



Mealtime Tracker Application

D1 - BAPN Designers

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Presentation Outline

- Design Process Summary
- Current Prototype Showcase
- Challenges Faced and Lessons Learned
- Next Steps



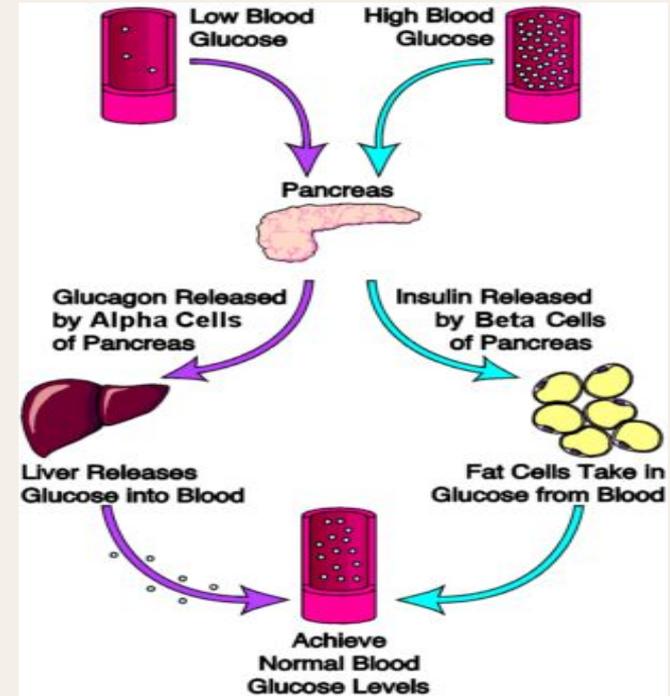
Our Client's Needs

- Simplicity and ease-of-use of the app
- Carbohydrate tracking
- Input and logging of foods
- Notification or reminder functionality
- Stores data for future analysis



Problem Statement

“A mealtime insulin tracking application for diabetic users that will regulate their diabetic conditions and increase harm-reduction efforts amongst all users.”



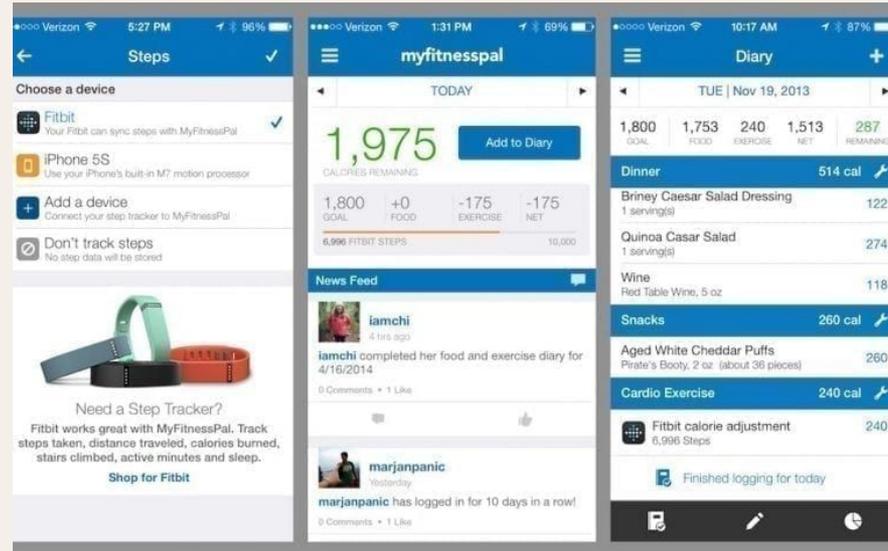
Blood Glucose Regulation Process

Benchmarking

- MyFitnessPal, Diabetes:M and mySugr insulin tracking apps



- MyFitnessPal's overly complicated inputs and logging of irrelevant factors (proteins, fats, vitamins)
- Many more apps focusing purely on insulin tracking



Target Specifications

- Compared the specifications of Diabetes:M, Diabetes Recipe and MySugr by three value types
- Utilized a numerical ranking system
- Mostly quality-oriented with the exception of the insulin dosage amount

