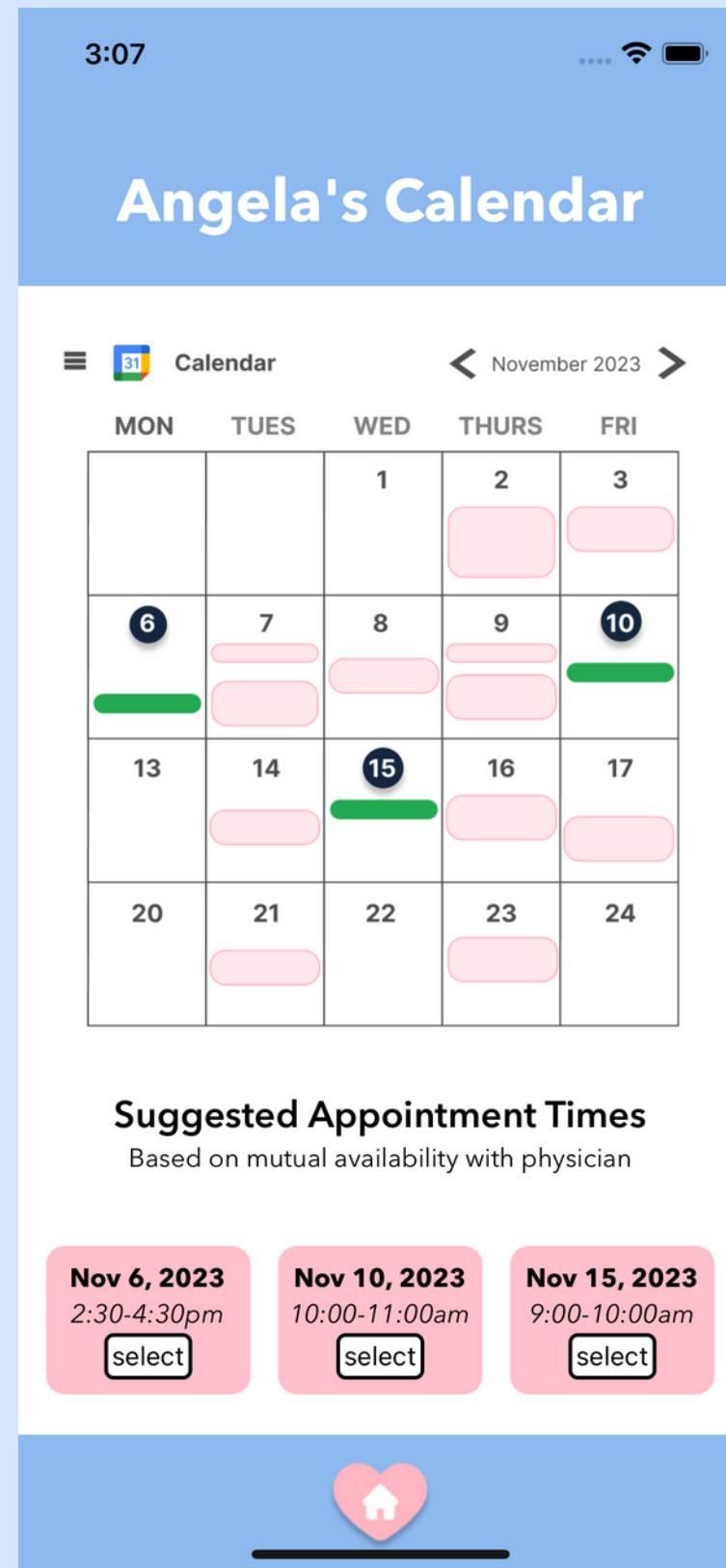
To address the above issue, we added an **additional layer to the chatbot which inquires about an existing primary doctor.** Once the chatbot identifies the type of care the patient needs, the chatbot determines if the patient already has a primary doctor for the visit.

Revision #4

Before



After



Button Accessibility

Rationale:

