



Business Plan: DiaBuddies

Technovation 2024

Executive Summary

Children diagnosed with diabetes face unique challenges in managing their blood sugar levels effectively. The new responsibilities of constantly monitoring levels, making good dietary choices, increasing physical activity, and insulin intake can be a scary task for kids. The current market for blood sugar monitoring lacks a child-friendly interface and does not engage younger users in the process. DiaBuddies offers features such as a health tracker, games, educational content, challenges and contests, and a unique supermarket feature to encourage regular monitoring and promote better diabetes management for children.

Company Description

Mission

DiaBuddies' mission is to empower young diabetics aged 10-18 to take control of their well-being by providing them with an engaging, user-friendly app that monitors blood sugar levels and promotes healthy habits through gamification.

Vision

In 3 years, we aim to be the leading app for pre-teens and teenagers with diabetes. While the app is aimed for users old enough to use phones, we expect to include a feature for parents to join on their phone's and track their child's progress. We plan for our app to connect to physical glucose monitoring tools for real-time tracking. We also plan to expand our app so users can enter challenges to win online prizes, such as digital gift cards.

Structure

We are a non-profit organization aiming to collect funds solely for the purpose of app maintenance and providing prizes. All additional proceeds will be donated to the Mayo Clinic Center for Pediatric Diabetes Research to help medical professionals discover more ways to support young diabetics.

Products and Services

Health tracker

The health tracker provides a manual entry form for users to enter the date, time, glucose level, and additional notes. Each entry is added to a scrollable database, and can be updated or deleted. If the user has entered a healthy glucose level (<140 mg/dL), they will earn 10 points in MySupermarket, another app feature.

Our future goals are to connect the app with physical glucose tracking devices (such as Dexcom or Freestyle Libre) for diabetics to track their sugar levels. We also plan to include graphing features so users can visualize how their glucose levels have changed throughout each day, week, month, or year. Another goal is to include an alert in case a user's glucose levels are dangerously low, along with providing emergency phone numbers and resources.

Game

The Game feature acts as an interactive quiz. The user is in a supermarket and is given questions related to diabetes and healthy habits. By clicking arrows to move up, left, or right, the user moves up the shelves and towards the correct answer. Points earned in the game are available to use in MySupermarket.

Future goals are to enhance this feature into an infinite running game that retrieves questions from a database and ends when the user gets three questions wrong. This is an area we plan to explore AI opportunities and how they can enhance the quality of our game.

Info Page / Challenges

The info page contains an introduction to maintaining a healthy diet and stable glucose levels. Instead of promoting strict dieting habits to adolescents, the education focuses on creating a balance of nutrients and developing a healthy relationship with food. No negative connotations are used; in fact, occasional sweet treats and processed foods are encouraged to avoid invoking eating disorders amongst users. This section of the app also has health challenges to keep kids engaged with their health. These challenges include recipe contests and fruit/veggie intake goals.

Future goals are to make this feature more interactive by allowing users to enter local, state, or national challenges and win digital prizes that benefit society. An example of this would be Diabuddies donating money to the winner's chosen organization such as a local food shelf or diabetes-related organization. Another goal is to include education for users with allergies and/or dietary restrictions to make the app more inclusive towards children from different regions, medical conditions, religious practices, etc.

My Supermarket

This feature ties together all aspects of the app. It keeps track of many points the user has, ideally retrieving data from the health tracker, game, and challenges. Users can claim an ingredient (such as a fruit or veggie) with every 10 points. A sweet treat (such as a brownie or cookie) can be claimed with every 100 points. Again, this reinforces the idea of a positive diet by telling users that it's okay to eat unhealthy snacks on occasion.

Future goals are to enhance the in-app prizes that users can claim. Examples of this include new avatar accessories, get a buddy for your avatar, change the background, add music, etc.

Market Analysis

DiaBuddies is marketed towards diabetic youth who are old enough to use a phone (ages 10-18). The app is ideally for children who are looking for an all-in-one tracker, educator, and motivator. To better understand our key competitors, we analyzed the top 4 diabetes apps for children, and compared their features to what DiaBuddies offers.

We found that most apps are mainly for parents to monitor their child's progress. Ours is the only app with educational features directed towards youth. As more kids aged 10-18 use technology every day, DiaBuddies is a way for them to use that screen time to better manage their health.