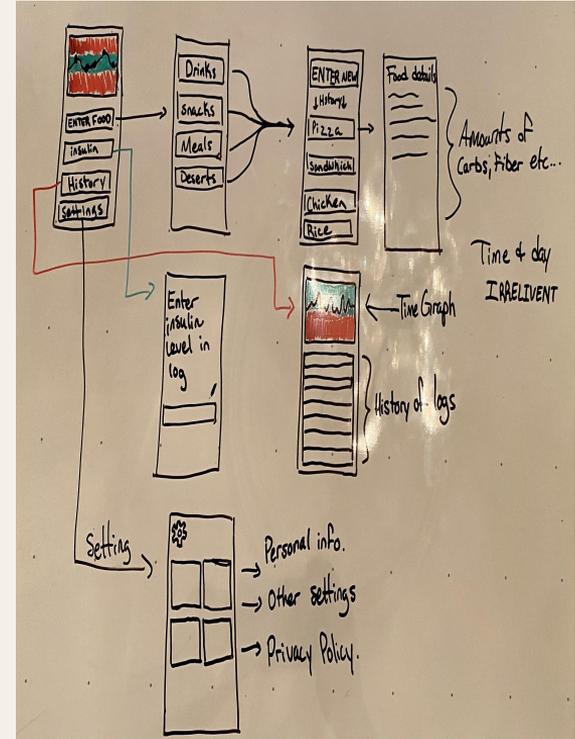
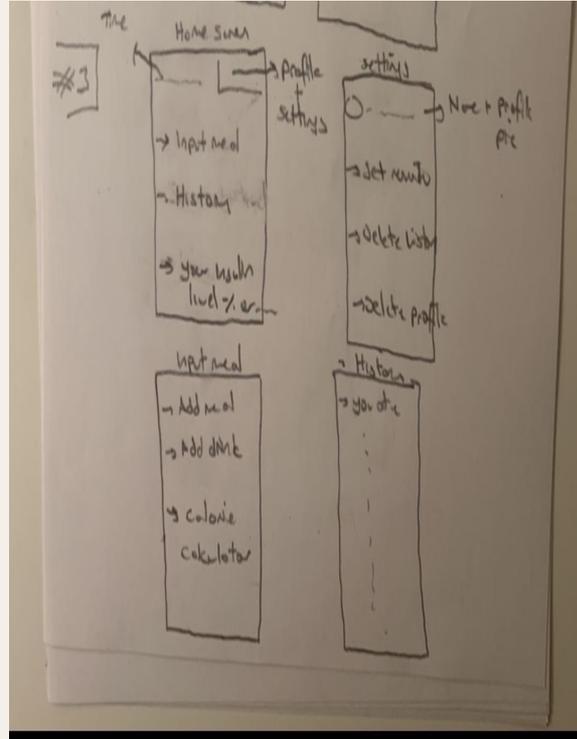
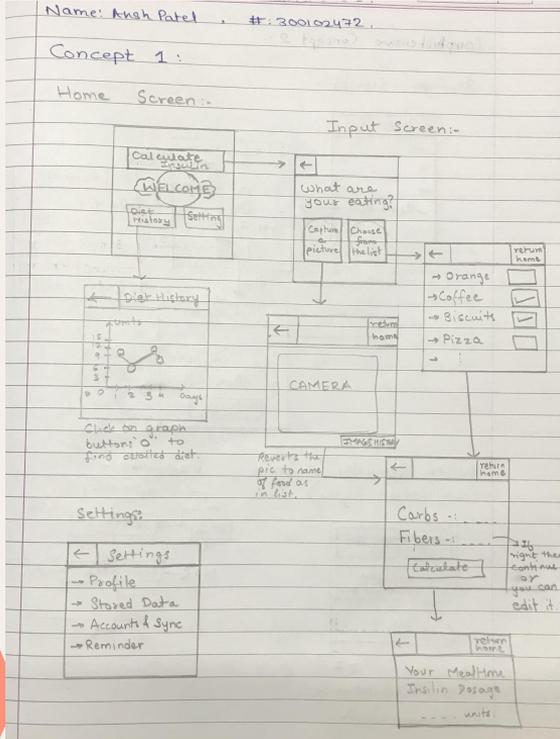
| # | Specifications | Marginal Value | Ideal Value | Final Value |
|---|---|-----------------|---------------|---|
| 1 | Accuracy of insulin needed per meal | 0.5 unit/100 mL | 1 unit/100 mL | 1 unit/100 mL |
| 2 | User Feedback | Between 0 & 9 | 9 | 8/10 |
| 3 | Ease-of-use | Between 0 & 10 | 10 | 10/10 |
| 4 | Software application testing | Pass | Pass | Pass |
| 5 | Cost | Free | Free | Free |
| 6 | Wifi dependence | No | No | No |
| 7 | Product quality | Between 0 & 10 | 10 | 9/10 (smooth running & user friendly) |
| 8 | ADD (Attention deficit disorder) friendly | Between 0 & 10 | 10 | 10/10 (simple user interface) |
| 9 | Data Storage | Yes | Yes | Yes (records upto 2 months of daily use) |

