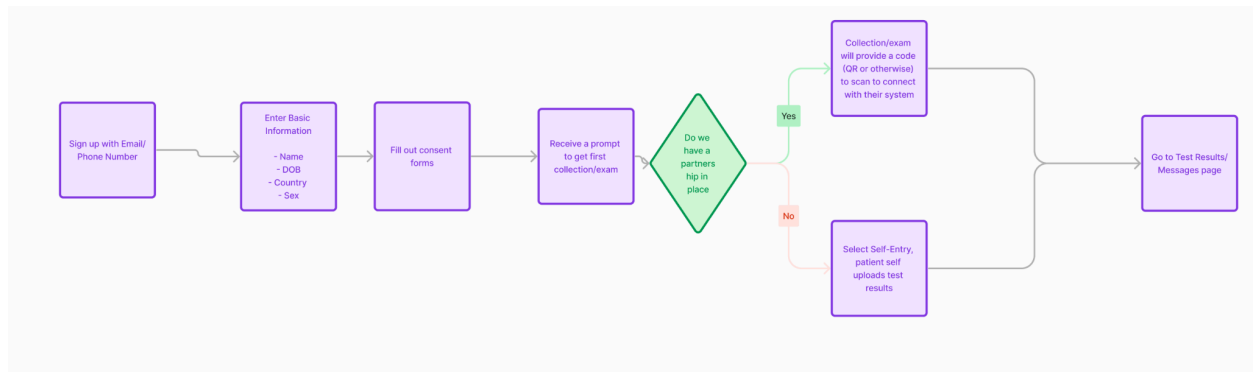# App Code Spec

Summary:
The Standard Biodata app allows users to create an account (and login afterwards), submit data, view submitted data, and chat with us.This should be built as a PWA that can be turned into a native Android app (and then iOS later)

User Flow/Pages (page images attached later):

First Time Flow
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-Sign Up
-Sign up with Email/Phone Number
-Enter Basic Information
-Name
            -DOB
            -Country
   -Sex
-Fill out consent forms
-Connect With Tests
-Receive a prompt to get first collection, collection provider will provide a code (QR or otherwise) to scan to connect with their system.
-ALTERNATIVE:
            -If we do not have a partnership in place where we can do this, skip to Test Results/Messages page, where patients can self-enter in the information.
-Go to Test Results/Messages page