	DiaBuddies	Gluroo	MySugr	Happy Bob	BlueLoop App
Description	All-in-one app	Advanced glucose tracker	Tracker with health challenges	Tracker with a star-point system	For caregivers (parents, nurses, etc.)
Glucose Tracking	✓	✓	✓	✓	✓
Include personal notes	✓	✓	✗	✗	✓
Games	✓	✗	✗	✓	✗
Intended directly for kids (parents optional)	✓	✗	✗	✓	✗
Emergency alerts	✓	✓	✗	✗	✓
Point system	✓	✗	✗	✓	✗
Interactive challenges and prizes	✓	✗	✓	✗	✗
Cost	Free or \$9.99/year for bonus features	Free	Free or \$2.99/month for bonus features	\$5.99/month or \$49.99/year	Free

Market Comparison Chart

We think our product will perform well in the market. While other apps do exist that contain similar features, ours is the only one that combines all features.

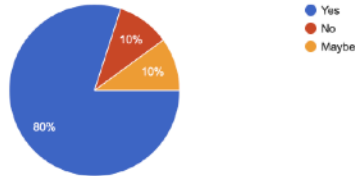
Customer research

To conduct research, we created an anonymous survey that asked young diabetics to read a description of our app and select whether they would download it or not. They also had the opportunity to share how likely they would be to use a game app to motivate them to maintain healthy habits. We posted this survey on various social media platforms, such as Instagram, Facebook, and LinkedIn. We received 20 responses from this form.

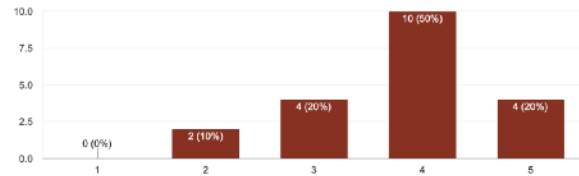
To get a better idea of the market after this, we called pediatric diabetes centers in the St. Paul area. These included the Children's Teen Diabetes Clinic, Mayo Clinic Children's Center Pediatric Diabetes Specialty,

M Health Fairview Masonic Children's Hospital. We also talked 1-on-1 with family and friends who have diabetes about their experience.

If you were/are a kid, would you download this app?
20 responses



How likely are you to use mobile games and challenges to motivate you (or your child) to maintain healthy habits?
20 responses

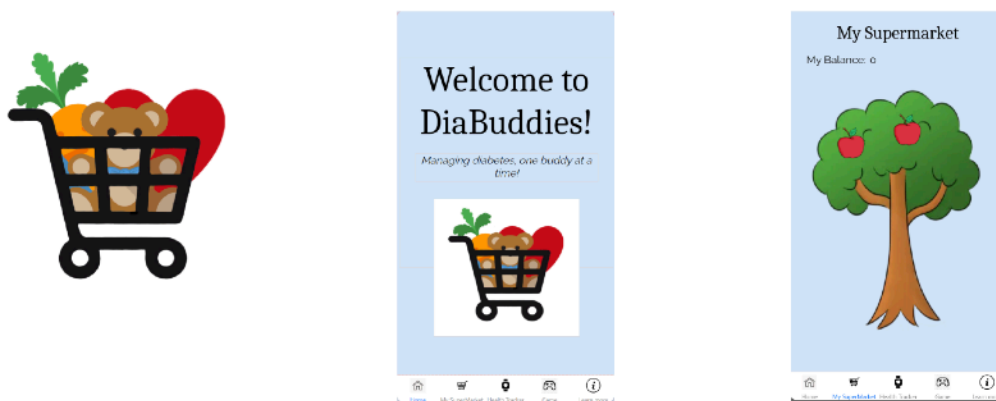


Eight percent of users from the form said “yes” when asked whether they would download our app. On a scale from 1 to 5, 5 being “most likely” 90% of users selected 3 or above when asked how likely they would be to use gamification and health challenges to maintain healthy habits. Multiple diabetics stated that they already use an app to track their glucose, but they were not engaged with the app/only used it to make sure they were meeting bare minimum glucose requirements. Multiple diabetics also said that they struggle with mental health when it comes to being healthy, and that their relationship with food and sugar has become more toxic since being diagnosed. Thus, we decided to take a positive diet approach in our app so we can educate users that eating healthy doesn't mean cutting off sweet cravings, or failing if an unhealthy snack is eaten. Ultimately, we hope to reduce youth eating disorders through this nutritional approach.