Decision Matrix

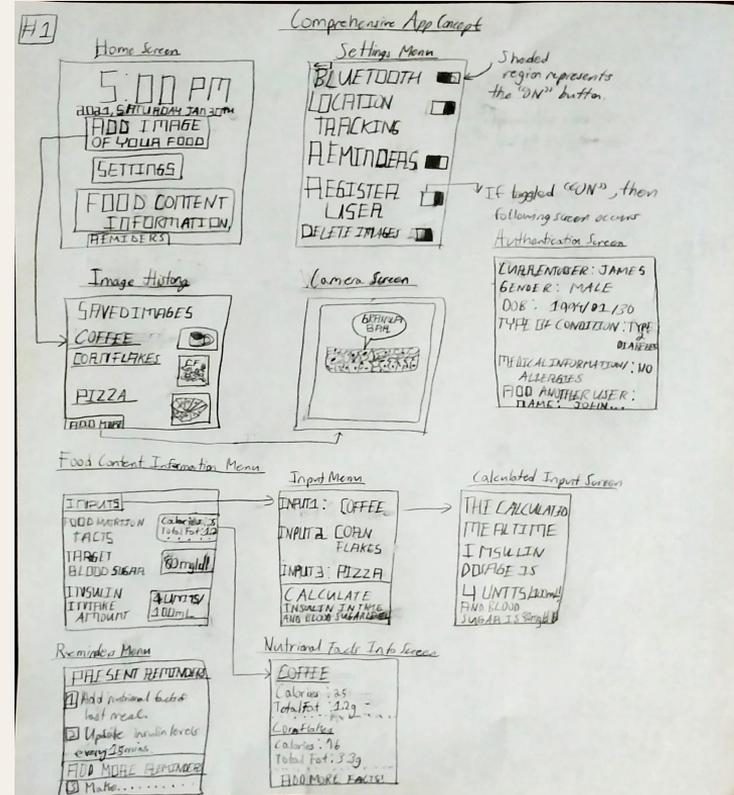
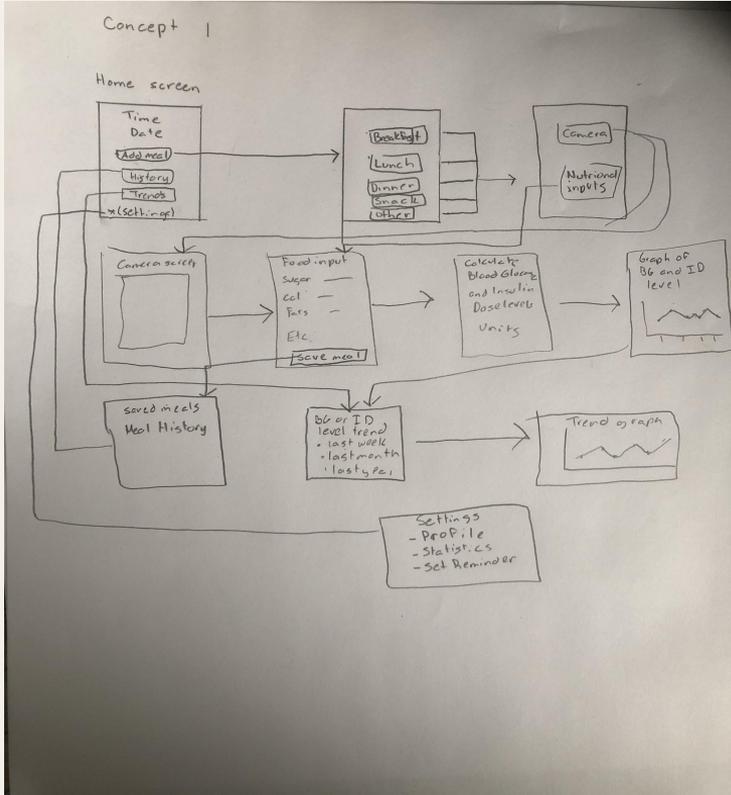
- Aesthetic design
- Food input
- Input history
- Graphical representation
- Contacts for M.D. submission

| # | Specifications | Concept 1 | Concept 2 | Concept 3 |
|---|---|---|--|--|
| 1 | Accuracy of insulin needed per meal | The client must insulin with what he eats (4) | Adjusted metrics to display how each person is affected (5) | Adjusted metrics will be altered by input of insulin by user and calculated result with food logging which will combine both aspects (5) |
| 2 | User feedback | Rating system has to be connected to WiFi (4) | Contact information with developers' emails (4) | Contact email (3) |
| 3 | Ease-of-use | Simplicity (4) | Simple with different functions (5) | Extreme simplicity is the goal (5) |
| 4 | Software application testing | We can test it (5) | We can test it (5) | We can test it(5) |
| 5 | Cost | Free to use (5) | Free to use (5) | Free but with ad. space but will distract ADD clients (2) |
| 6 | WiFi dependency | Pre-integrated formulations and functions (4) | Pre-entered meals that the client has on a regular basis (4) | WiFi should not be required (4) |
| 7 | Product quality | Functionality, it has to do what we want it to do (4) | Pleasing appearance, rounded buttons (5) | Cannot be over complicated(3) |
| 8 | ADD (Attention deficit disorder) friendly | Simple, Apple like interface (4) | Minimal buttons, not complicated (4) | White and blue interface (4) |
| 9 | Data Storage | Store data on hard drive (4) | Stored data which can be viewed by users and developers (5) | Simple data storage in form of history log (4) |
| | Total | 38 | 42 | 35 |

