
Almost **one-third of contraceptive users (31%)** say they are experiencing **side effects** from their current method, and **just over half (52%)** say the **side effects are more severe** than they expected.

The Team



Shreya
Coterm in CS



Allie
BS in CS



Emily
Coterm in CS



Eric
Bs in CS



Problem/ Solution Overview

- Menstruating people need *personalized women's health care* instead of a one-size-fits-all solution.
 - With **IUDIY**, we empower users to understand their needs and get a *personalized treatment recommendation*.
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Introducing IUDIY

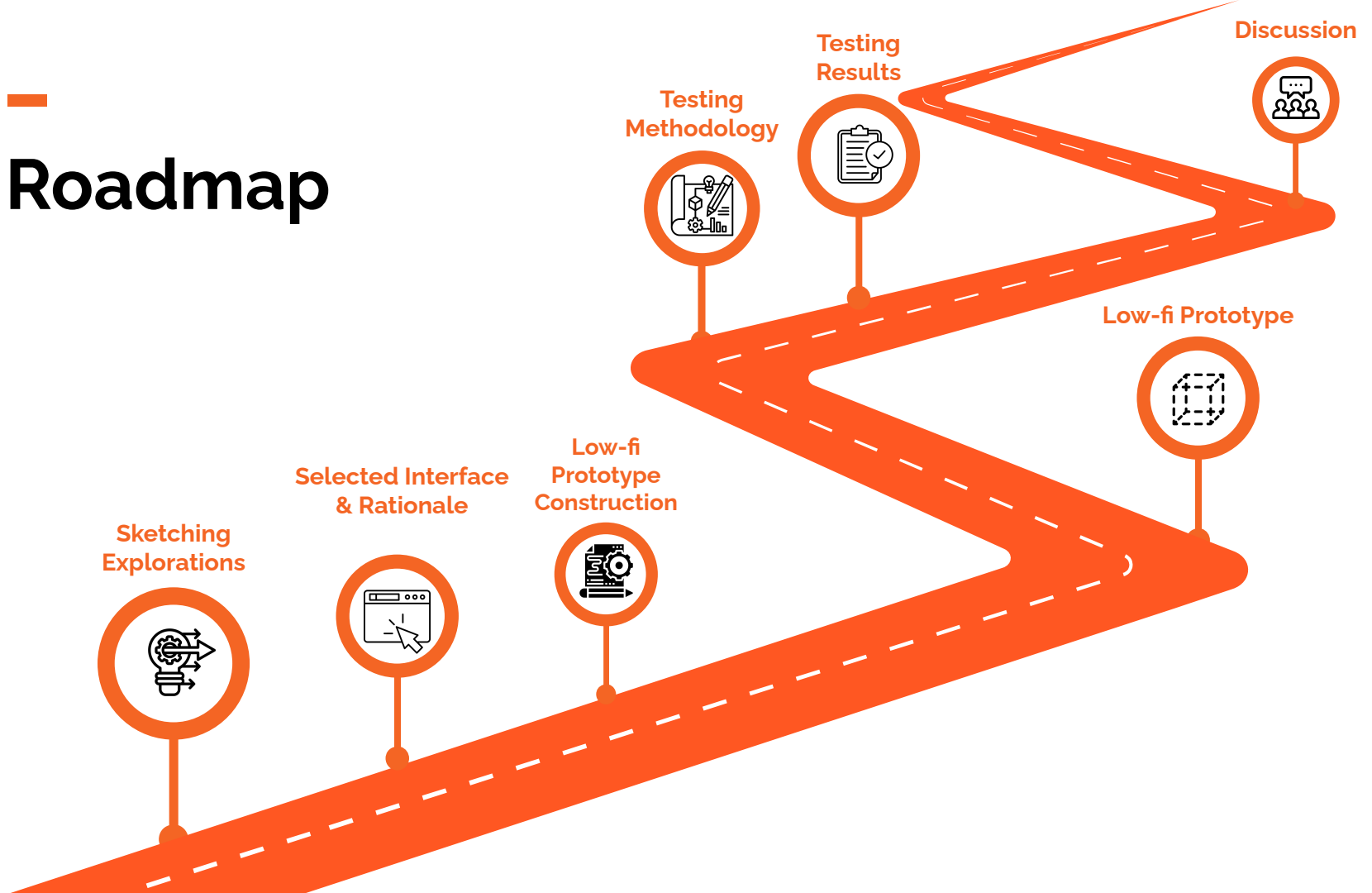
- **IUDIY = DIY + Contraception Method**

The name captures our mission of engineering personalized contraception.