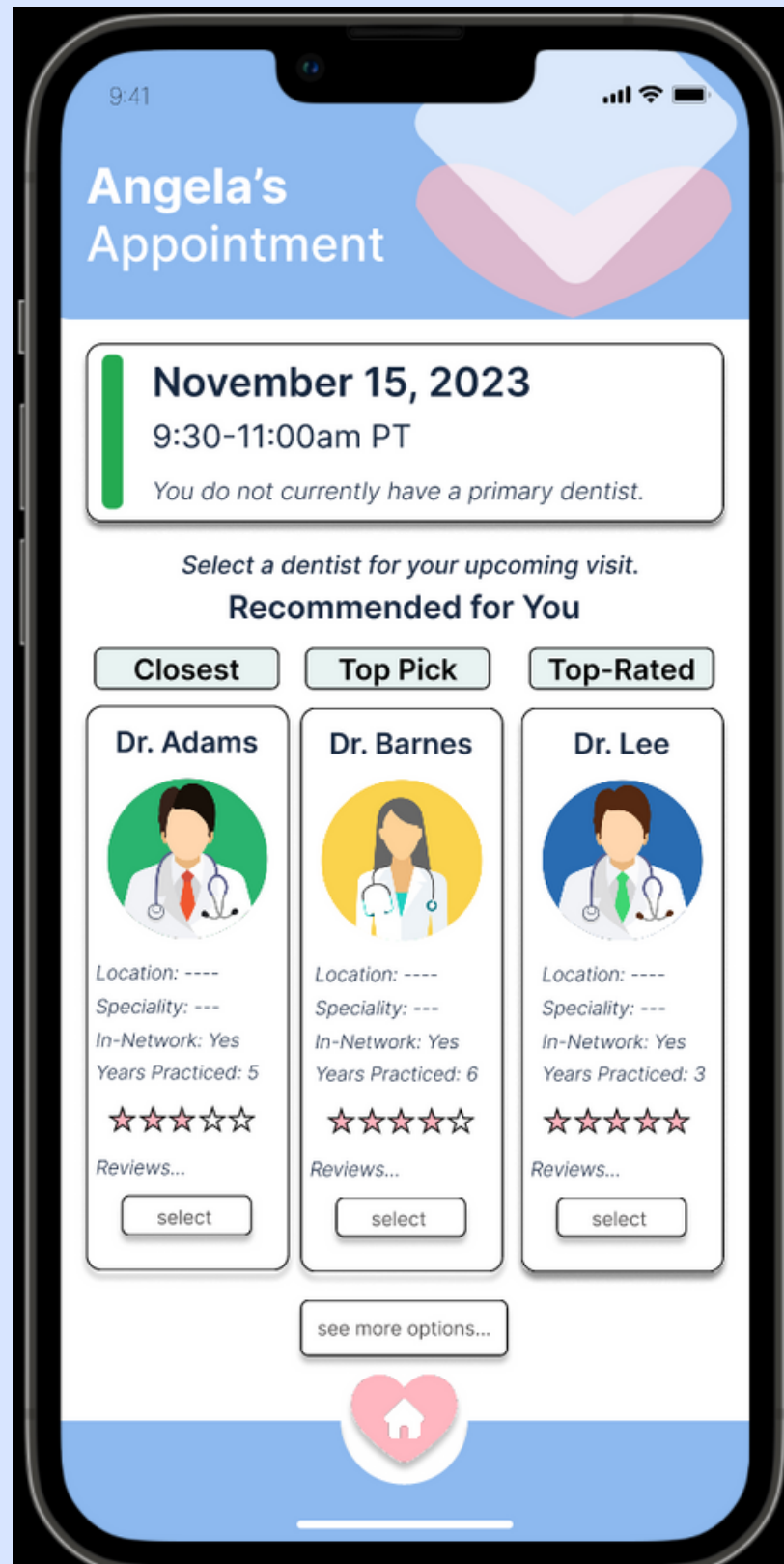
Our original app had many pages in which the **buttons were visibly inaccessible** (i.e. too small), violating H7 and 11. This was especially noted on our calendar page.

Progress:

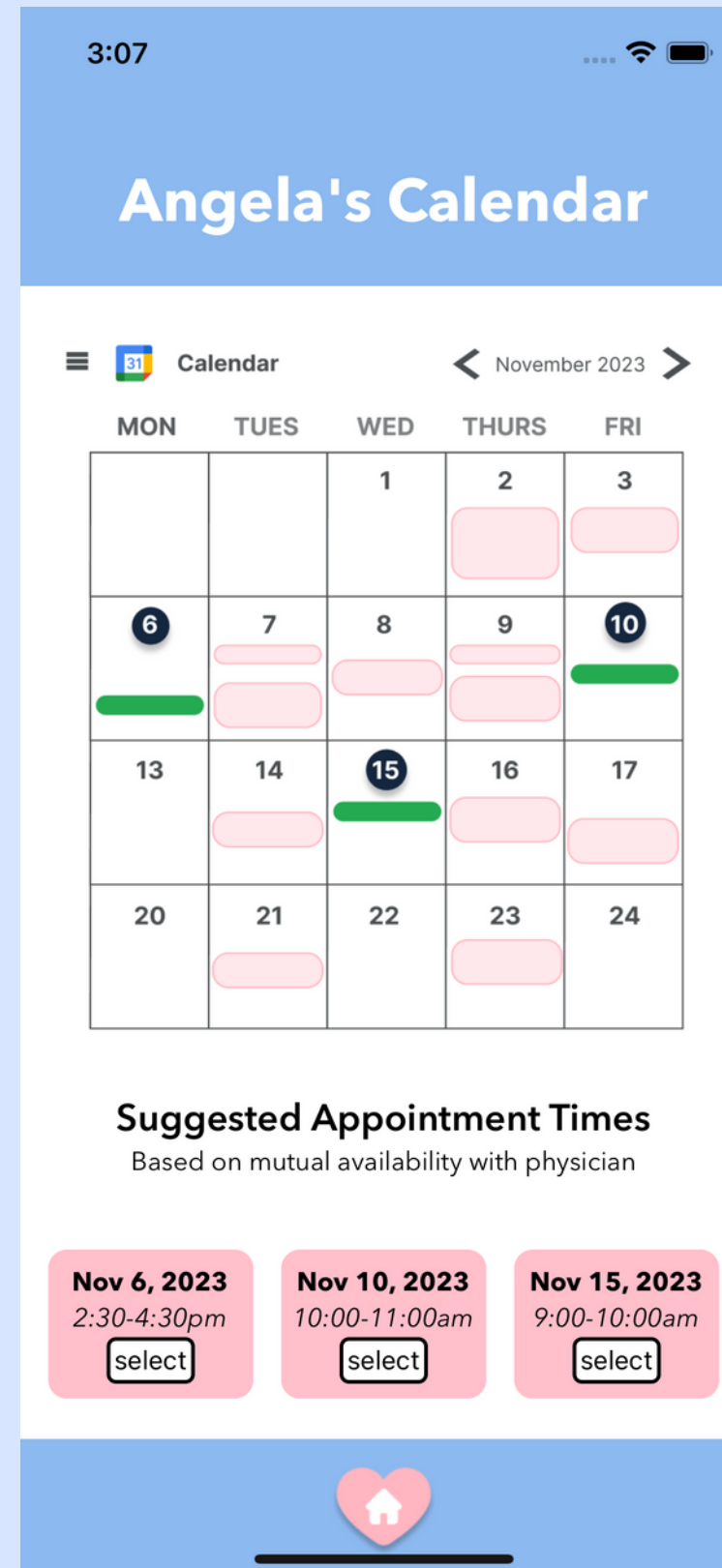
We addressed these violations by making the month **toggle buttons larger**, allowing the feature to be more visibly accessible. This is especially important for users with visual impairments.

