

### Meet The Team



**Gabriella Goss** Team Lead



Rheaa Kamath Team Lead



**Skyler Beld** Team Member



**Sarah Deak** Team Member



**Walter Dorau** Team Member



**Sophie Haydar** Team Member



**Aidan Sabatino** Team Member

## Special Thanks



Paul Parsons
Professor



Nancy Rasche Professor



Robin Arnold LPO



Shelby Benton



Aiza Hazib

# Sponsors



Jingle Chen



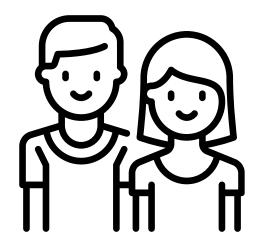
Tianjie Jia

### Problem Space

According to our sponsors, the health of children's teeth is at risk, as many children aged 3-6 have issues brushing their teeth correctly. Therefore, a mobile app that tracks teeth-brushing data that works in conjunction with our sponsors teeth brushing robot, aims to visualize toothbrushing data for parents and provide information on their child's progress.

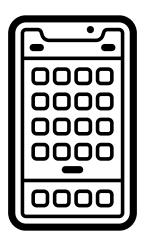
### Clarifications

#### **User Group**



Parents of children ages 3 - 6 years

#### **Platform**

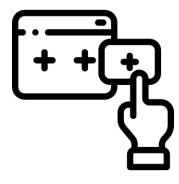


App to help parents to view and keep track of child's toothbrushing data and progress

# Project Goals



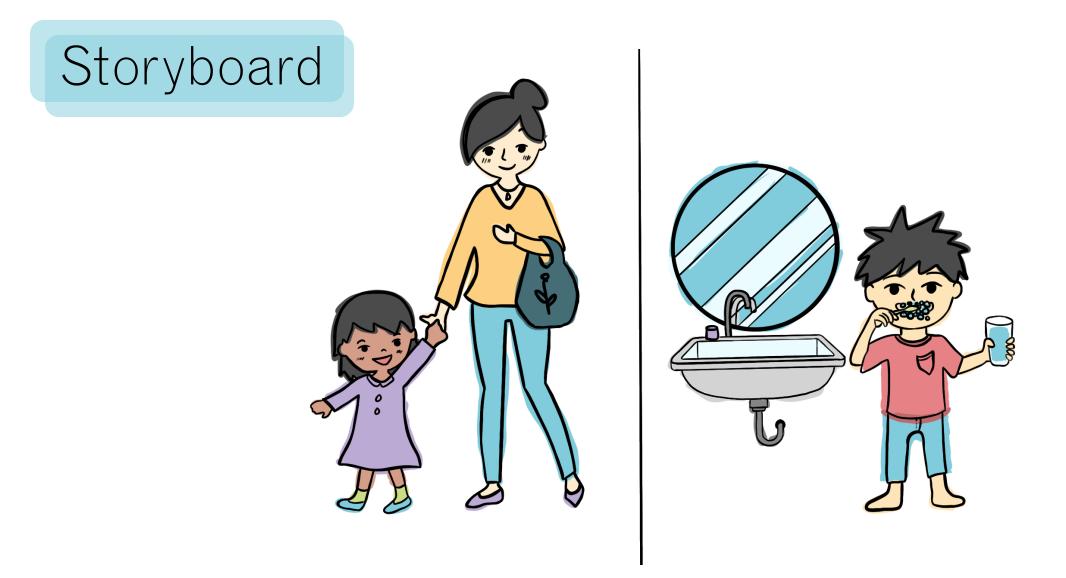
Fostering Healthy Toothbrushing Habits in children aged 3-6 years



Create an intuitive app for parents

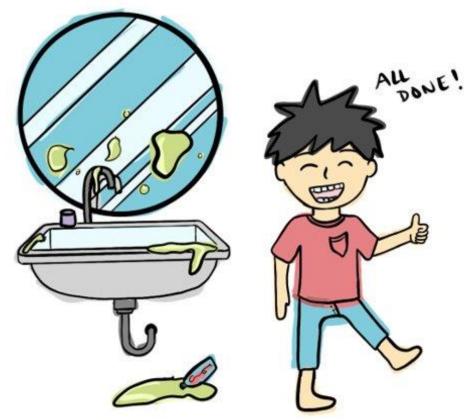


Visualize different levels of data (basic, detailed, etc.)

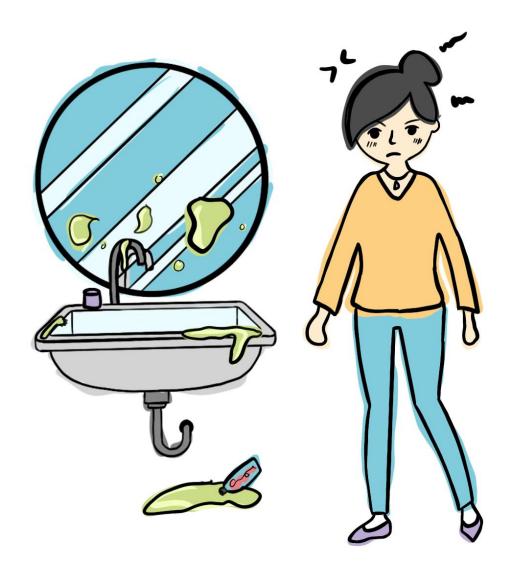


Stephanie has a difficult time managing both children's brushing habits.

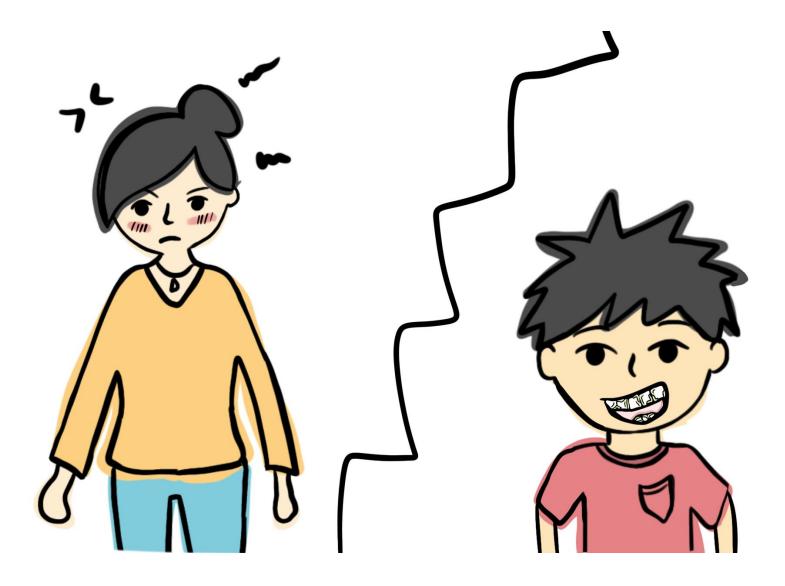
### 20 Seconds later ...



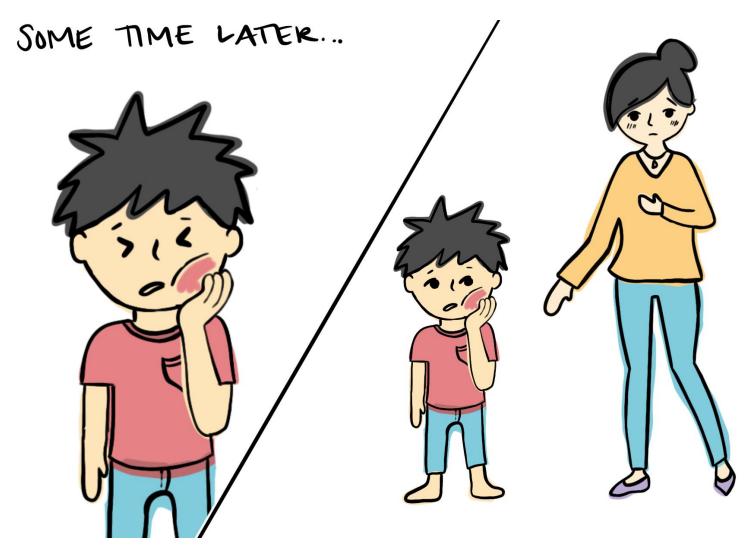
Jeffery, overtime, stops brushing his teeth properly. He is not aware that he isn't brushing for enough time or correctly.