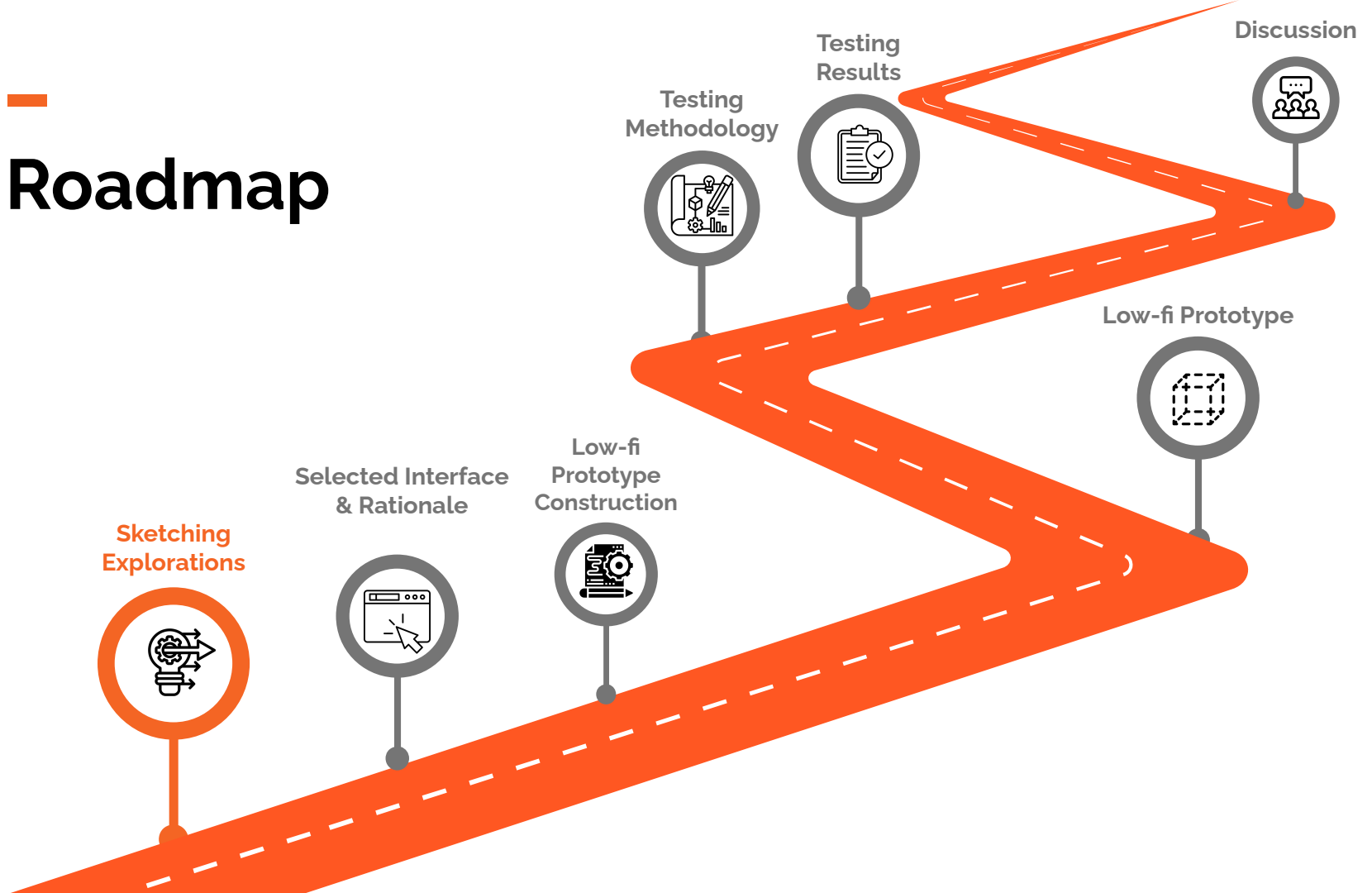
- **Value Proposition**

Find contraception that is right for you, and minimize the side effects of contraception.

Roadmap

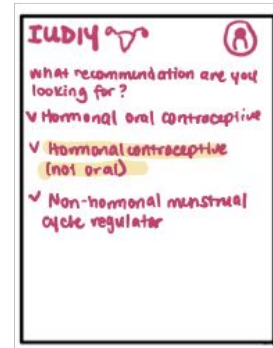
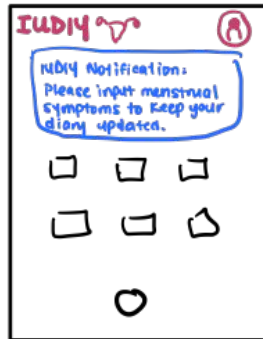
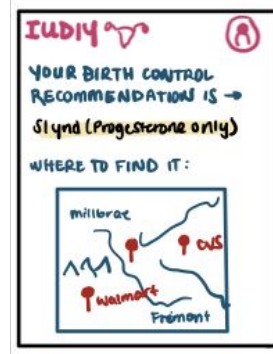


Roadmap



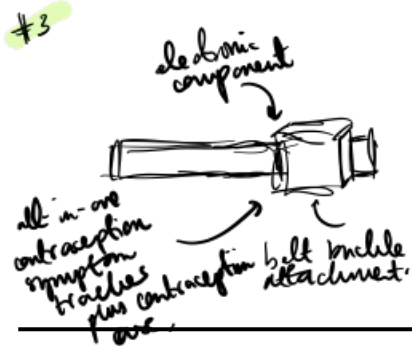
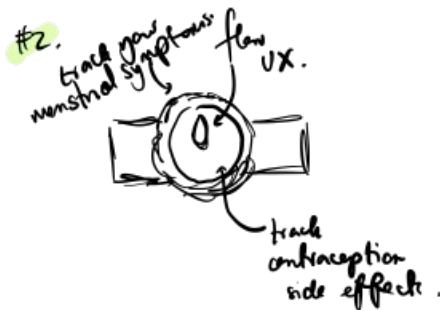
Sketching Explorations