Revision #5

Before



After



Consistency of Appointment Dates and Times

Rationale:

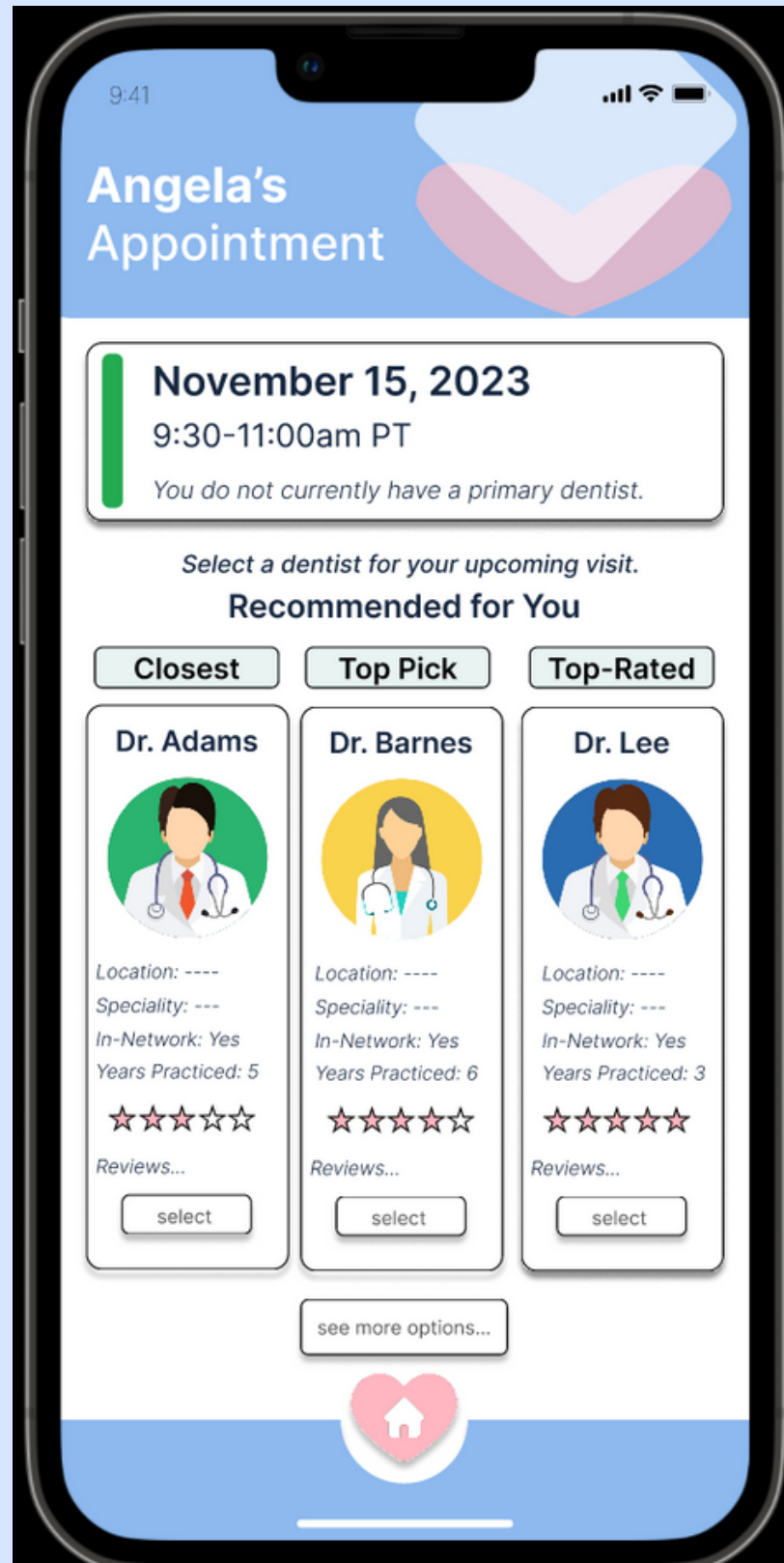
Our original app's scheduling workflow had **inconsistencies in the dates and times** across different pages, violating H1. The scheduling workflow is a core task, and consistency in dates and times is a critical part in allowing the user to confirm an appointment.

