



diaBEATit

Healthy living, simplified

Concepts developed by Group 41



THIS PRESENTATION

Problem

Target segment

Solution and UVP

App walk-through

Validation

Q&A

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THE PROBLEM

- a sedentary lifestyle is associated with especially adverse outcomes for Diabetes and pre-diabetes patients
- current studies suggest that up to 73% of diabetes patients in the US do not exercise enough (Hamasaki, 2016)
- creating lasting changes to lifestyle is difficult for people already struggling



TARGET SEGMENT



Individuals suffering from type 2 diabetes,
needing motivation and support
to exercise more consistently

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SOLUTION AND UVP

- program to understand personal blood glucose levels, and see the impact of exercise
- simple activity organiser and planner, to break down exercising into achievable parts, to fit patients' current lifestyle
- notification system to motivate and keep patients on track

THE APP



VALIDATION

**USER
INTERVIEW**
QUALITATIVE

**SUS AND NPS
SCORE**
QUANTITATIVE

FOCUS GROUP
QUALITATIVE





diaBEATit DEMO





QUESTIONS?

Group 41

Figma prototype link:

<https://www.figma.com/proto/cOWfGBIcYKYberICk48DBh/Micro-Interventions?node-id=314%3A1337&scaling=scale-down&page-id=42%3A2&starting-point-node-id=138%3A607&show-proto-sidebar=1>

Wireframe link:

<https://projects.invisionapp.com/freehand/document/BOBkOZWBB>

Lean Canvas

Lean Canvas		designed for: Micro Interventions	date: 11.21.2021	version: 3.0
Problem Lack of motivation to exercise, trouble finding a good exercise, or trouble getting started. Type 2 diabetes patients face barriers finding time to exercise regularly. Feeling overwhelmed by managing your exercise schedule, and needing help breaking exercising activities down successfully.	Solution 1. Breaking down exercise into smaller activities that can be completed over the course of a week. 2. Scheduling the activities over a given period of time within a provided deadline with breaks in between each one. 3. Sending notifications and reminders for each activity as well as rewarding the user for successfully completed goals.	Unique Value Proposition Easy and convenient way to help with type 2 diabetes symptom management via exercise by motivating the user to be more consistent.	Customer Segments People who suffer from type 2 diabetes and need motivation to exercise more consistently.	

User Story Map

User(s)

People who struggle to manage their diabetes

Goals

Help to create structure around exercising

Manage micro interventions

Tracking progress

Activities

Break down weekly exercise into smaller activities

Setting task timeframes

Manage notifications

View progress

Steps

Choose various activities from the library

Choose time frame for the activity

Set activity reminder frequency

View current activity status

Add activities to the weekly plan

Choose duration for the activity

Accept / ignore an activity reminder

View overall activity status

Modify activities if necessary

Defer an activity to another time

View past activities

View badges and achievements

Healthy living, simplified

With an organized exercise plan, we make sure that you get the optimal amount of cardio activity you need to keep you in good shape.



Here to help

DiaBEATit helps you track and motivate your physical activity levels.

We offer you a library of classical cardio and alternative exercising that you can combine to get the optimal amount of daily activity.

The app uses micro-interventions to effectively get - and keep you - on track with your exercising. So you can focus on doing what needs to be done



Using the latest research

Micro interventions serve as an engaging means to deliver positive psychological improvements, and increase overall well-being. Studies show that Micro-interventions have the potential to create lasting positive changes to behaviour and mental health outcomes. Keeping you healthy and productive.



Testing

Qualitative Testing

The first method used to validate this iteration of the project was conceptual validation. This method was chosen so as to be used specifically with a test participant with first hand experience of type 2 diabetes and the management of its symptoms. The desired outcome is therefore not conclusive about the perfectness or completeness of the app but rather a part of the development process so that unsuitable aspects and design concepts can be changed before they become baked into the final design.

Method

Conceptual validation: This method involves presenting low fidelity concepts to a user so that it encourages co-creation. By intentionally presenting these half-finished conceptual products, users are more likely to analyse, offer suggestions, and further explain their needs as relating to the product so far. It's purpose is to mine information and refine rather than just question.

Test Format

- Describe the overall concept to the participant so that they have a basic understanding of the project goals.
- Introduce each part of the design one at a time allowing the participant to absorb, question, comment on it.
- Ask the participant to share their opinions on the current design, what they like about it, and what they would change. What they think is realistic and useful if they were to use the app themselves and what is redundant or unhelpful. Allow them to run wild with your concept, proposing additions and changes.
- Possible questions to ask if prompting is needed:
 - What do you like the most about what we have so far?
 - What do you like the least or do you think would not work?
 - What do you think is the hardest part about managing symptoms for type 2 diabetes?
 - What would help make that management easier?

Findings

The participant was overall very enthusiastic about the proposed concepts and product. The current design was easy for them to follow and they liked the idea of having choices on how to break down the exercise times throughout the week in order to achieve their weekly goal. They didn't have much to comment about with achievements and progress, but they did say that this kind of thing works for other people they know as a good source of motivation.