Realization 1 Concept Sketches



Realization 2 Concept Sketches

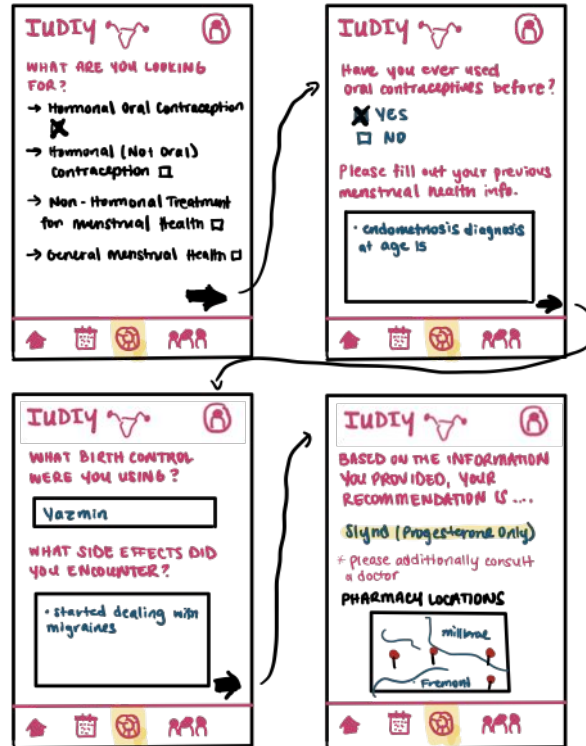
WEARABLES REALIZATION.



Realization 3 Concept Sketches

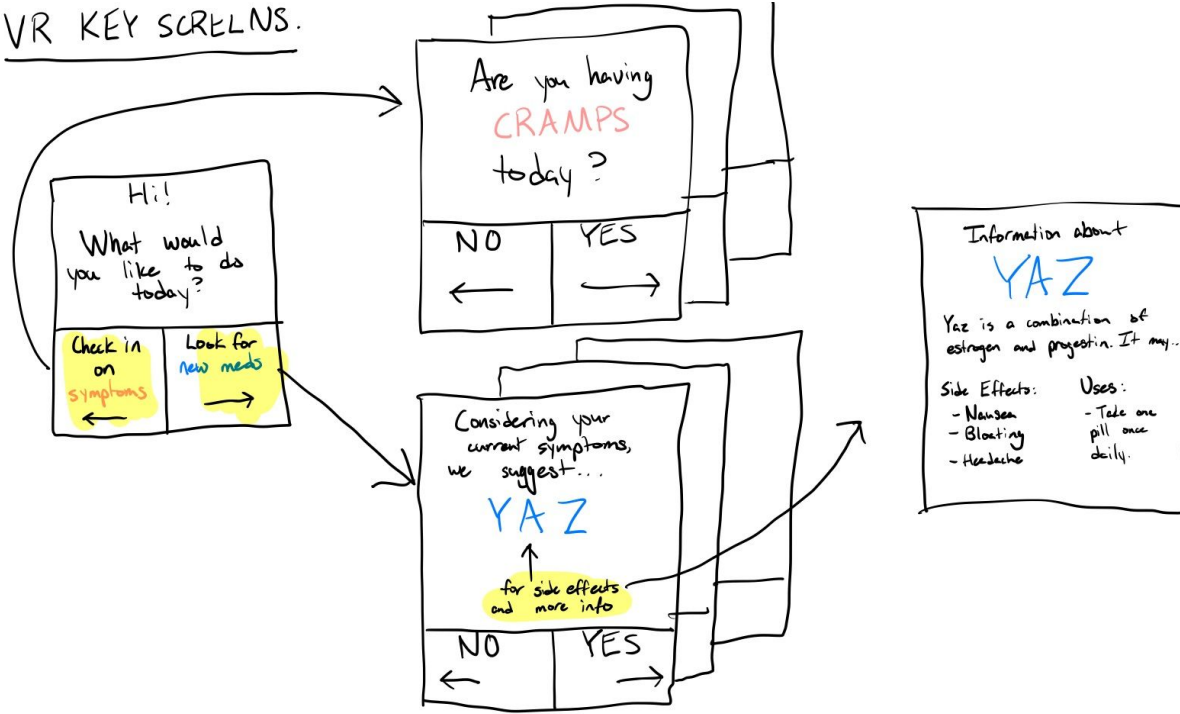


App Realization Fleshed Out

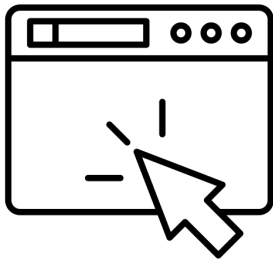


VR Realization Fleshed Out

VR KEY SCREENS.