Stephanie does not have enough time to make sure Jeffery has brushed his teeth.



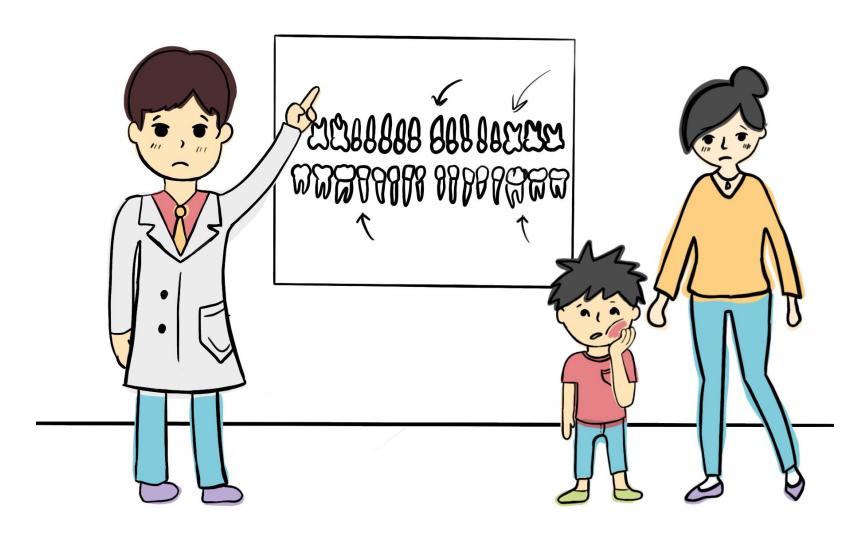
Stephanie often misses or forgets to check up on Jeffery's brushing habits.



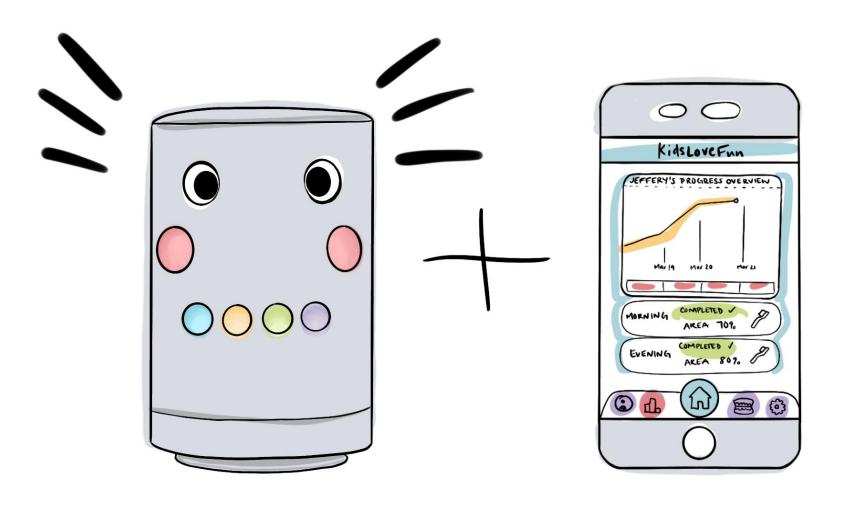
His mom had assumed Jeffery's brushing habits were okay because he didn't complain, and she hadn't been checking.



Jeffery has not been brushing his teeth correctly.

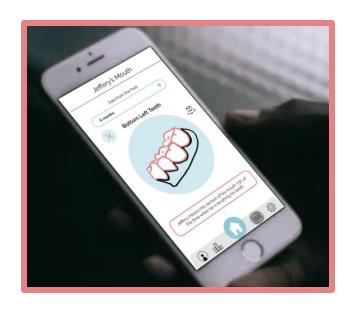


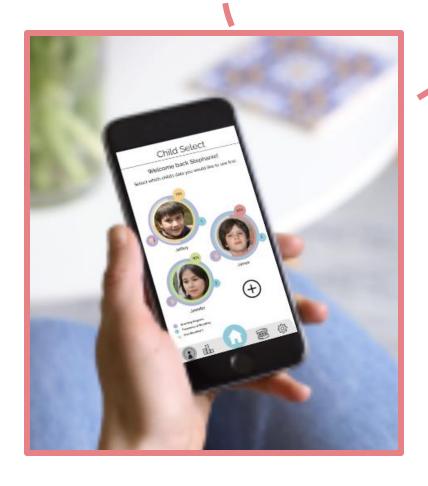
Stephanie had no idea that her son was not brushing his teeth correctly. She feels guilty that he has been in pain.



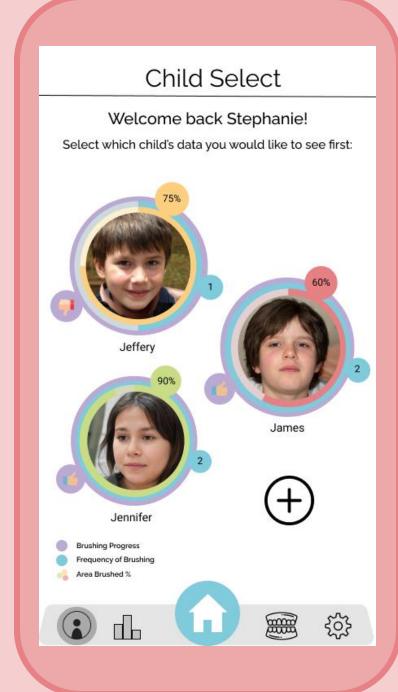
Tody can help Jeffery learn and maintain good brushing habits, & the companion app will help his mother understand more about his toothbrushing habits.

## Current Design







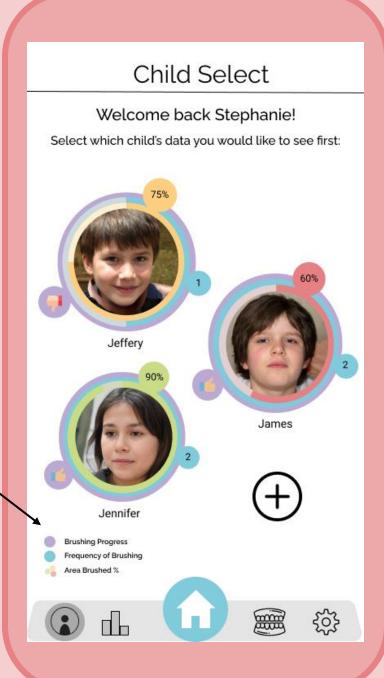


I can see a quick overview of all my children and their brushing progress for today! This keeps me in the know even with my busy days.



View an overview of that day's brushing progress, frequency, and % Area Brushed.

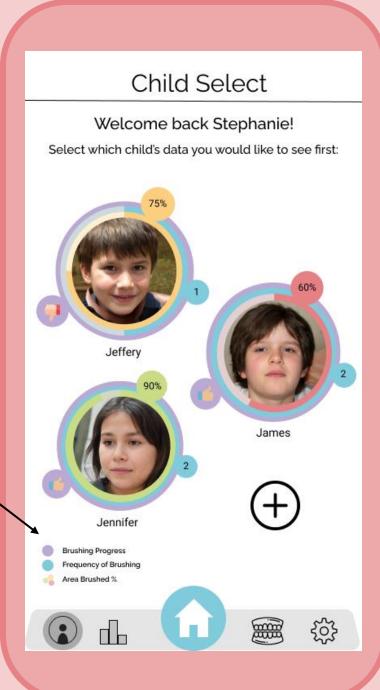
- Brushing Progress
  Frequency of Brushing
- Area Brushed %





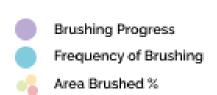
View an overview of that day's brushing progress, frequency, and % Area Brushed.