Possible Concepts

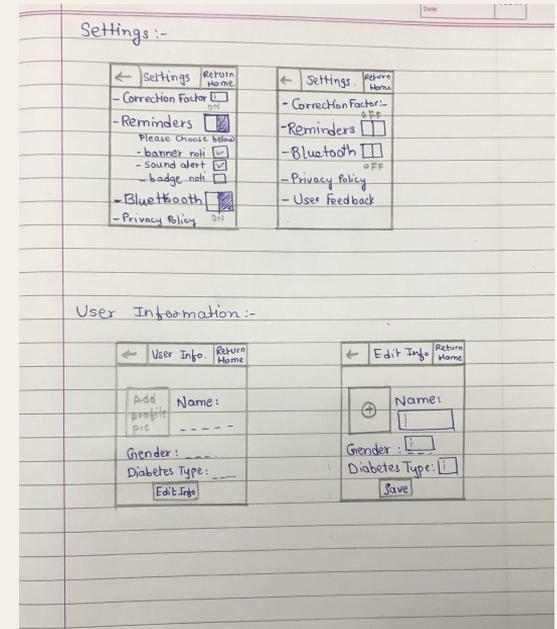
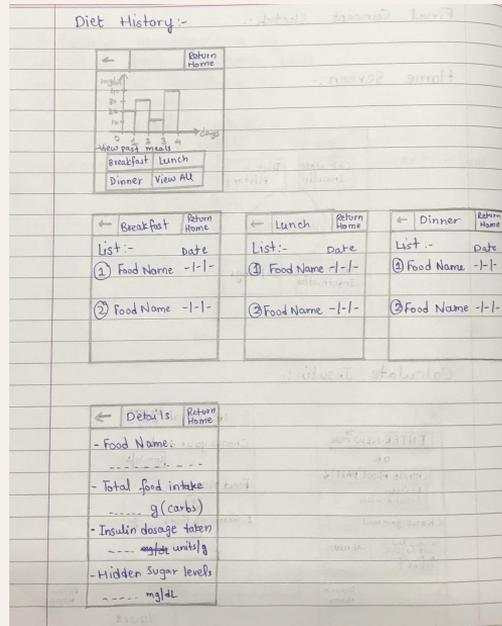
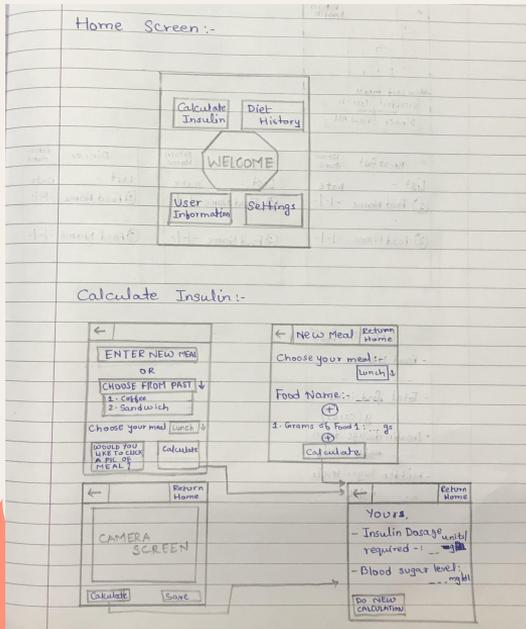