Selected Interface & Rationale



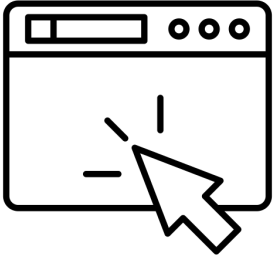
App Interface Pros & Cons

Pros

- App is more accessible than VR.
- Quickly logging is easy, and intuitive for user.

Cons

- An app is not an immersive experience.
 - More similar to existing products.
-



VR Interface Pros & Cons

Pros

- Immersive experience allows for increased engagement
- Swipe-based interface is familiar and fun.

Cons

- Not easily accessible to lower income brackets or people unfamiliar with VR
 - Takes too much time to use
-



Selected Interface- Mobile App

Relevant Data

- Flo has 200 million downloads and over 40 million active users showing that an app in the menstrual/contraceptive health sector can succeed

Constraints

- Different screen sizes
- Memory usage
- Data security
- Network bandwidth

Findings

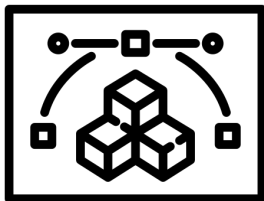
- Out of all of our interviews no one easily had access to a VR setup while they all had mobile phones
-



Design Evaluation

- Most accessible interface out of our options
 - The market is wide-open for more/better apps in the women's health market
 - Takes users time constraints into account
-

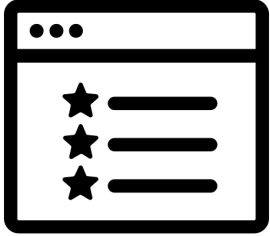
Low-fi Prototype Construction



How it was made?

Paper Prototyping Construction

- a. Brainstormed all the potential task-flows and put the most common ones in the navigation bar.
 - b. No color to keep the UI simple.
 - c. All the screens should look the same so it looked like it could have come from the previous screen.
-



Features

Home

App-point of entry.

Prescriptions

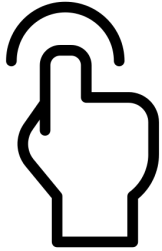
Section to change prescription, investigate your prescription and

Check-in

Log daily symptoms and side-effects.

Profile

Profile information is constructed based on initial preferences questionnaire.



Interactions

In-Person Process

Users touched the paper where they would click.

Zoom Procedure

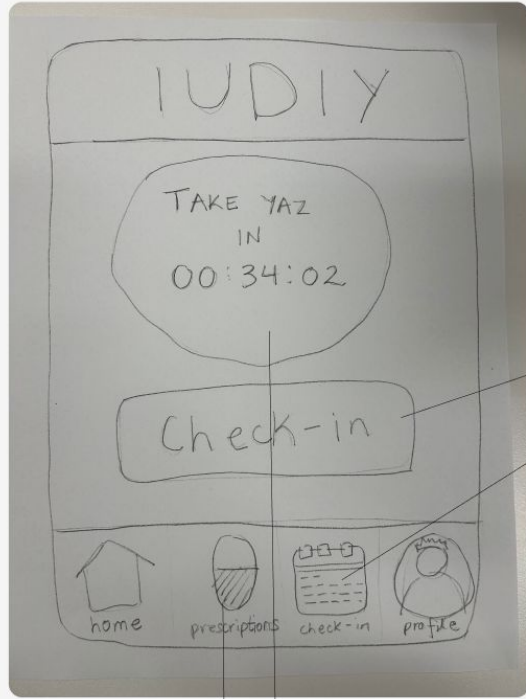
Users would say where they would have clicked.

Low-fi Prototype

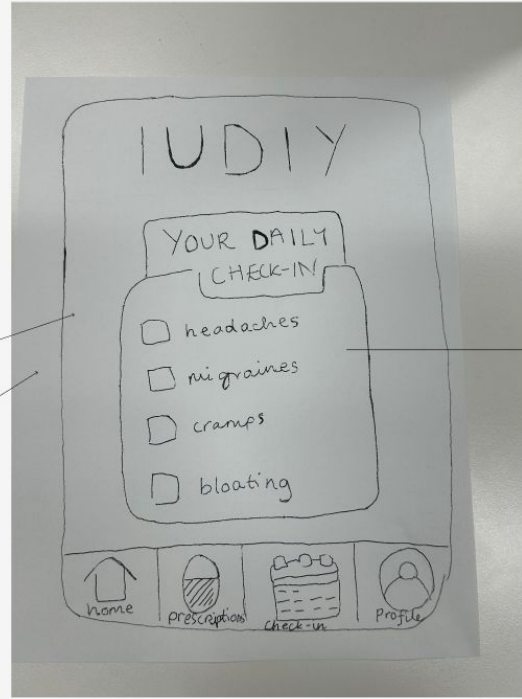
Simple Task Flow

Please log your symptoms.