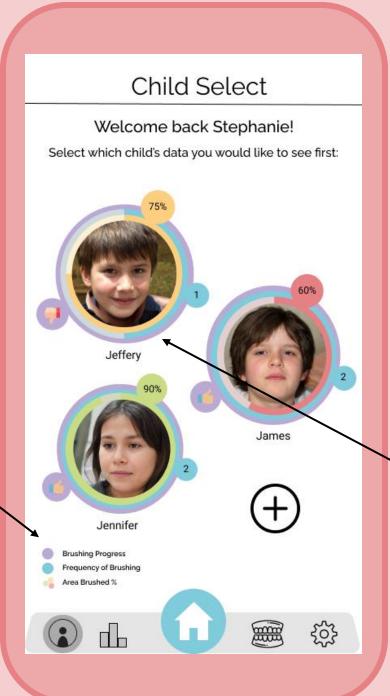
- **Brushing Progress** Frequency of Brushing
- Area Brushed %



Quickly view multiple child profiles in one place.

View an overview of that day's brushing progress, frequency, and % Area Brushed.





Quickly view multiple child profiles in one place.

Select a Child to view more indepth information.



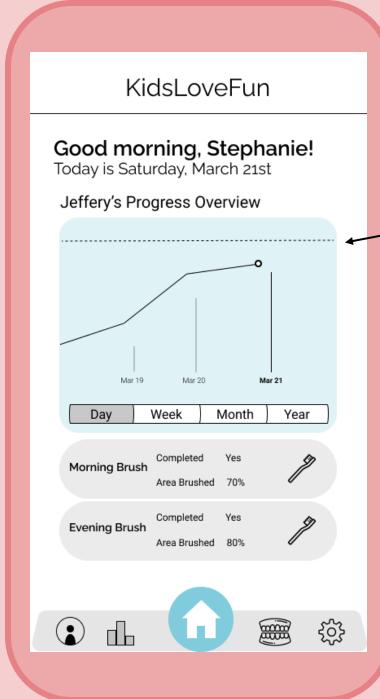
I can quickly check up on Jeffery's overall progress and see his statistics for brushing on this day. I can also make sure Jeffery is reaching his goal for the day.



Selecting a child will take Stephanie to the homepage.



Selecting a child will take Stephanie to the homepage.



She can view a bar graph that shows Jeffery's daily progress overview. The dotted line shows the overall goal, 100% quality of Area brushed.

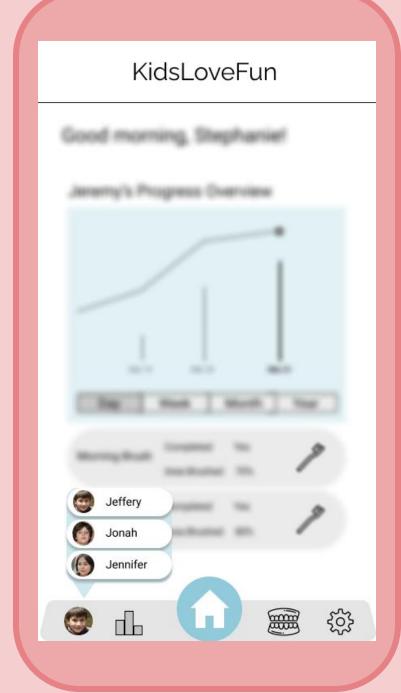
Selecting a child will take Stephanie to the homepage.

Stephanie could see the overall daily progress in brushing including if he brushed twice that day, and the percentage of the mouth brushed for that day.



She can view a bar graph that shows Jeffery's daily progress overview. The dotted line shows the overall goal, 100% quality of Area brushed.

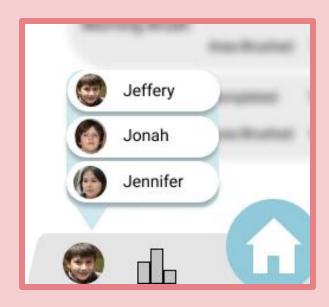
#### Fast Child Select



If I am looking at a page and am curious to see the same page but with information on a different child, I can quickly change child profiles.

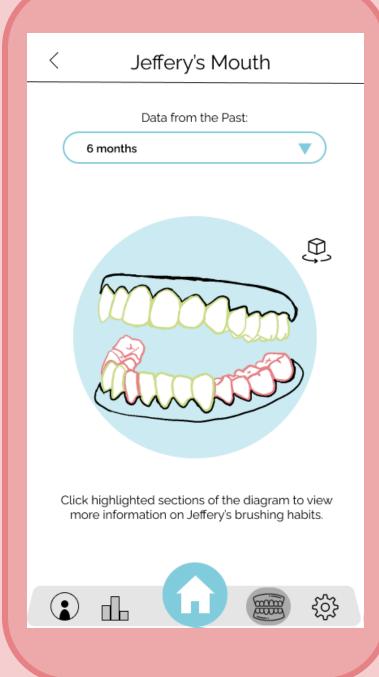


#### Fast Child Select





If Stephanie wants quickly change what child she is viewing, she can swipe up on the profile icon to quickly select a different child and see the new child's data on a whatever page they were previously on.



I can use the 3D model to visualize
Jeffery's teeth and even show this
information to a dentist if Jeffery is
struggling or has mouth pains. This allows
me to know where to step in to help
Jeffery reach these sections of his mouth.





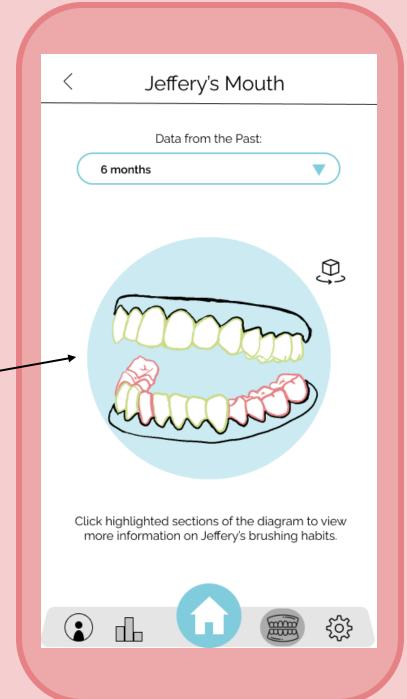
By clicking on the mouth icon, they can view the 3D Model which shows problem areas.

Stephanie can see problem areas from different data sets: the past day, weeks, months, or year.

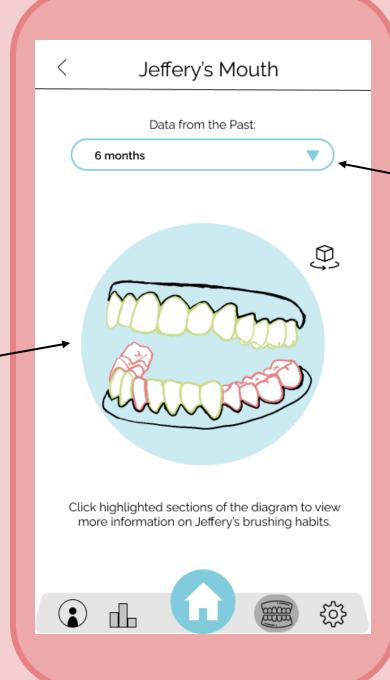


By clicking on the mouth icon, they can view the 3D Model which shows problem areas.

Stephanie can rotate the 3D model to view all sides of the mouth.