Strategy and Implementation

Branding

A key aspect of our brand identity is the “Buddy” character in DiaBuddies. This avatar is part of the brand's logo, game, supermarket, etc. It was designed by St. Paul digital artist Katelyn Birkeland. We use the slogan *Managing diabetes, one buddy at a time* to help each user feel included by Buddy. The app utilizes food imagery in order to promote healthy eating habits for our user base while fostering a healthy relationship with food. We use a light blue theme to match the diabetes awareness colors. We also utilize a teddy bear buddy in order to create a friendly image that appeals to kids. This branding is consistent throughout our app, logo, and marketing materials.



Logo and images from the app

Strategy to reach target users

To reach target users, we researched current apps that diabetic children are using (see Market Comparison Chart above). We found that useful features are present in various apps, but there is no one app that combines glucose tracking, gamification, and diabetes education. DiaBuddies bridges this gap by saving users' time and effort that is caused by using multiple applications as each of them usually contains one feature whereas we are providing an end to end solution.

Content marketing: Appropriately market the unique features of our app such as positive reinforcement, fun challenges, etc. Make sure marketing content is easy for children to understand so that they are willing to download the app themselves. This can be done by briefly describing key features of the app and including engaging graphics that will capture the attention of children.

Social media engagement: Many children aged 10-18 (especially after age 13) are active users of social media. By posting advertisements and promoting our app through an Instagram account and/or short TikTok video, we can reach our target audience better. This can also be a platform to share user testimonials and promote in-app challenges and contests.

Along with social media engagement, DiaBuddies will partner with diabetic influencers. We can start on a small scale by collaborating with diabetic micro-influencers (1k - 10k followers) and ask them to share how DiaBuddies makes a positive impact in maintaining a healthy lifestyle. Later, we aspire to partner with Jillian Rippolone, Charmaine Dominguez, The Kruegers, etc., who are all large-scale influencers (1mil+ followers) and already have a following of children affected by diabetes.

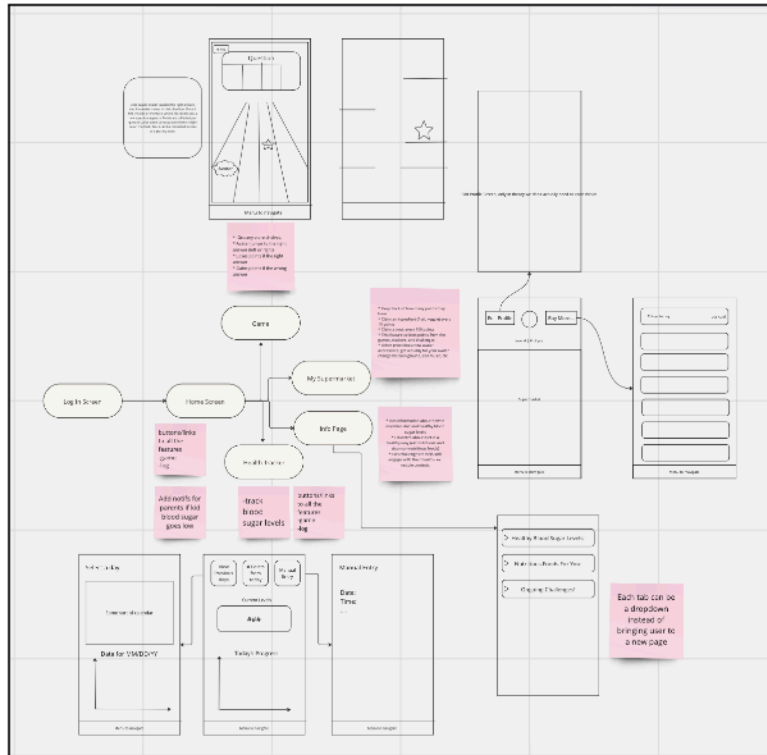
School outreach programs: We will partner with middle and high schools to raise awareness about our app and how it can help diabetic students. When a child is diagnosed with diabetes, their school nurse can encourage using the app as a resource for tracking glucose and learning about their condition.

Healthcare provider collaboration: We will partner with pediatric diabetes organizations. On a small-scale basis we will start with these Minnesota organizations: Children's Teen Diabetes Clinic, Mayo Clinic Children's Center Pediatric Diabetes Specialty, M Health Fairview Masonic Children's Hospital. But on a larger scale we will partner with the Children's National Hospital and the American Diabetes Organization.

Pricing

The app will always remain free to all users. This is to ensure that we provide equitable opportunities to all users and maintain a non-discrimination by income policy. This choice will also encourage more children to download the app, as they don't always have an income to pay for a subscription with. All features of the app will be available with the free version.