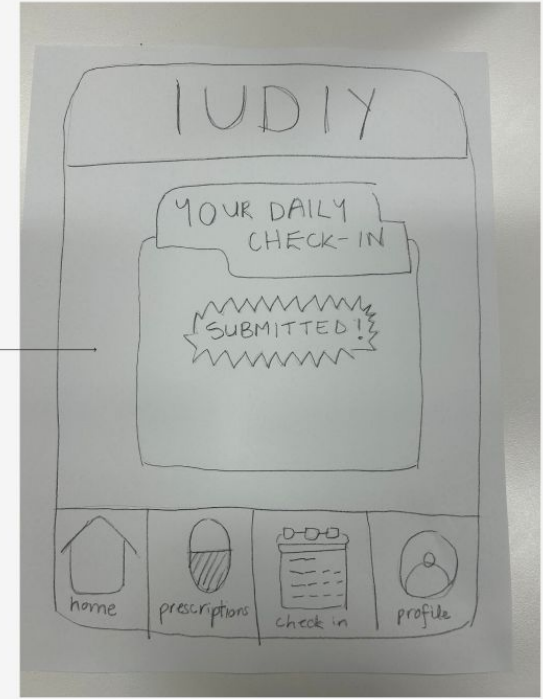




Home screen includes check in button, navigation bar, and reminder timer



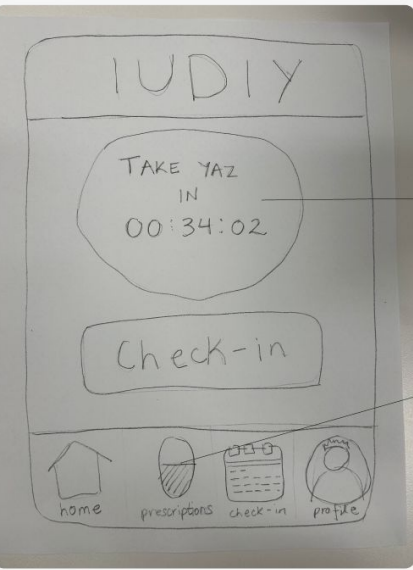
Check-in tracks symptoms with checkbox interface



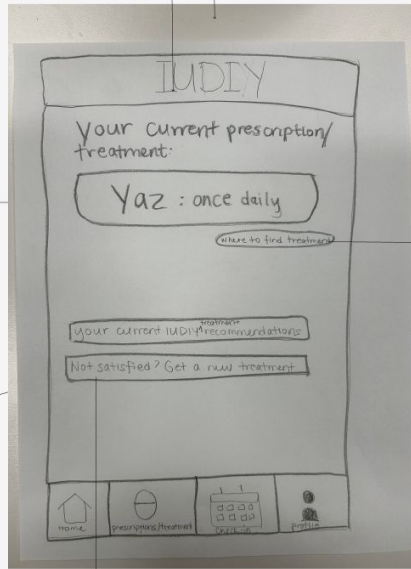
Submitted screen shows user is done with check-in and recommendations are updated

Moderate Task Flow

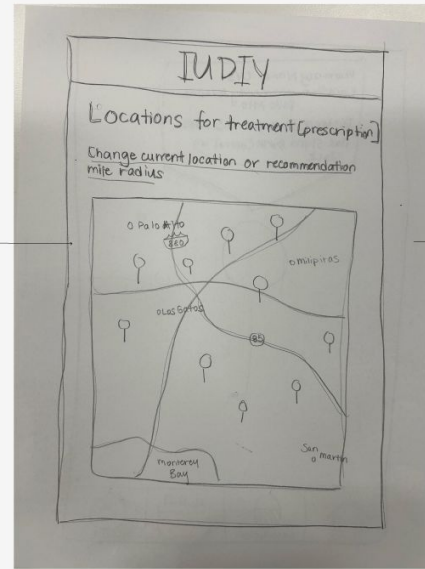
Find a pharmacy that carries your
current prescription.



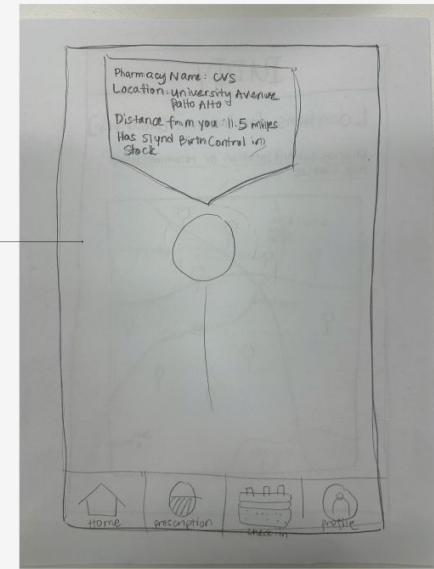
Home screen navigates to recommendation page from timer or navigation bar