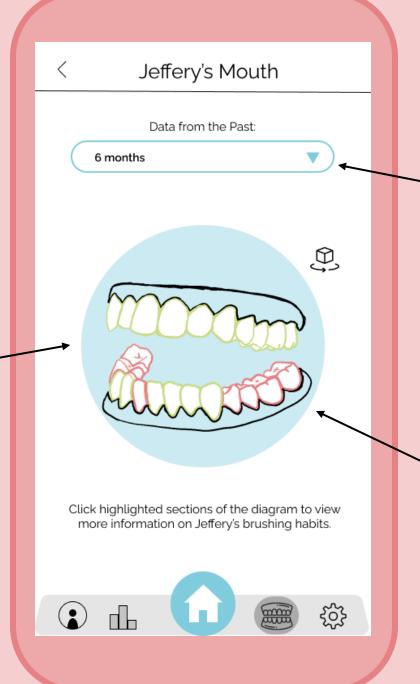


Stephanie can rotate the 3D model to view all sides of the mouth.



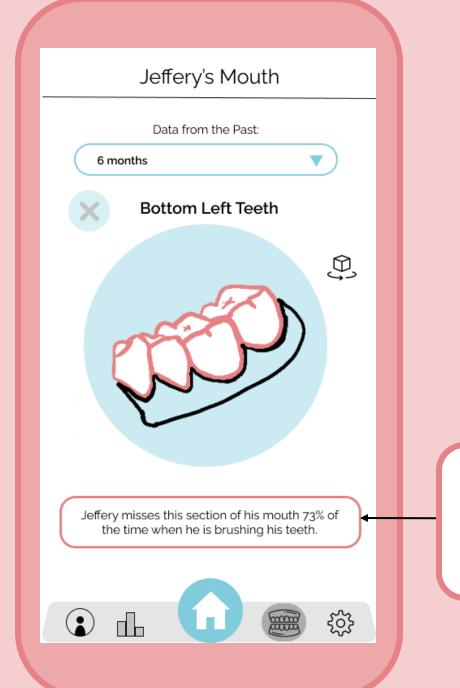
Stephanie can share this information with Jeffery's Dentist even all the way back to the last visit.

Stephanie can rotate the 3D model to view all sides of the mouth.



Stephanie can share this information with Jeffery's Dentist even all the way back to the last visit.

By clicking on red sections of the mouth, Stephanie can view more information as to why this is a problem area for Jeffery in his brushing routine.



Stephanie can understand how or when she needs to step in to assist Jeffery in his routine.

#### Monthly Progress



I can keep track of my children's progress each month. Even if I get too busy to check it daily, the app will remind me to look at their progress over time so I can step in to help if they need it.



#### Monthly Progress



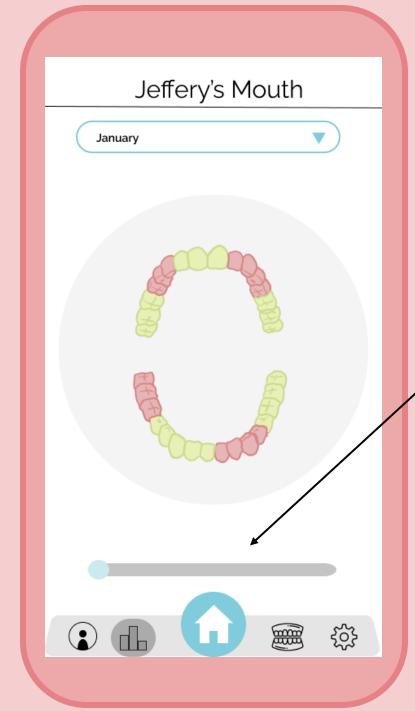
Each month, Stephanie will receive a notification that shows her when the Monthly Overview is available to view.

Good Morning Stephanie!

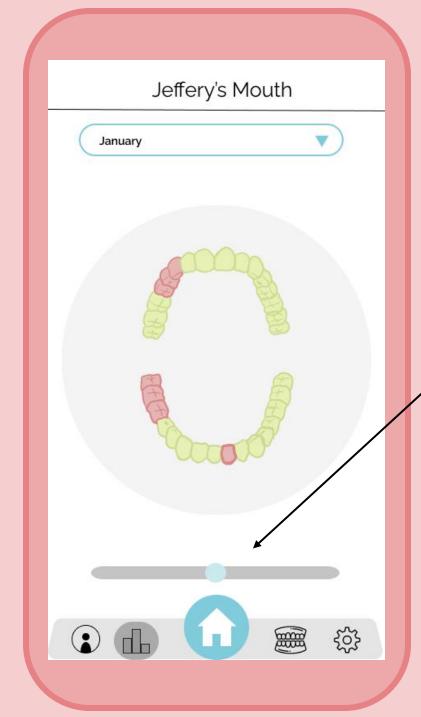
Jeffery's monthly overview is now available to view.

Click to see your child's progress over the past month!

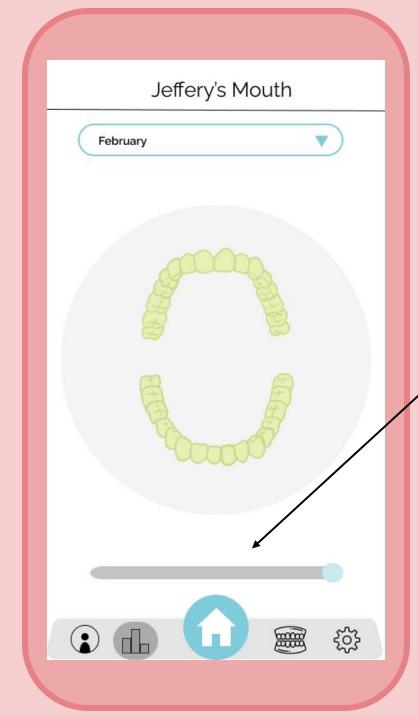
#### Monthly Progress



By moving the slider from left to right, she can view the overall progress Jeffery has made throughout the past month in his brushing progress.



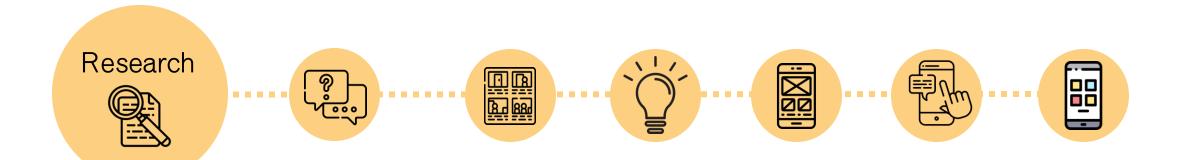
By moving the slider from left to right, she can view the overall progress Jeffery has made throughout the past month in his brushing progress.



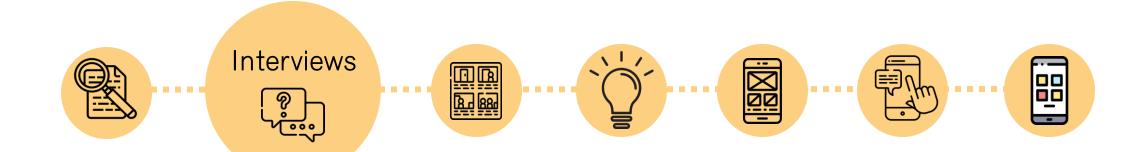
By moving the slider from left to right, she can view the overall progress Jeffery has made throughout the past month in his brushing progress.

How did we arrive at this design?