Continuation of Possible Concepts

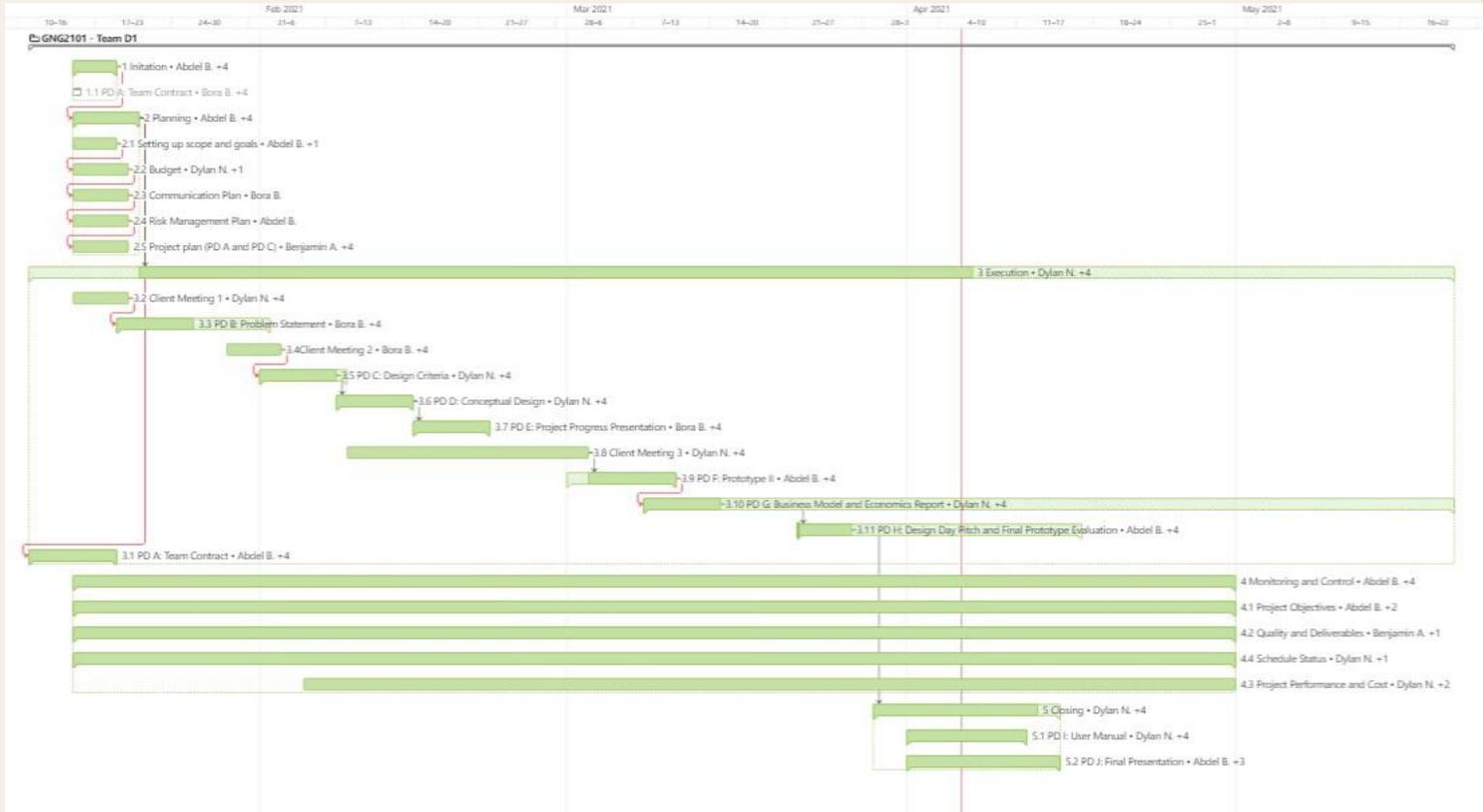


Chosen Design Concept

Designed before completing the first prototype



Project Plan



Business Model

→ The Freemium business model was best suited for our business as it best fit our goals and values.

| | | How? | What? | Who? |
|---|---|--|---|---|
| Key Partners Google Play Store (Android) Hospitals Dieticians Nutritionists | Key Activities Calculating logging and tracking of different carbohydrates within foods. | Value Proposition We will allow the user to track and monitor the periods when they consume various types of carbohydrates, in a simple, intuitive way with minimal, simple inputs. The user will be allowed to use the app offline since there is a Bluetooth feature making the product Wi-Fi independent. | Customer Relationships The customer relationship was developed with meetings regarding the app's development. A trustful relationship was created with our users. | Customer Segments We are developing this app as a means to an end with other overly complicated apps which require too many inputs in order to log and track carbohydrates. We are aiming our app towards all age demographics but more specifically focusing on those who want to reduce or track carbs. |
| | Key Resources Software and project time allocated Software engineers Paid software applications (higher-developed programming languages for coding) Office space for employees (work infrastructure) | | Channels The app will be downloadable only through the Google Play Store. | |
| Cost Structure Fixed costs will be held for employees, rent, advertising, licensing and equipment. These costs will remain the same regardless of the number of sales. The variable costs will contain data storage which will be adjustable depending on the number of users | | Revenue Stream Profit is generated by the user purchase of the premium upgrade priced at 20\$. Since other apps are predicated on a subscription-based business model, it is difficult to benchmark prices, so our price is fair for the service being provided. | | |

How much?