Prescription screen shows current meds and buttons to recommendations



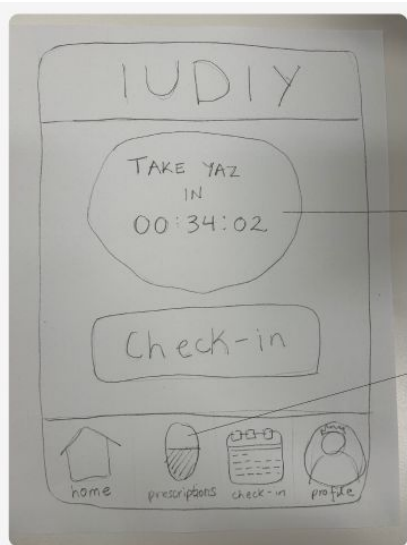
Map showing different pharmacies or treatment centers



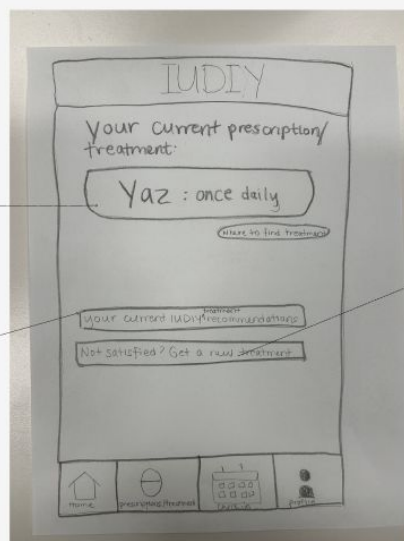
Screen shows details about the pharmacy or doctor's office and what they offer

Complex Task Flow

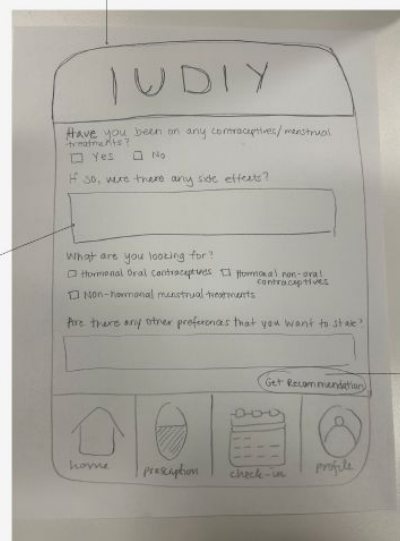
Change your current contraceptive recommendation.



Home screen navigates to recommendation page from timer or navigation bar



"Not satisfied?" lets users get new recommendations



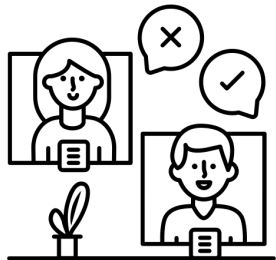
Questionnaire leads to new recommendation



Screen showing updated recommendation vs old recommendation

—

Testing Methodology



Participants

Demographics

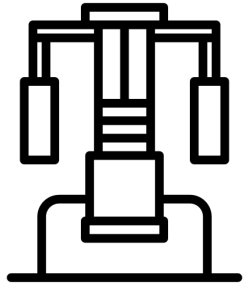
- 24 year old woman, on an IUD.
- 32 year old, new-mother, with two kids.
- 26 year old woman, taking contraception.
- 23 year old woman, taking contraception.

Recruitment

- NextDoor was super helpful in recruitment.

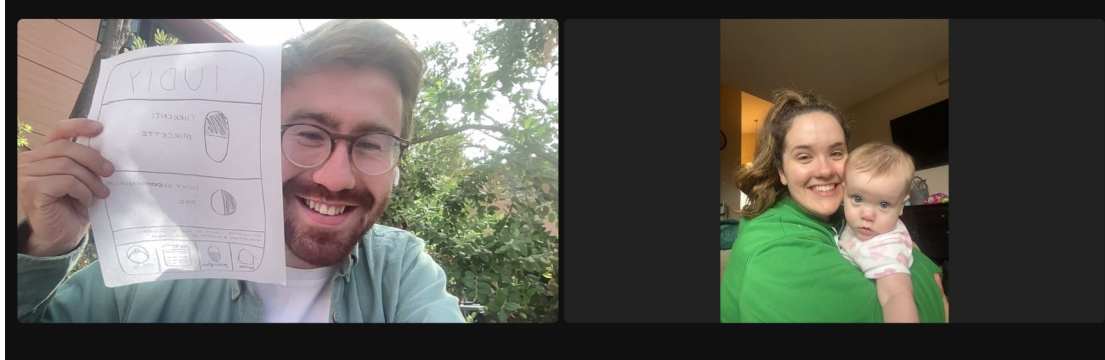
Compensation

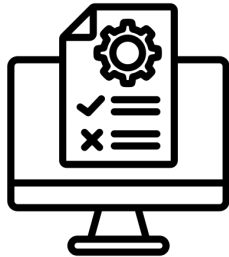
- \$0
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Environment and Apparatus

- Three interviews in person, one via Zoom
- In person interviews: we read out a script and had users try to complete different tasks by “clicking a button”
- Over Zoom, asked which buttons she would click if in person





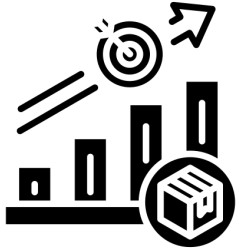
Testing Procedure

Team Member Roles

Each team member tested one person and asked them to complete all three tasks.

