

Project plan.

Technology for diabetes



**Sjors Driessen, Daan Sewüster, Shihaab Rouine, Luca Megens,
Stefan Vandenboorn & Laurentiu Dumitrache**

Stofloos/RondOm | 09/02/2022

Table of contents

Project assignment

CONTEXT	03
GOAL	03
STRATEGY	04
RESEARCH QUESTION	05
PARTIES INVOLVED	05

Project methodology

METHODS	06
---------	----

Scope

PROJECT DELIVERABLES	08
PROJECT EXCLUSIONS	08
PROJECT ACCEPTANCE CRITERIA	08

Project Organization

STAKEHOLDERS AND TEAM MEMBERS	09
COMMUNICATION	10

Activities and time plan

TIME PLAN	11
-----------	----

Testing strategy and configuration management

TESTING STRATEGY	12
TEST ENVIRONMENT AND REQUIRES RESOURCES	12

User stories

USER STORIES	13
--------------	----

Version history

VERSION	DATE	AUTHOR(S)	CHANGES	STATE
1.0	09-02 2022	GROUP 2	Document set up	COMPLETE
1.1	10-02 2022	GROUP 2	Document filled with information after meeting with stakeholders	WORKING
1.2	21-02 2022	GROUP 2	Added user stories, research questions and design challenge	DRAFT
2.0	24-02 2022	GROUP 2	-clarified information: content and introduction -style added	COMPLETE
2.1	10-03 2022	GROUP 2	-clarified information: context -re-done the table of content	COMPLETE

Project Assignment

CONTEXT RondOm Podiatrists, a large healthcare organization in the Netherlands, has developed the "Diabetes Foot Check app" to continue providing care to patients despite the pandemic.

GOAL The current goal of the project is to improve the experience for the user in and around the app. This will result in new concepts and advice plans which will show improvements in the project supported by research and user tests. This should lead to encouragement of reflection, motivation, action and (permanent) behavioral change regarding self-monitoring and therefore prevention of foot injuries. This will then be implemented by the company in the foot check app itself.

Project Assignment

STRATEGY During this project we are going to use the Scrum method. We are going to use this because it is a more effective and flexible way of working. The scrum team will be divided over different tasks within the team. These tasks can be read at point 2.1.

During our scrum method we are going to use sprints of 2 weeks to update the stakeholders on our progress.

We want to make use of the CMD methods and try to keep track of the different methods we use per sprint:

-Product backlog

The product backlog is an overview of the things that still need to be done.

-Sprint backlog

The sprint backlog lists what will be done this sprint. The sprint backlog is compiled from the top topics of the product backlog. The development team determines what they can do based on their speed in the previous sprints.

-Acceptance criteria

The definition of done states what has been agreed upon in terms of how the software or product will be delivered. Requirements about documentation (in English), testing (tested by users and the maintenance department, with which devices and web browsers), location (on the acceptance environment) etcetera.

-Improvement

The "improvement" (increment) is a list of all realized improvements and changes to the product.

-Burn down

The burn down chart of the sprint is usually displayed on the wall in the project room. This way, it is immediately clear to everyone how much still needs to be done

Project Assignment

RESEARCH QUESTIONS

Design Challenge:

“Design a user experience to enable diabetes patients by using the app consistently to help them prevent their feet situation from getting worse.”

Main questions:

- What is the best solution for improving user retention?
- How can we make people aware of their condition/app?

Sub-questions:

- How can we keep the app relevant after the pandemic?
- Why do people stop using the app?
- How do you form a habit in a virtual environment?
- How can we keep the user engaged?
- How can we make people aware of the consequences and benefits?
- How can we get more attention from people who aren't using the app yet?

PARTIES INVOLVED

Deborah Pelders

Design Researcher,
Fontys Paramedische
Hogeschool

Lenn Tjin-A-Sie

Data Consultant & owner,
Stofloos

RondOm Podotherapeuten
Client

Fontys FHICT Media Design
Research group

stofloos

TU/e EINDHOVEN
UNIVERSITY OF
TECHNOLOGY

Fontys
University of Applied Sciences

rondom
podotherapeuten



Project Methodology

Methodes

We will be using the CMD Methods pack, this method allows you to create variety and improvement in your process by using different creative techniques to perfect the process. The following cards will be used:

Library



Literature study

With this method we will delve more deeply into the ways of thinking of the target group and the app animal was previously made. We then read, study and analyze various scientific articles.