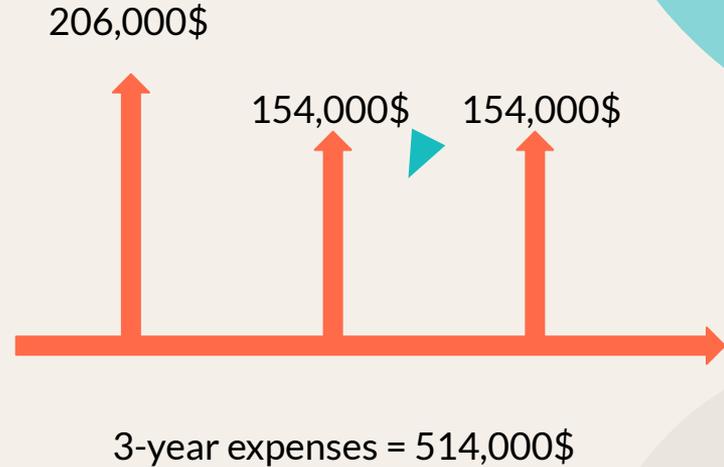
Economics

If we brought it to market...

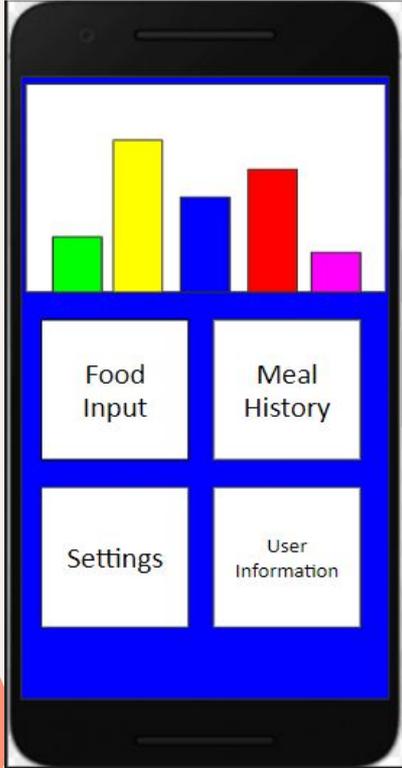
3-year net income = -246,000\$

Break-even point would be at 128,500 downloads assuming 20% upgrade to a premium version at 20\$.

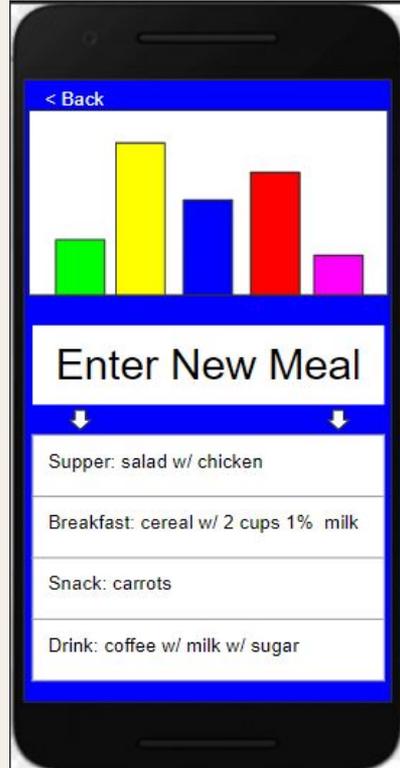
- Marketing
- Salaries
- Rent and Utilities
- Equipment
- Licensing