Process Description

- a. Limited concept introduction to test intuitiveness
 - b. Timed each task
 - c. Recorded the number of errors
 - d. Led a guided conversation to understand errors.
-



Usability Goals & Key Measurements

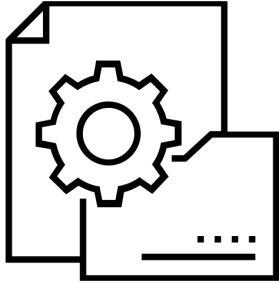
Key Measurements

- # of Clicks: Measure of intuitiveness and ease.
- # of Errors: Measure of user-friendliness.

Usability Goals

- *Complex* - clicks < 4
 - *Moderate* - clicks < 3
 - *Simple* - clicks < 2
-

Testing Results



Process data

- “Check-ins was confusing terminology” and users clicked the profile to log their symptoms.
 - The ‘where to find treatments’ button is too small
 - On the paper prototype, it’s hard to see that the location pins on the map are clickable
 - Need to include back buttons on the prototype
 - Need a submit button for check-in – whoops!
 - Users expected new recommendations to be generated with a new check in, not by explicitly changing it
-



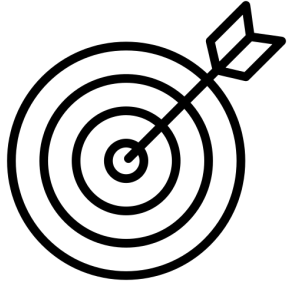
Bottom-line data

- Simple task took 25% longer than moderate task and had more errors, but due to simple mistake (ambiguous phrasing)
 - Initial metrics by error number were met, but could have been more ambitious
 - Complex task had 2 errors, medium had one, and none for easy
 - In the pharmacies task, the clicking on a location pin aspect took 2 times the amount of time that it did to get to the map page
-



Other relevant observations

- 'Not satisfied? Get yourself a new treatment' button had too much text
 - No submit buttons on pages
 - Confusion around final screen, questions around how to set recommendation as the new prescription
-



Usability Goals vs. Key Measurements

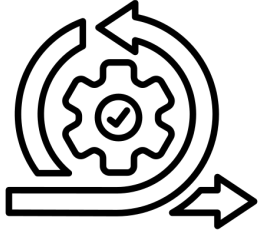
- Error rate was met but didn't set very high expectations for it
 - Vague wording for buttons so it was harder to navigate than expected
 - Overall, people were able to achieve the tasks set forth but took longer than we want
-

Discussion



Implications of Findings

- Interviewees were not able to complete a lot of the tasks quickly because of 'unclear wording' for some of the sections
 - Finding the locations for the prescriptions page was a bit vague
 - It was hard for people to go back if they messed up because there were no back buttons
 - Getting a new prescription was the easiest task so not many changes needed
-



Design Iterations

- Make wording for buttons a bit more clear
 - Emphasize clicking functionality in actual prototype
 - Cut down on extra words for the prescriptions page
 - Add 'back' and 'submit' buttons
-



Limitations of Testing

- **Visual Impairments:** Our one Zoom interview made it difficult for the user to see the smallest buttons, but this affected data uniformly
 - **Accessibility:** No issues through testing, but participant demographic did not include neurodivergent or visually impaired people
 - **Age:** All participants under 40
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Appendix

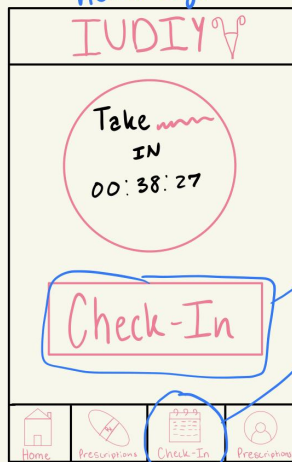
Selected Interface Evaluation

- Full list of pros and cons for selected interface rationale
 - Link to prototype
 - <https://www.figma.com/file/y9jpNhjLUGYI38X1GHrCep/cs147-allie%2Fshreya%2Family%2Feric?type=design&node-id=0%3A1&mode=design&t=X7twqFlt67DJfkgE-1>
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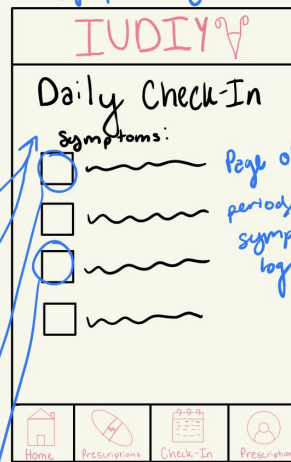
Simple Task Storyboard