- Competition
- Data users want
- Age range
- Psychology and development



#### Participants:

Parents with children aged 3-6

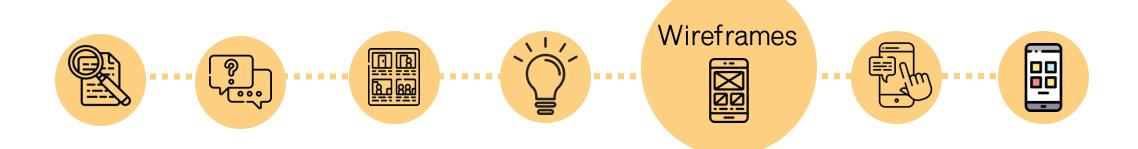
- Daily routine
- Children's habits
- Brushing data they may want to see



- Based on interview findings
- Supervised and unsupervised brushing stories



- Created user flow to understand what screens we needed
- Started sketching out screens



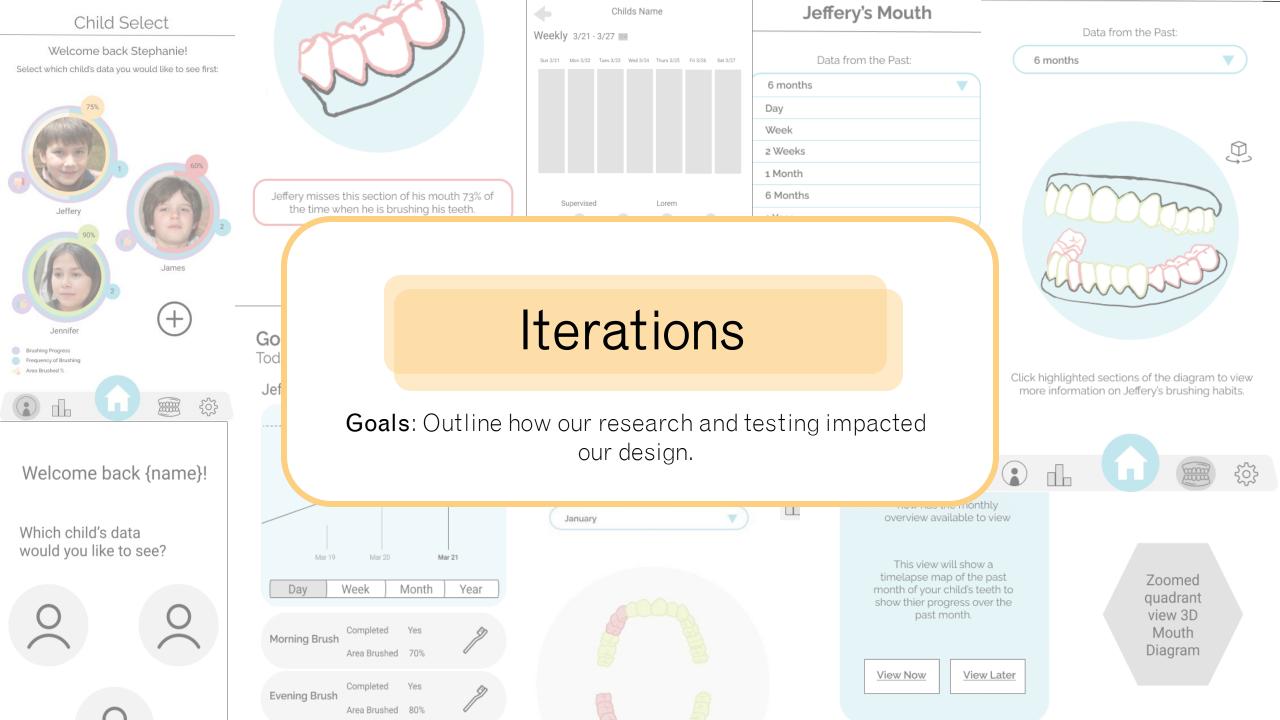
- Wireframes based on our ideation
- Used peer critiques to determine what features were necessary

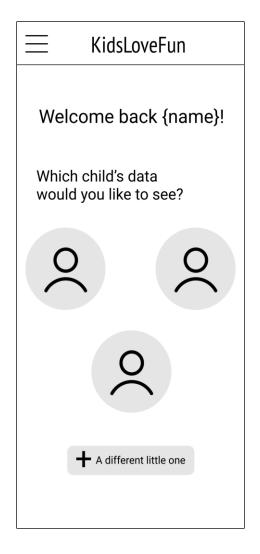


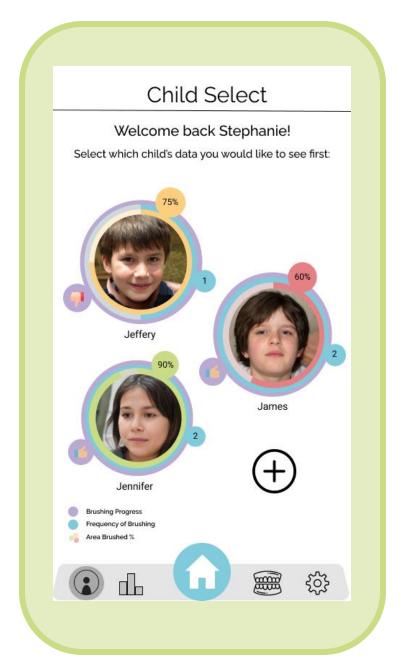
- Usability testing on wireframes
- Tested on ease of navigation of the app and what data to show

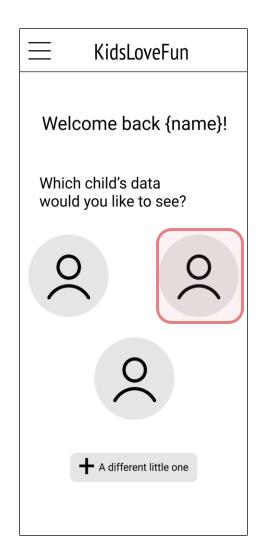


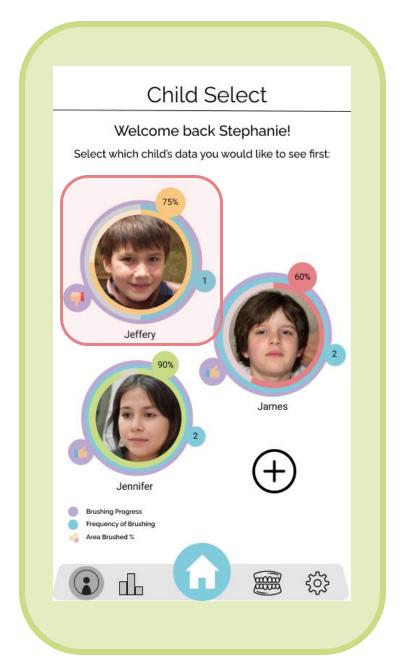
- Low-fi mockups
  - Testing
- Mid-fi mockups
  - Testing