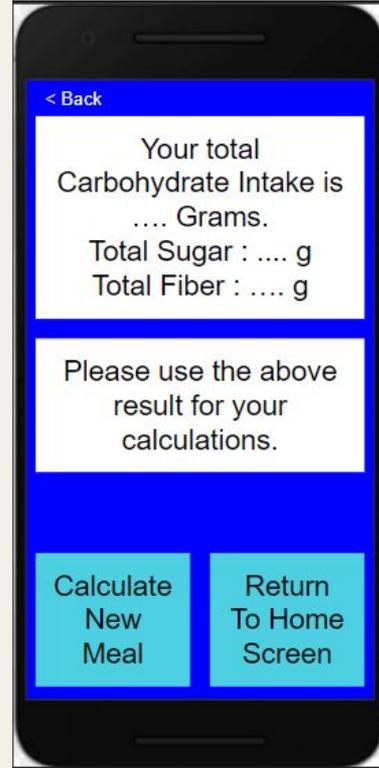
Prototype I



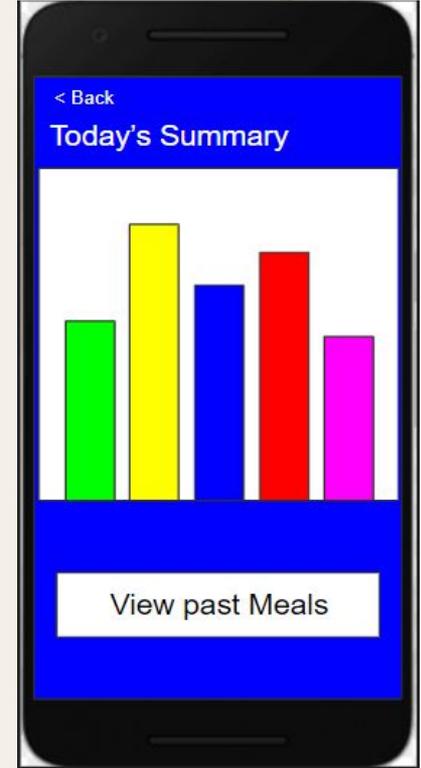
Home Screen



Food Input Screen

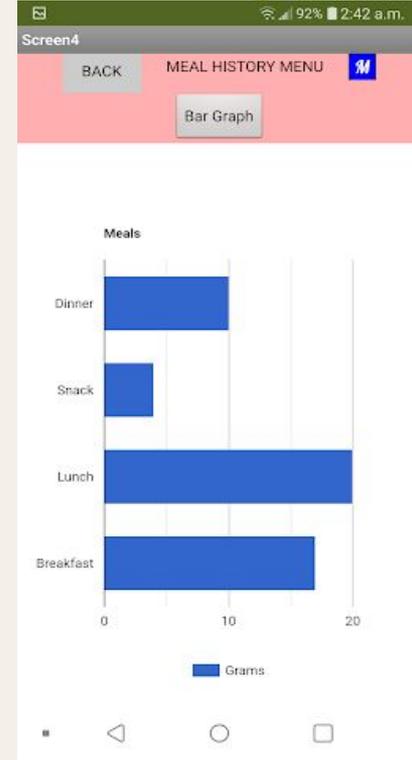
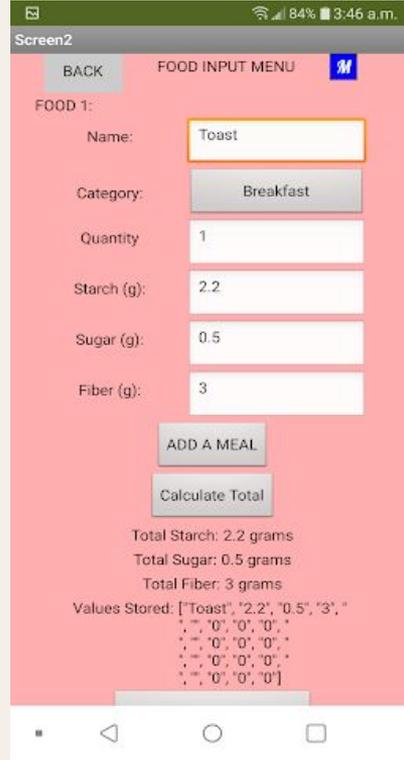
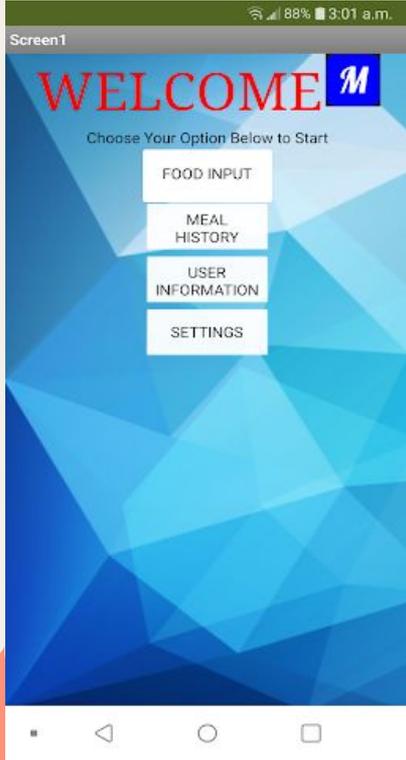


Results Screen



Meal History Screen

Prototype II



Prototype II Feedback

Which design looks more interesting ? *

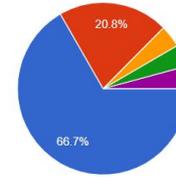


3.

9 responses

Do you think this application looks user friendly ?