The proposed ideas of the undeveloped diet portion of the app were also explained to them. The participant pointed us in the direction of the diabetes plate method as seen in the link. This was discussed in detail on how this could be implemented into the app during the next iteration to help guide users into better eating habits. Instead of a list of exercises to choose from, the user could be instructed step-by-step through the creation of a healthy, appropriately sized meal using lists of example foods for each of the food groups. This could then either be combined into an overall list for the week to be used for shopping or used daily during the actual preparation as a reference.

The plate method: <https://www.diabetesfoodhub.org/articles/what-is-the-diabetes-plate-method.html>

Quantitative Testing

Method

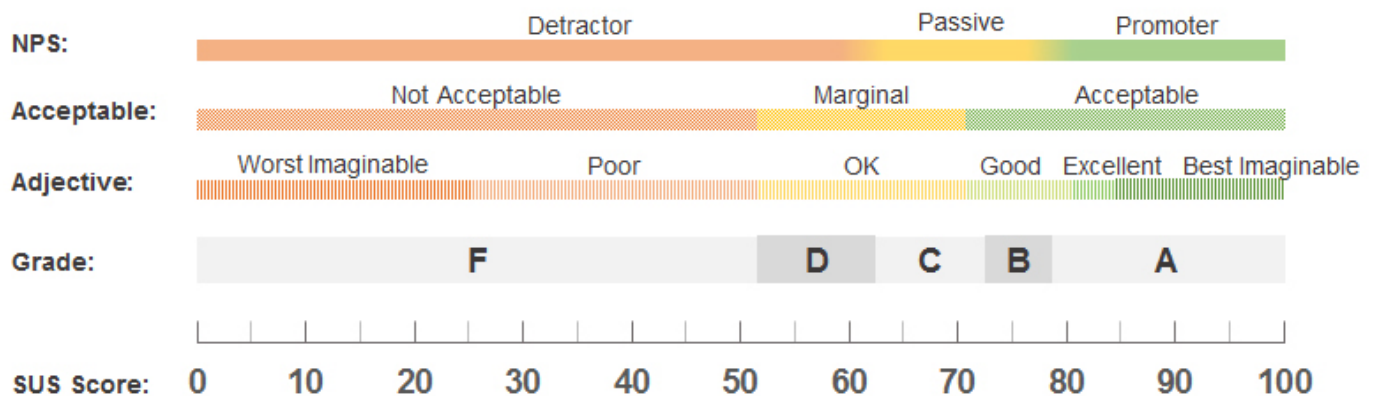
It was decided to use quantitative testing to validate the current levels of usability perceived by users. To do so, a set of test subjects were asked to try the app, and then to take a simple survey. The survey consisted of 3 types of questions:

- Personal questions to establish demographic
- System Usability Scale (SUS) questions
- A Net Promoter Score (NPS) question

SUS was chosen as a metric to quantify perceived usability, as it is widely used for this purpose, and provides a simple output score out of 100. NPS was chosen as the second metric, to quantify the quality of the overall user experience. It outputs a score between -100 and 100. The results of the survey for each of the versions can be seen below

Findings

The SUS suggests that the usability of the app at this point is perceived to be significantly above average (an average SUS score is considered to be 68). Additionally, overall experience based on the NPS is judged to be above average also, as the number of people saying they would recommend the app is significantly higher than the number that say they would not. Overall, these findings suggest that the perceived usability of the system is high. A graph illustrating how the scores have been interpreted, can be seen below



Questions:

1. Age
2. Do you have, or know someone who has, a type of Diabetes?
3. Have you ever used a Blood Glucose Measurement device before?
4. If I was a diabetes patient, I think that I would like to use this app frequently
5. I found the app unnecessarily complex
6. I thought the app was easy to use
7. I think that I would need the support of a technical person to be able to use this app
8. I found that the various features in this app were well integrated
9. I thought there was too much inconsistency in this app
10. I would imagine that most people would learn to use this app very quickly

11. I found the app very cumbersome/difficult to use
12. I felt very confident using the app
13. I needed to learn a lot of things before I could get going with this system
14. How likely is it that you would recommend this app to a friend or colleague?

Other comments on the app:

- Very useful app!
- I think the app was really nice and useful for someone with diabetes
- Love it
- Absolutely fabulous

Timestamp	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
21/11/2021 12:01:04	24	Yes	Yes	5	1	5	1	5	1	4	1	5	1	9
21/11/2021 12:01:11	37	Yes	Yes	4	3	4	1	4	2	4	1	5	2	8
21/11/2021 12:12:29	22	Yes	No	5	3	4	1	5	2	5	1	5	2	9
21/11/2021 12:52:20	21	No	No	5	1	5	5	4	1	4	1	5	2	9
21/11/2021 13:02:50	21	No	No	4	2	5	1	4	2	5	2	5	1	9
21/11/2021 14:05:49	20	Yes	Yes	4	1	5	2	5	1	5	1	5	1	10
21/11/2021 14:45:10	69	Yes	No	4	1	5	2	5	1	5	1	5	2	10

[illegible]