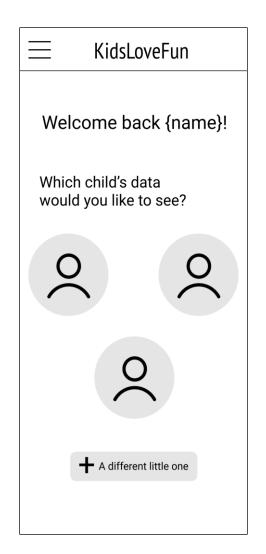


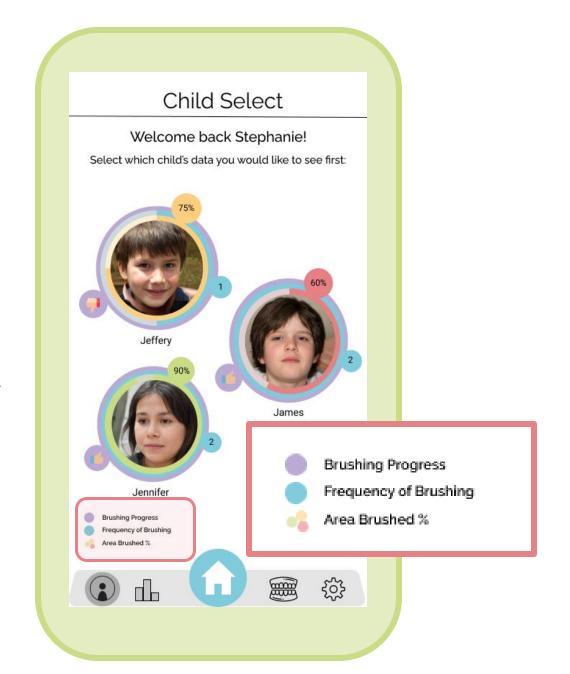


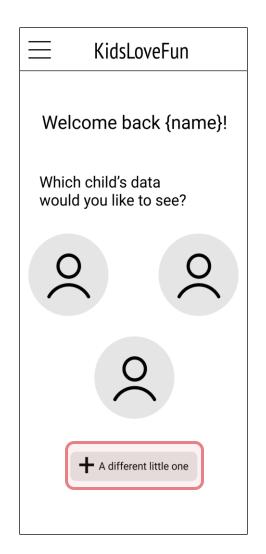


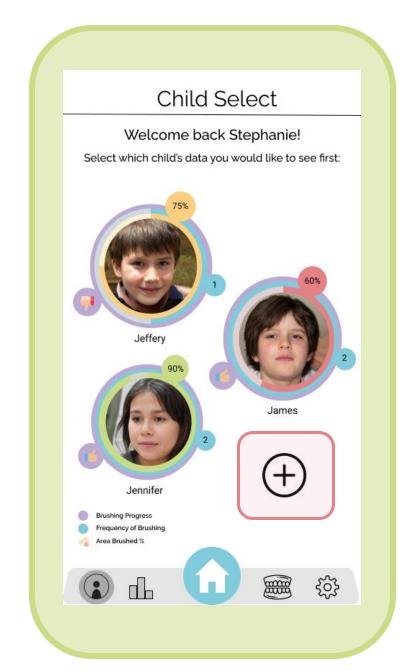


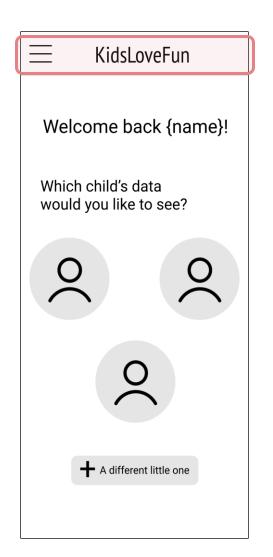


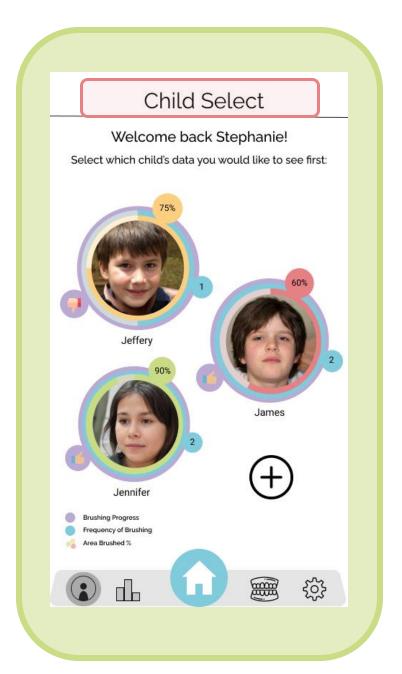


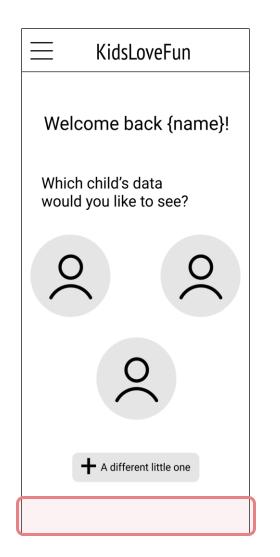


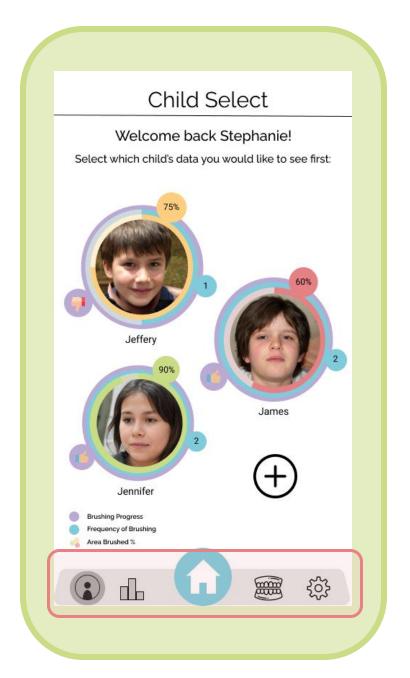


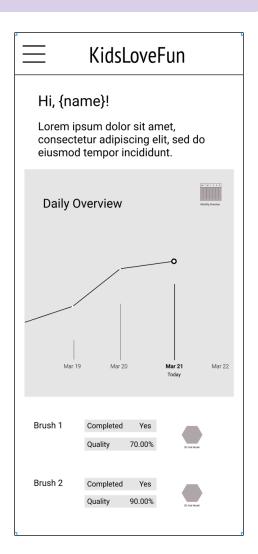






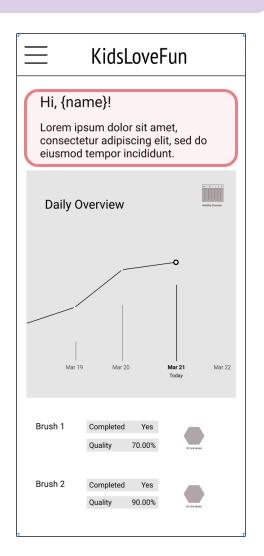






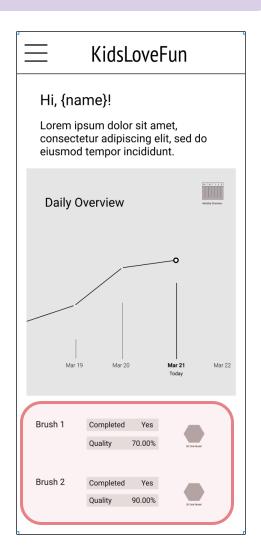






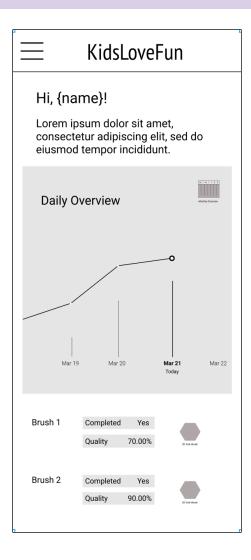






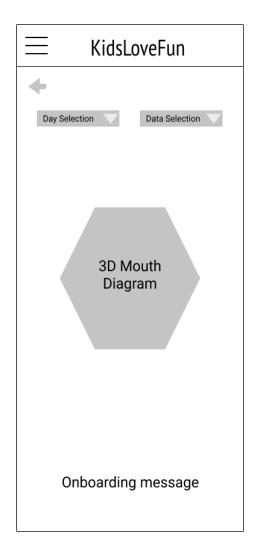


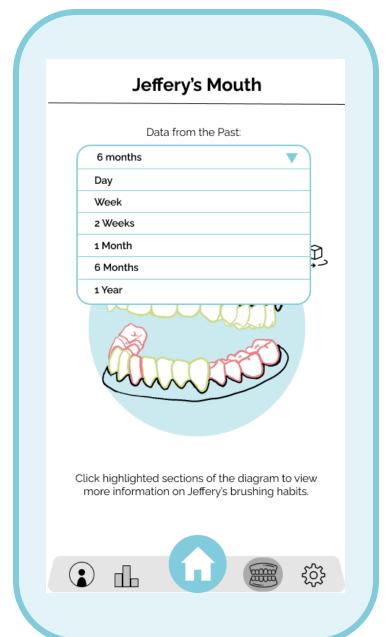


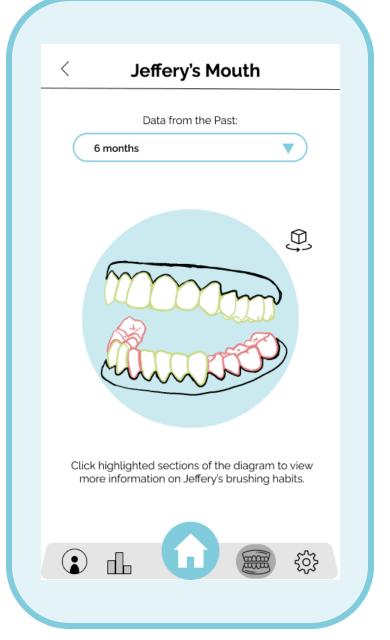


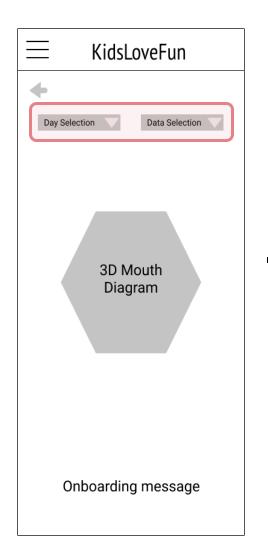