Progress:

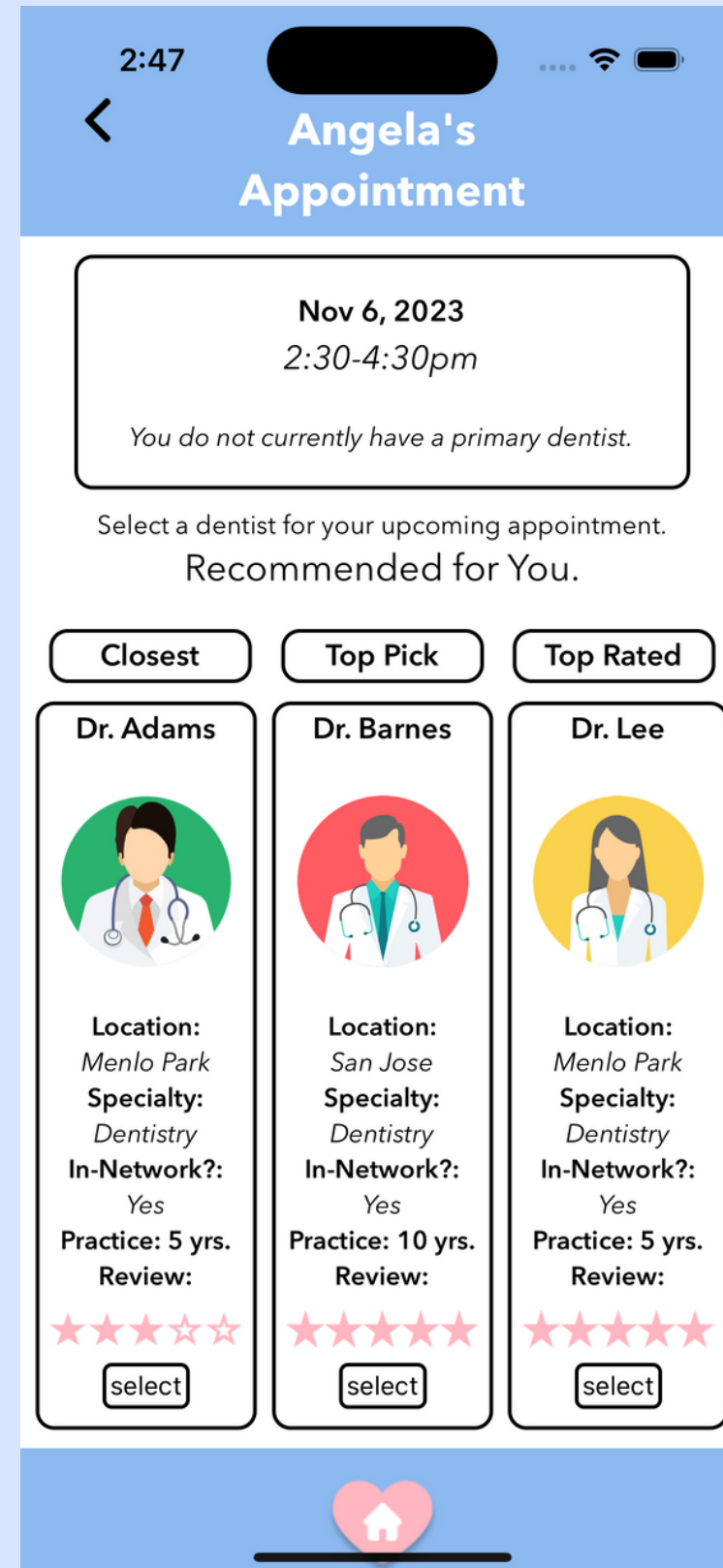
We addressed these violations by ensuring dates and times remained consistent across all pages in the scheduling workflow, increasing **user confidence** and **reducing confusion**.

Revision #6

Before



After



User Control in Error Recovery

Rationale:

Our original app's scheduling workflow did not allow the user to **recover from misclicks, violating H3**. A misclick in this case causes a significant burden to the user (requires going back to the Home and rescheduling the appointment).

Progress:

We addressed these violations by **adding back buttons** to appointment booking pages (calendar and doctor recommendations). Our **next step is to implement confirmation pages** that will act as a second line of defense to user errors.

Revisions & Usability Goals



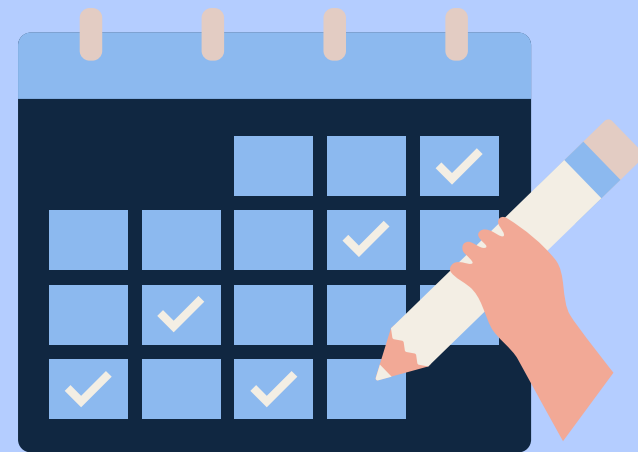
Ease of Use

Most of our **revisions**, such as adding options to go back or giving the user to choice to enter their insurance manually, are with **the intention to make the UI experience easier** for the user



Intuitive Interface

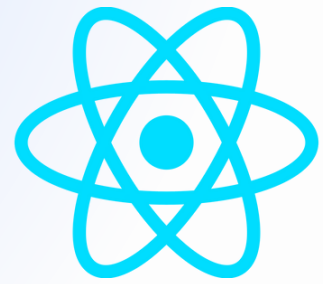
We also aimed to make our app **more intuitive** by adding in features focused on **transparency**, such as with the task time being clearly shown to the user