Simple

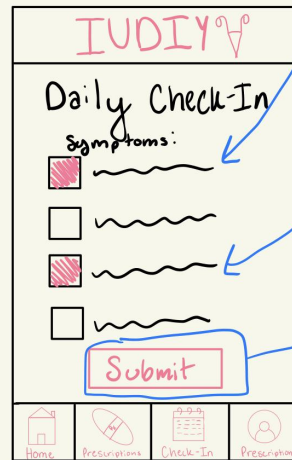
Home Page



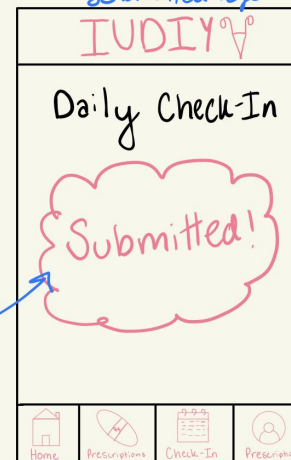
Symptom Log



Page of possible period/menstrual symptoms to log



Submitted Page

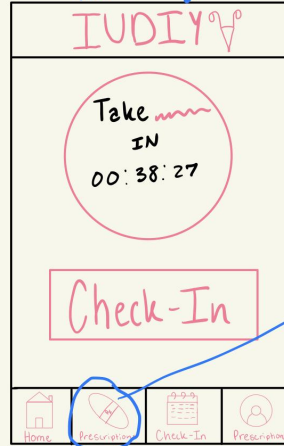


Shows user they've submitted

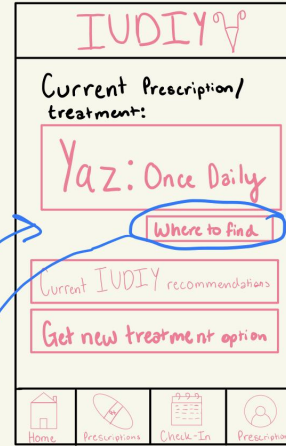
Moderate Task Storyboard

Moderate

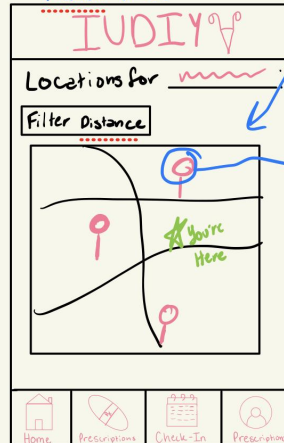
Home Page



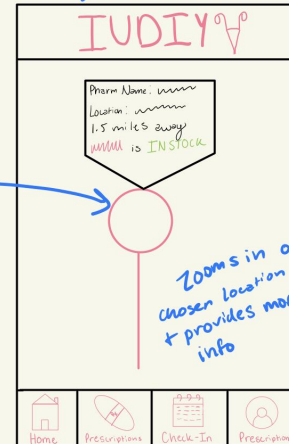
Prescription Home Page



Pharm Map



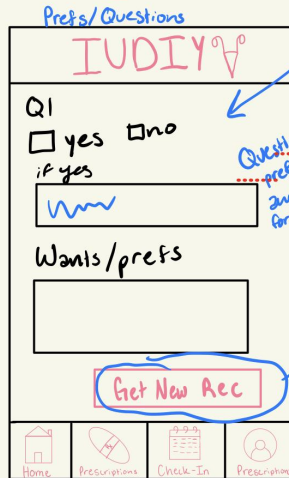
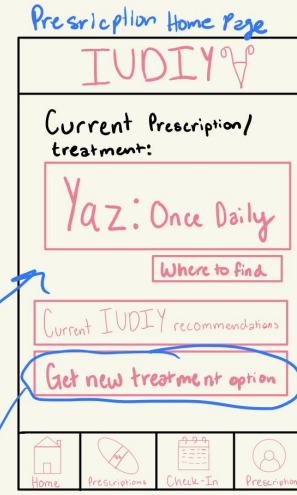
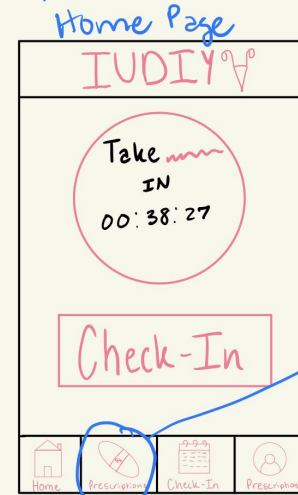
Location Zoom



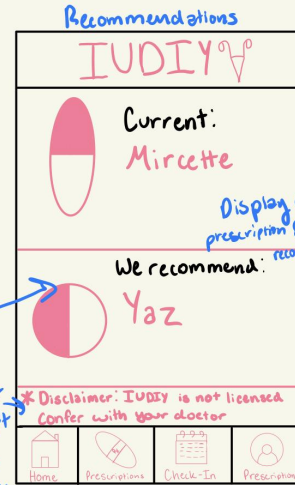
4 of 4 pulls up pharmacy map w/ distance prefs.

Complex Task Storyboard

Complex



Questions about
prescriptions
and symptoms
for new rec.



Display current
prescription & our
recommendations

Disclaimer
be we aren't
medical
professionals

Any Questions?