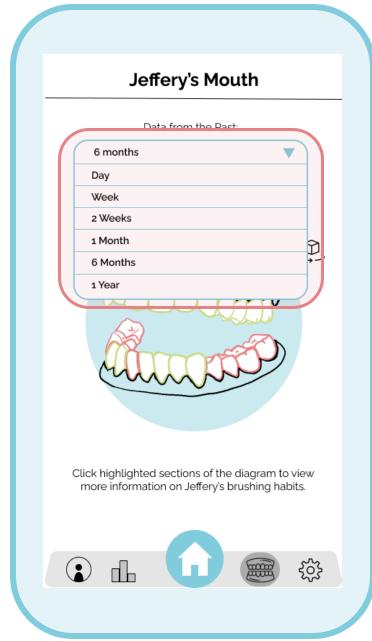


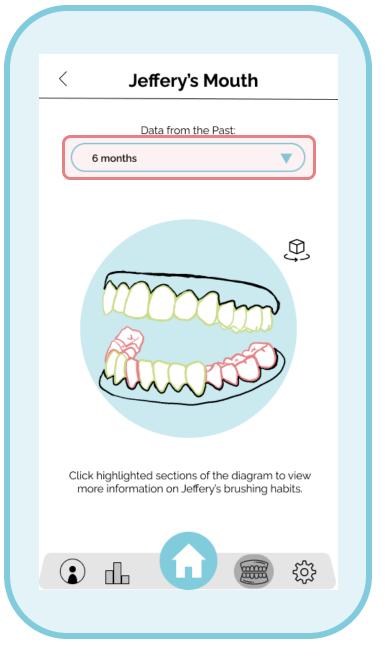


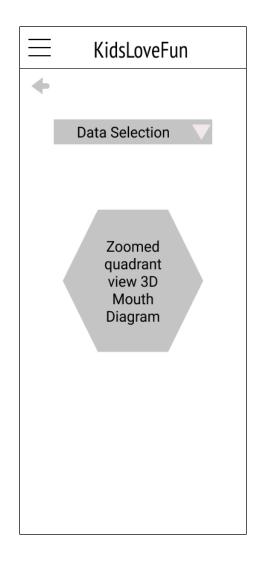


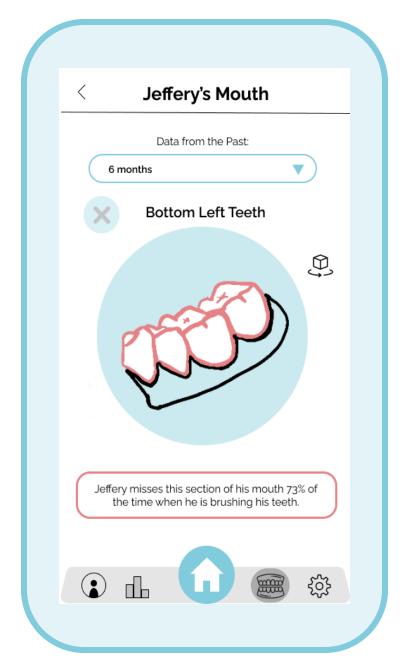


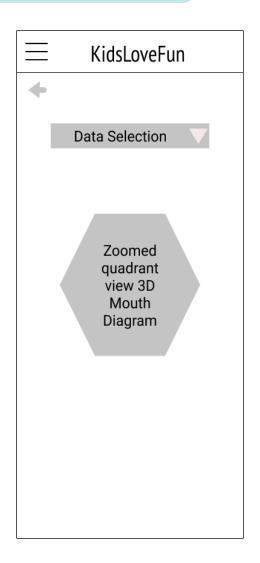


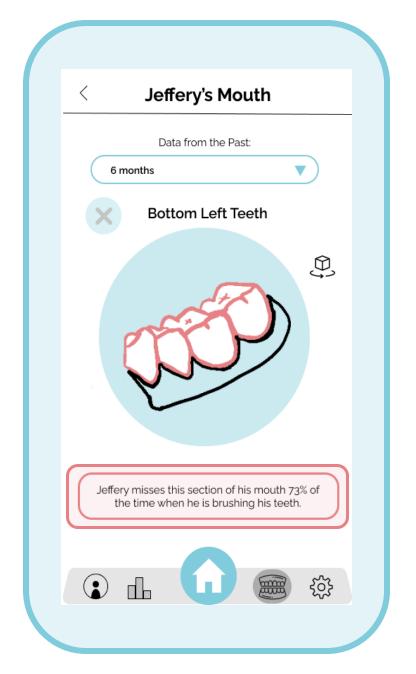


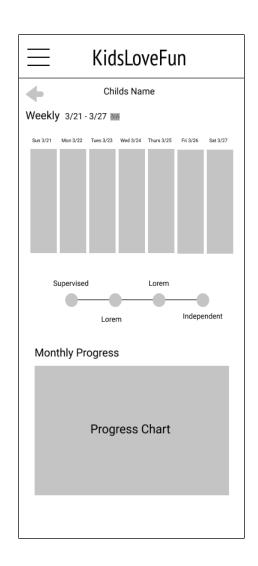




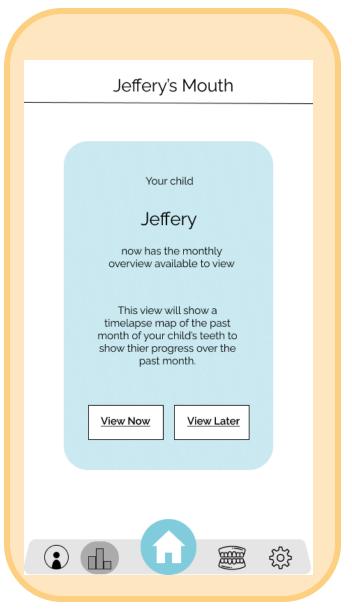


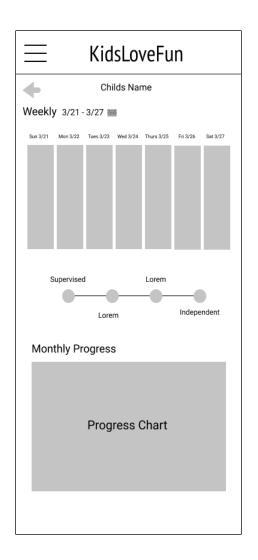


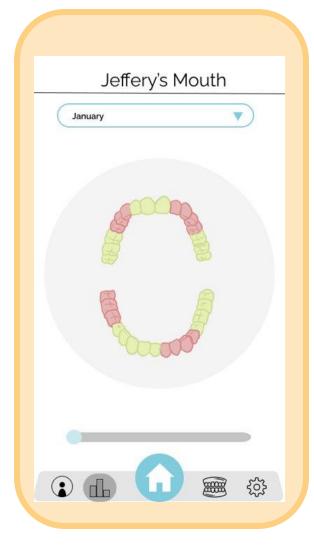


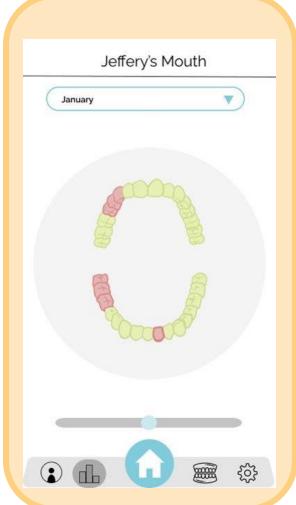


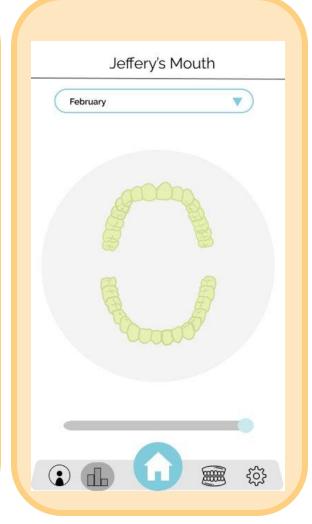


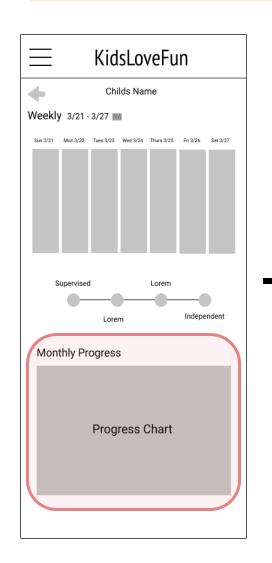


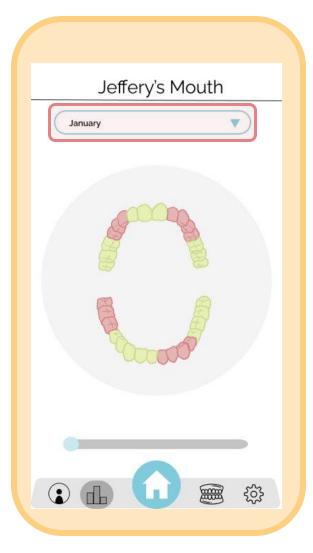


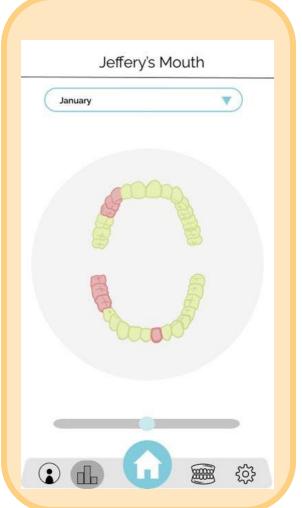


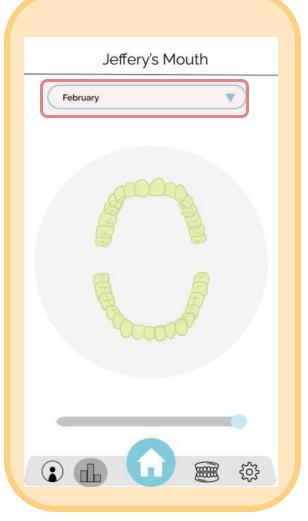


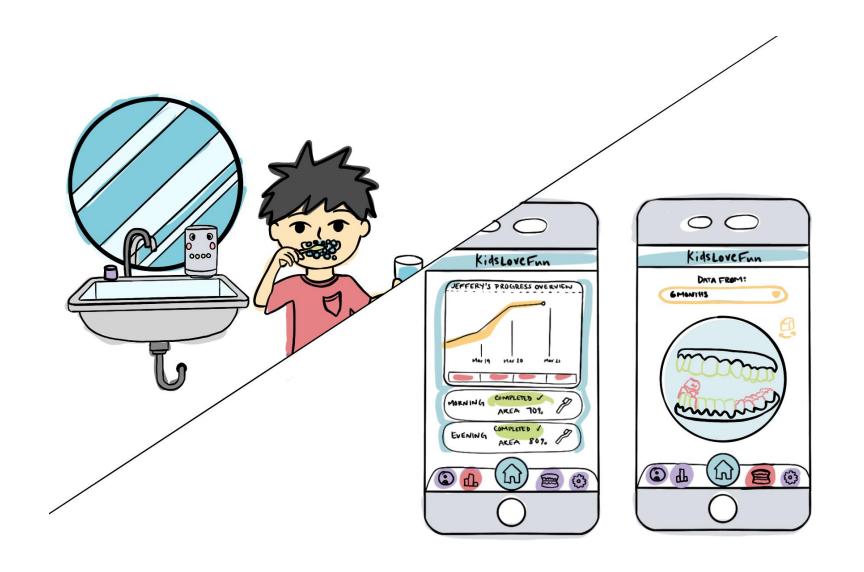