CHECKUP

Prototype Status

Tools



React Native (Application Framework)



Figma (Design Software)



Supabase (Authentication Back-End)



Expo (Software Development Kit)

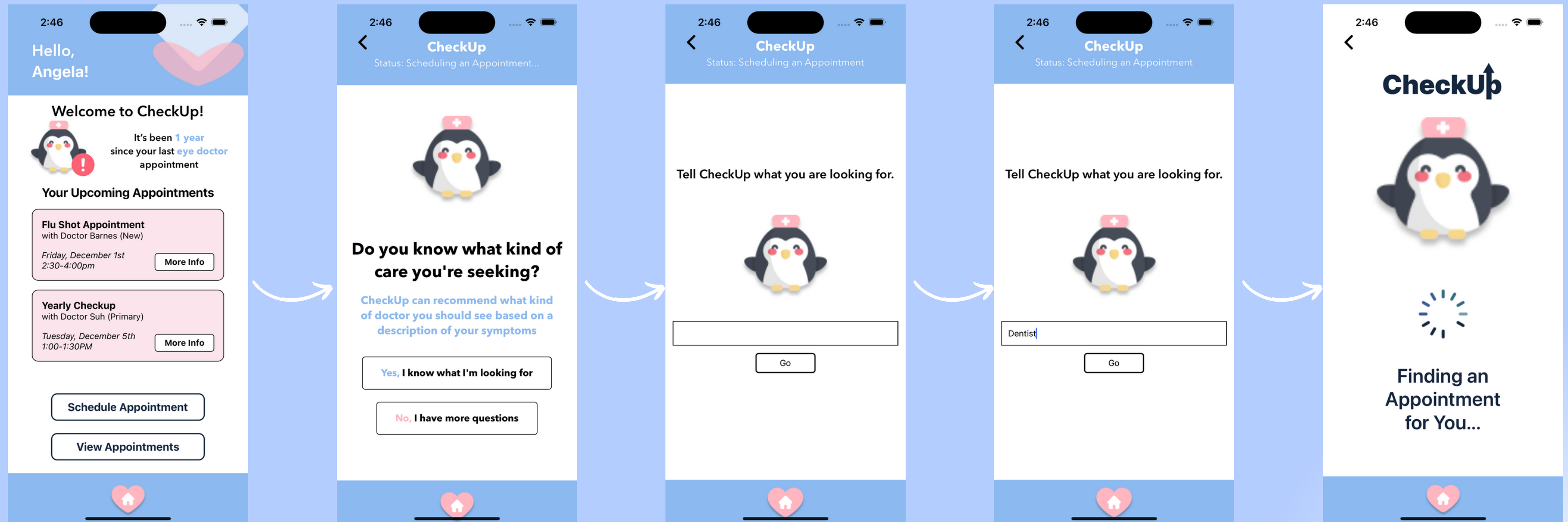


VSCode (IDE)



✓ Implemented Features: Task 1

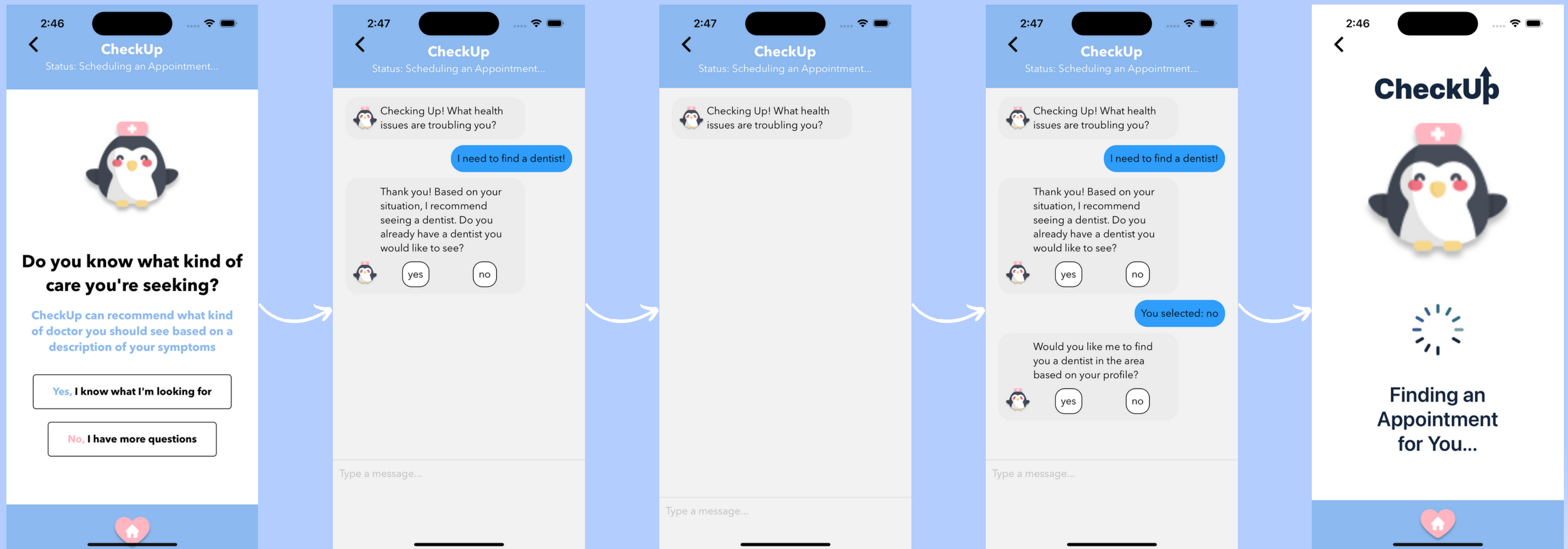
Simple Task: Users can communicate with CheckUp that they want to book an appointment



Option 1: Power users know what care they want.