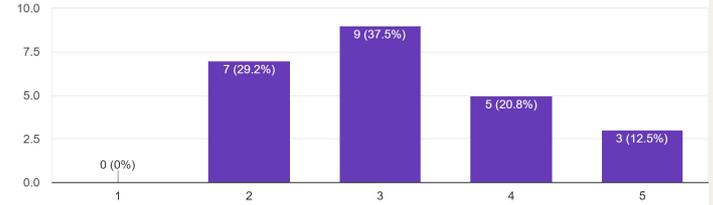
24 responses



- Yes
- No
- I'm between Yes and No. It's somewhere in the middle because I can't really see how the app functions.
- There are some aspects that make it user-friendly like the bar graph feature and some that don't. So that's why I'm stuck in the middle given the ratings I...
- Needs a little more work

Rate it on a scale of 1 - 5

24 responses



What do you think about Food Input menu ? *



The food input looks very well implemented. The food quantities accept decimals which allows for more accuracy and that is fantastic.

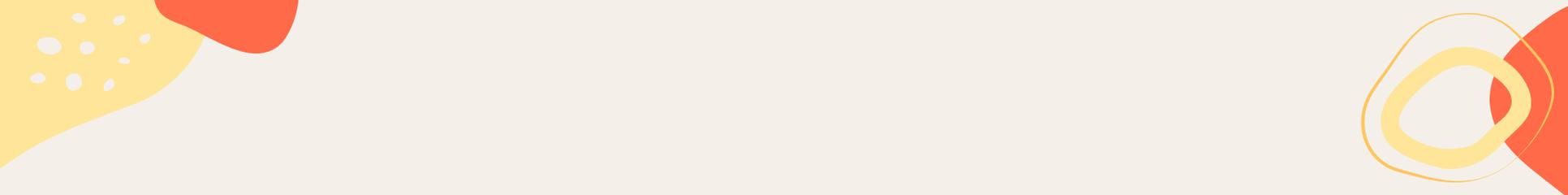
1 response

How the user information screen looks to you ? *

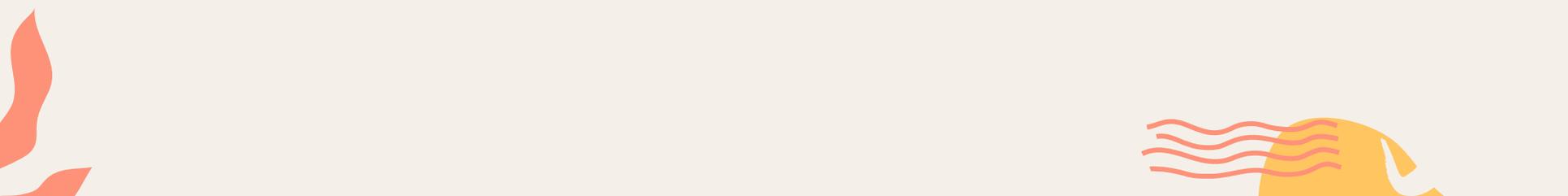


1 2 3 4 5

4 responses

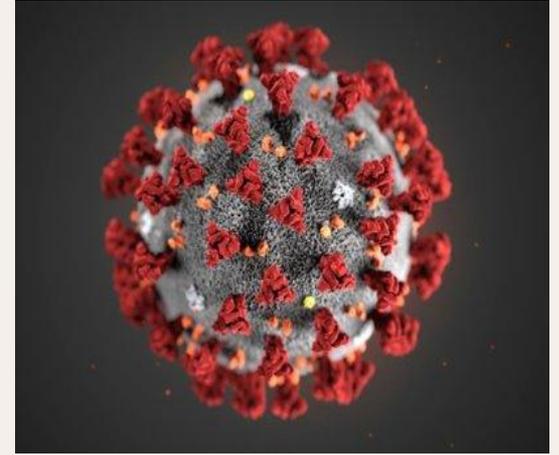


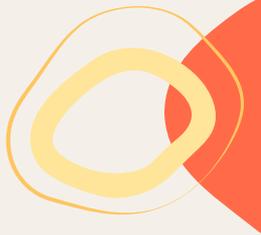
Prototype III Demonstration



Challenges Faced and Lessons Learned

- COVID-19
- Time Management
- Organization
- Storage of data and notification system





Next Steps

- Implement Bluetooth functionality (Wi-Fi-independency)
- Create a more sophisticated reminder system
- Enhance visual appeal of the app
- Publish Mealtime on the Google Play Store



The image features a central white rectangular area containing the word "Questions" in a large, bold, red 3D font. This central area is surrounded by a light beige background. Scattered throughout the background are numerous grey, 3D question marks of varying sizes and orientations, some appearing to float or be in motion. In the corners, there are decorative elements: a yellow shape with white dots in the top-left, a yellow and orange circular graphic in the top-right, and a yellow shape with red wavy lines in the bottom-right.

Questions