Post Sign-Up Flow
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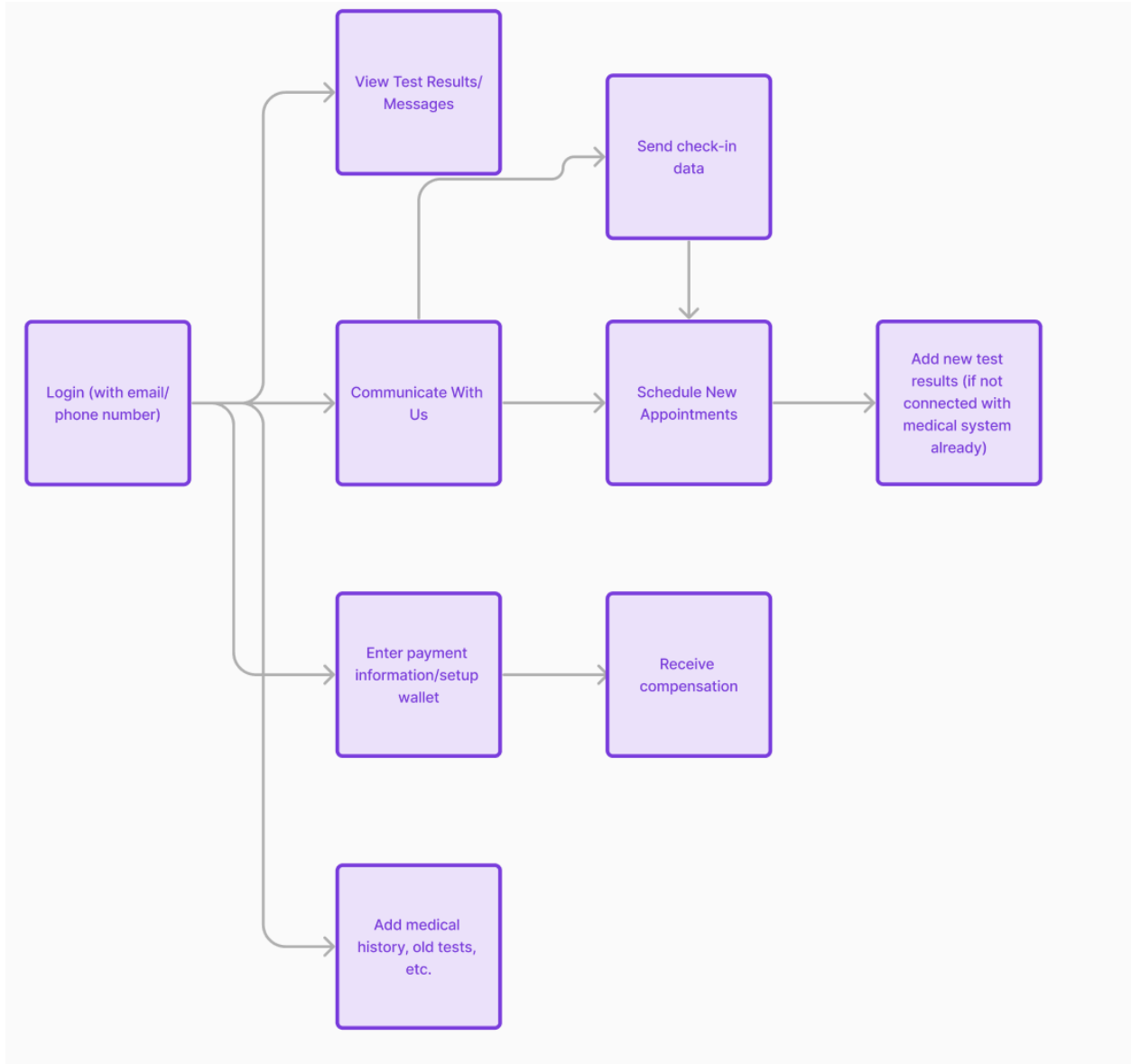
-Login (with email/phone number), whatever was used initially
-View Test Results/Messages
-Communicate With Us
        -Collect check-in data
-Add history, old tests
-Complete surveys
-Receive compensation funds

Backend Architecture

        (Note: We should look to use as many off the shelf components as possible, so we don't reinvent the wheel)

Sign-In
Use some sort of Magic Link authentication for this. (Privy? Sets up a wallet automatically as well) Other options are Magic Link and Stytch.

Collection
TBD - A code will be given by the on the ground clinic. The app should call some service we run to generate this.

Data Entry
Data can be processed in four ways:

Image: People can take a picture of files/notes and it gets sent to an AWS Lambda endpoint.
PDF/file:People can upload files and it gets sent to an AWS Lambda endpoint.Text:
People can type up notes and it gets sent to an AWS Lambda endpoint.
Surveys:We'll periodically send surveys to the users, the answers also get sent to an AWS Lambda endpoint.
        Surveys are an entirely different class of pages, WIP on the design. We should send push notifications for this.

The Lambda endpoint takes the data, sends it to a GPT endpoint that formats the data into FHIR format and sends it to AWS Health Lake (this is already built)

Ensure that data is encrypted in transit.

Data Retrieval
Make GET requests to AWS Health Lake, which returns FHIR data that can be formatted to fit the app front end.

Communication
Use a service like Crisp and embed that within the app to allow the users to chat with the Standard Biodata team. Push notifications should also be added for alerting people about new chats.