✓ Implemented Features: Task 1

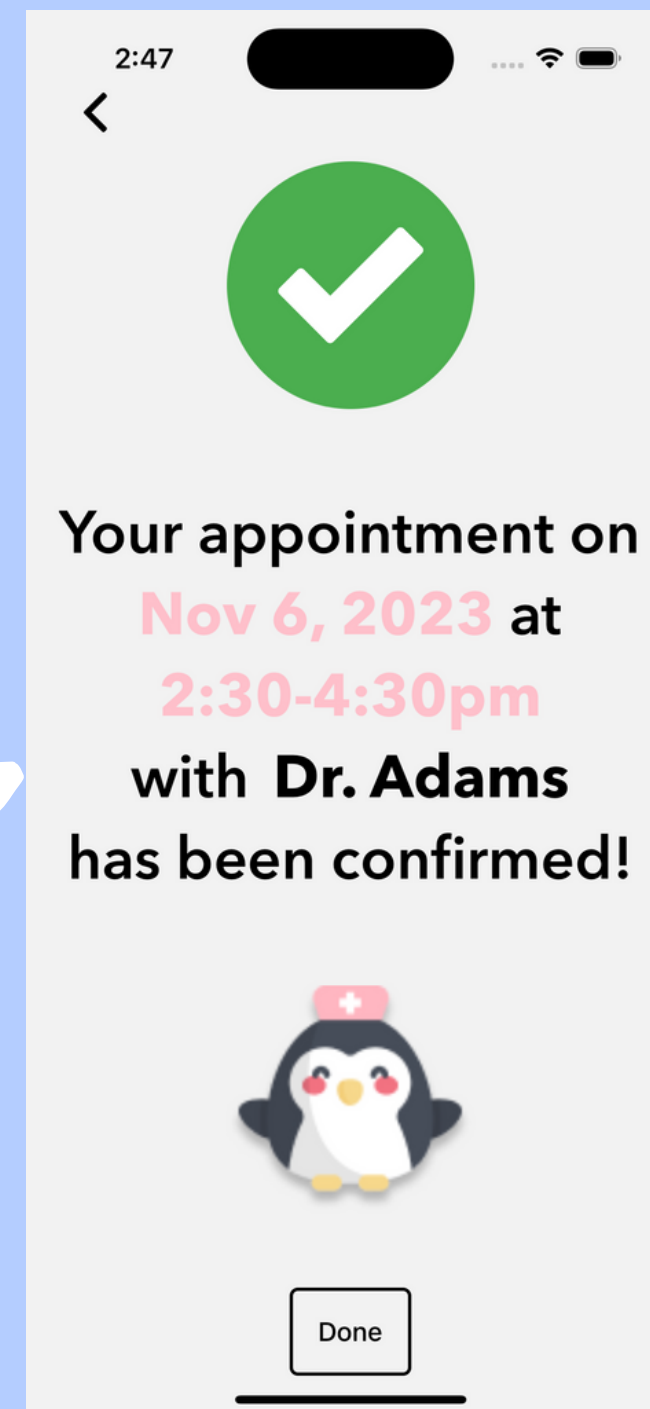
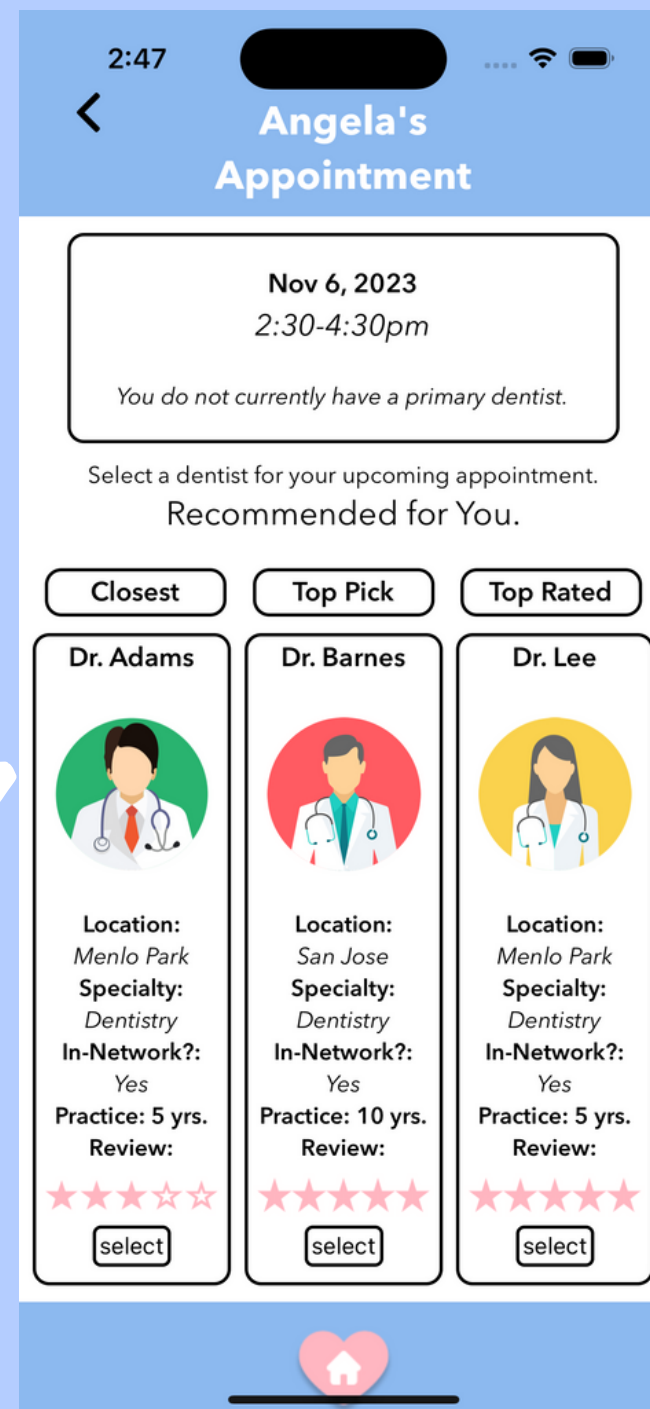