That being said, our nonprofit needs a small income to support the cost of maintenance, challenges, and business partnerships. Therefore, to enter a community challenge that has a monetary prize, users will need to pay a fee of \$9.99/year. Then they can enter an unlimited number of challenges per year. However, if the user chooses the free version of the app, they can still participate in challenges and contests on their own; they will just not be chosen as a winner.



Product implementation strategies

Product development life cycle: After identifying the product we wanted to build, we began with user journey mapping. We created a flowchart of how the user will navigate through the app (see figure on next page). Then, we created a list of features we wanted to incorporate. We first categorized these into front-end and back-end features, and then decided what we wanted to code, and what we wanted to explore as a future endeavor in this business plan. Then we prioritized the features we would program based on a combination of the most realistic to program in our timeline and most important for our brand. We found that the health tracker, info page, and supermarket were most important, and with what time we had

left we focused on the game and adding challenges/contests. Then we tested our product as a group and determined what errors we faced, and how we would tackle them. We also then determined what features we want to focus on in the near future.

We will start with beta testing for select users to implement our product in the industry. Diabetic children can sign up for this testing online, and we will market this opportunity using the target user strategies. After 6 months, we will ask beta users to write reviews and provide feedback on their experience using the app. After identifying areas of improvement, we will spend 3-6 months enhancing the app, and then publicly launch it on the app store for anyone to download.

Another implementation strategy is to provide users with a seamless onboarding process. We will offer our pitch video and technical video for users to watch and understand the features they have access to before they begin using the app. We will also provide a PDF user guide with instructions so that users can take advantage of all our app has to offer.

Employees

After launching the app, we will need a few employees to maintain the upkeep and continue to enhance the product. One product manager to oversee app operations, one marketing director to promote the app, and handle influencer and organization partnerships, one software developer for feature updates, and one accountant to keep track of the revenue, operating costs, and ensure that the business remains sustainable.

Financial Plan and Projections

Startup Capital

Each of the four team members in DiaBuddies will invest \$250 to the startup. This will make our initial capital \$1000. After gaining 1000 app users, we hope to gain support from 5 local, national, or global diabetes organizations that are willing to sponsor our app for \$100 per year.

Revenue

We expect to generate revenue from the premium version of our app, advertisements, and sponsorships. Since over 80% of 20 surveyed diabetics indicated that they would use our app, we hope that the population of users will increase by about 2000 per year in the initial years of our app launch. 30% of users said they would likely pay for the enhanced features of our app, so we expect about 600 users to purchase the premium upgrade. The pricing for this is \$9.99 per year.

We will charge \$1 per advertisement. These will all be from other pediatric healthcare-related businesses. We will include advertisements in the form of emails and texts to avoid distracting users from enjoying the app. In the first two years, we will need to pay for influencers to promote our app. However, by the third year, we hope to get sponsored by influencers who share our mission, and we will include their own challenges and/or messages in the info section of our app. We hope to get 5 sponsorships per year at \$100 each.

Operating Costs

We will have some basic operating costs, which will increase over time as the users of our app increase too. These costs include salaries for our workers, hosting the app on the app store, service fees, equipment such as new technology, etc., and initial advertisements and marketing. Another fee is partnering with Dexcom, so our app can connect to their devices.

	Year 1	Year 2	Year 3
Startup Capital			
Personal investments (\$)	1000	0	0
Diabetes organizations (\$)	0	500	500
Annual Total (\$)	1000	500	500
Revenue			
Annual users	2000	4000	6000
Premium feature (\$)	6000	12000	18000
Advertising sales (\$)	1000	2000	3000
Promoting influencers (\$)	0	0	500
Annual Total (\$)	7000	14000	21500

Operating costs			
Equipment (\$)	500	500	750
Salary for 4 workers (\$)	2000	2000	2400
App store fees (\$)	99	99	99
Dexcom / diabetes device fees (\$)	2000	2000	2000
Advertising (includes influencer promotion) (\$)	500	500	0
Annual Total (\$)	5099	5099	5249
Annual Profit (\$)	2901	9401	16751

Operational Costs Projections

Summary

DiaBuddies is an all-in-one app for youth aged 10-18 to manage their diabetes. The app includes glucose tracking, games, challenges, contests, educational features, and a unique supermarket feature. Our team is a highly motivated group of young women who have a strong understanding of the needs of the market from customer research that we have conducted. By following this business plan, we have the opportunity to help millions of young diabetics manage their medical condition and live happy, healthy lives.