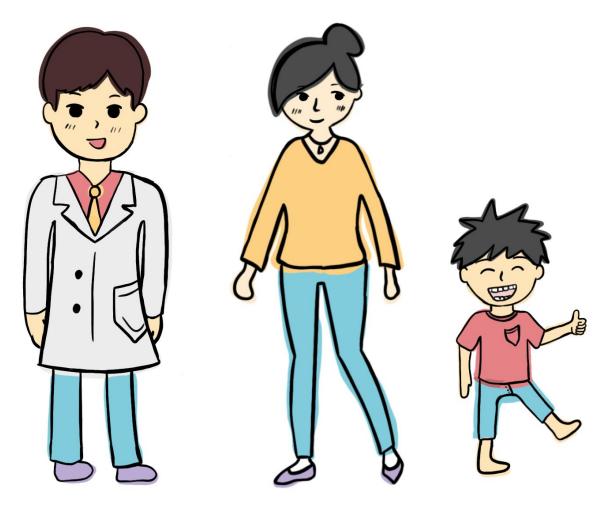




Stephanie can see the overall weekly improvement in Jeffery and is happy to see progress.

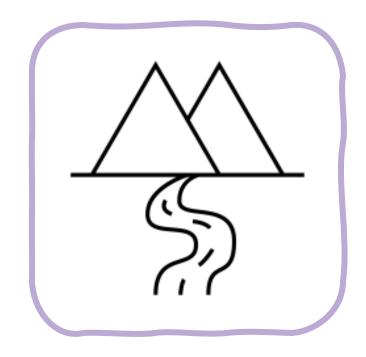


She can check up on Jeffery's brushing habits any time she needs to and knows when she needs make the time to step in to help her son.

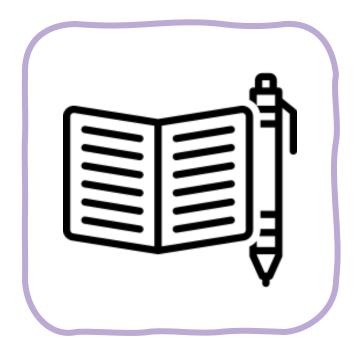


Overall, the application has helped Stephanie understand what specific brushing habits her son needs to improve upon.

## Reflection

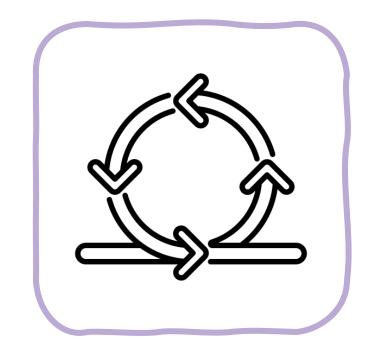


Barriers we worked through

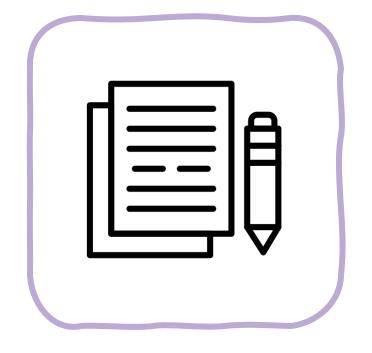


Where our solution may fall short

# Next Steps



Final Iteration



Finalize Documentation