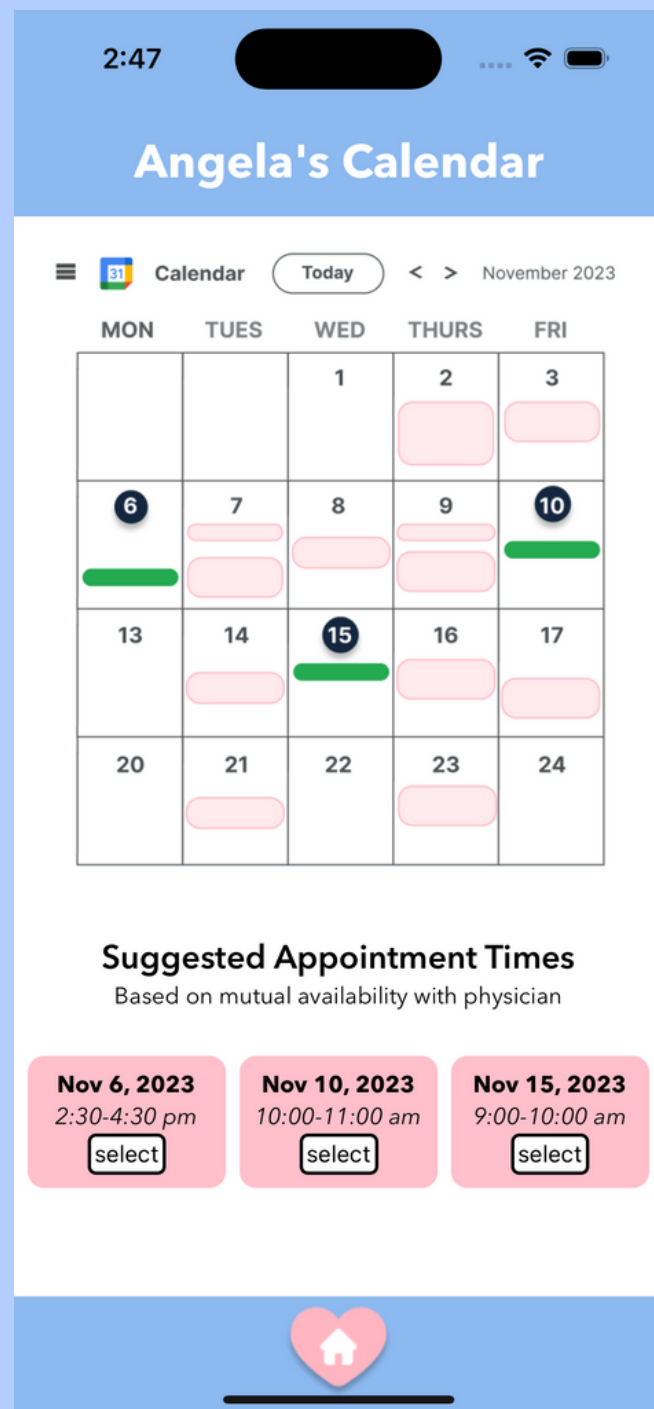
Simple Task: Users can communicate with CheckUp that they want to book an appointment



Option 2: Users want more guidance on the care they need.

✓ Implemented Features: Task 1

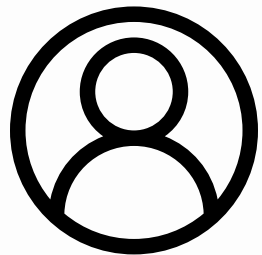
Simple Task: Users can communicate with CheckUp that they want to book an appointment



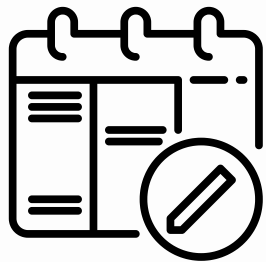
Unimplemented Features



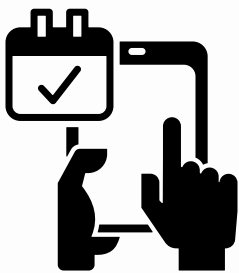
Setting up calendar integration, insurance card scans, and doctor preferences



Creating an account on CheckUp (authentication)



Canceling/rescheduling appointments

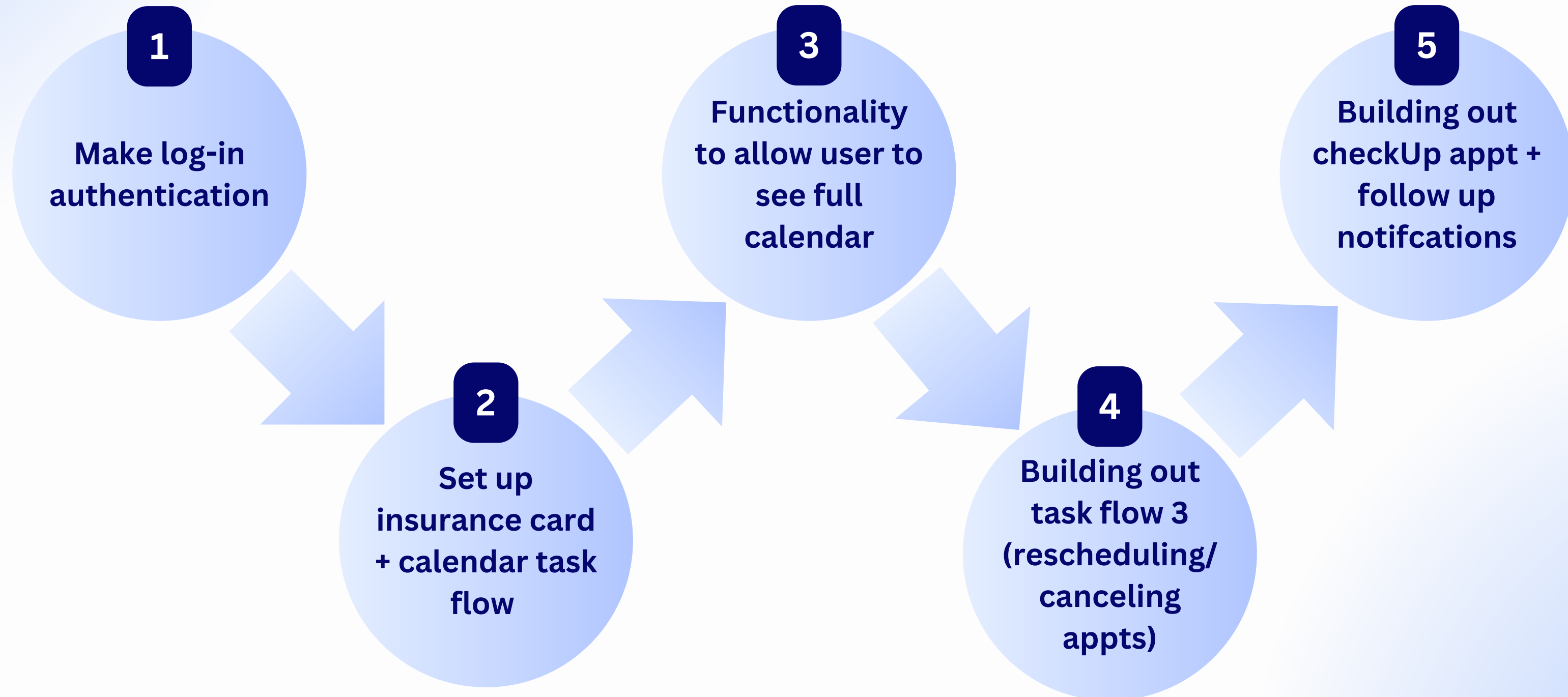


Booking follow-up appointments



Leaving doctor reviews

Our Plans to Finish



Wizard of Oz



Search Function

No matter what the user searches in our search functionality for appointment scheduling, CheckUp “magically” takes them to the next step in the process. The search feature does not actually search the web for information.



Chatbot Feature

No matter what the user types into the chatbot, the interactions are faked using hard-coded chatbot responses. The “magic” chatbot interaction always pushes the user along to the same end point.

Hard Coded Items



Doctor Recommendations

The same three doctors are always the ones recommended



Dates/Time Available

The same three dates are always recommended



Chat Responses

What the chat says/responds with is hard-coded



Home Page Reminder

The same message is always displayed



Upcoming Appointments

The 2 upcoming appointments are always the same

The screenshot shows a mobile app interface for 'Angela's Appointment'. At the top, the time is 2:47, and the title is 'Angela's Appointment'. Below the title, the appointment date and time are 'Nov 6, 2023' and '2:30-4:30pm'. A message states 'You do not currently have a primary dentist.' Below this, a prompt asks to 'Select a dentist for your upcoming appointment. Recommended for You.' There are three tabs: 'Closest', 'Top Pick', and 'Top Rated'. Under 'Closest', three dentist profiles are listed: Dr. Adams, Dr. Barnes, and Dr. Lee. Each profile includes a name, a circular profile picture, location, specialty, in-network status, practice years, and a review section with stars and a 'select' button. Dr. Adams is located in Menlo Park, specializes in Dentistry, is in-network, has 5 years of practice, and a 4.5-star review. Dr. Barnes is located in San Jose, specializes in Dentistry, is in-network, has 10 years of practice, and a 5-star review. Dr. Lee is located in Menlo Park, specializes in Dentistry, is in-network, has 5 years of practice, and a 5-star review. At the bottom of the screen, there is a home button icon.

Issues/Questions



- **How to** set up a user database using Supabase (our backend tool)?
- **How to** train our chatbot to respond to a variety of user responses correctly?
- **Utilizing** camera to scan information during login / onboarding process
- **Getting notifications** to pop up on user's mobile device
- **Keeping track** of appointment (storing user data)

Prototype Demo