SWOT analysis

The project team finds several Strengths, Weaknesses, Opportunities and Threats related to a project. The results are typically presented in a 2 x 2 matrix. You need to understand the community that a particular organization is working with; this can be done via public forums, listening campaigns or informational interviews.

Field



Interview

Interviews allow you to better understand users and other stakeholders by gathering their opinions, behaviors, goals, attitudes and experiences. Invite representative participants from each stakeholder group, make them feel comfortable and ask questions about your topic of interest (e.g., product usage). Report on your interviews in a suitable way

Survey

Develop a questionnaire and give it to a representative sample of participants, using the right channels. You can use a variety of online tools to analyze the responses.

Problem Analyse

An important aspect of problem analysis is asking questions, such as who, what, why, when where and how. 'Why' is an especially important question for understanding the problem. It can be asked multiple times. Once the problem is clear, you can collect more information about the problem. Is it a new problem? Are there existing solutions?

ProjectMethodology

Lab

System test



System testing evaluates the complete, integrated system against its requirements. Create a test plan based on the requirements. It should have test cases with expected outcomes.

Usability testing

You can use a paper or electronic prototype of your solution to test your application at an early stage. Later, you can use your actual solution and test things like interface, performance and how a user executes a typical task.

Field

Pitch



We are going to give a small pitch every 2 weeks about the sprint we have done in those weeks so that the stakeholders stay informed of our progress.

Product Review

One or more representatives of the client and other experts do a walk-through of the final product before it is released.

Workshop

Brainstorm



Bring people together to spark creativity and use a creativity technique to ensure a creative flow among the participants. Accept any ideas; filtering can be done at a later step.

IT architecture sketching

Come together around a whiteboard and draw the high-level architecture based upon discussion before and during the drawing process. Like the C4 model.

IT architecture sketching

Start by figuring out what you want to learn from your prototype. Figure out which kind of prototype suits your needs best: for example, you can create a paper or electronic prototype of your UI (User Interface), a proof of concept or a proof of principle.

SCOPE

What we will do for this project is to deliver a solution that can encourage the users of the app to make use of it more consistently. We will do this by doing research on how the users are currently using the app and ask them what they think could be improved.

The other thing we want to do for this project is do research to see if there may be a different approach then could be better than using the app.

Project deliverables

Research document of various relevant subjects.

Prototypes of different solutions we will come up with.

Interview and test results.

Improved customer journey that will increase user retention.

Project exclusions

We will not be delivering a fully developed app.

We will not work on developing & researching that is not part of the project or is connected to the project.

Project acceptance criteria

Increase in user retention

Raise awareness to people that do not use the app already.

The UI is accessible by all categories of people.

Research documents are supported with liable references.

Project Organization

STAKEHOLDERS AND TEAM MEMBERS

Name	Contact information	Role and functions
Sjors Driessen	sjors.driessen@student.fontys.nl	Student
Luca Megens	luca.megens@student.fontys.nl	Student
Stefan Vandenboorn	s.vandenboorn@student.fontys.nl	Student
Laurentiu Dumitrache	l.dumitrache@student.fontys.nl	Student
Daan Sewüster	d.sewuster@student.fontys.nl	Student
Shihaab Rouine	s.rouine@student.fontys.nl	Student
Lenn Tjin-A-Sie	lenn@stofloos.nl	Stakeholder
Deborah Pelders	d.pelders@fontys.nl	Stakeholder

Project Organization

COMMUNICATION

We are going to update our stakeholders on a 2-week basis by presenting our progress. We will also update our stakeholders through the Microsoft Teams environment and via e-mail when necessary.

For communication between ourselves, we will use our Discord group for doing stand-ups, update each other on everyone's individual process on the project and help each other out when we are meeting an obstacle, we cannot solve ourselves. When a team member cannot work that day, or partially, due to an appointment or illness, we inform our team members through our Discord group.

Activities and time plan

PHASES OF THE PROJECT

We are going to work with different faces during this project:

- Analyzation & research
- Ideation & concepting
- Realization
- Final deliverable
- Evaluation & reflection

TIME PLAN AND MILESTONES

Our time plan will be working from 10:00 AM till 16:00 PM either from home or at school. We will work from home most of the time, due to Covid. As of now, our only day we can work on location will be Wednesday unless informed otherwise.

For this project we're going to make use of sprints. Each sprint will consist of three weeks. In the beginning of each sprint, we will set up our goal(s) that we want to achieve by the end of the sprint. At the end of each sprint, we will go over each other's work to show our progress on it.



Activities and time plan

Time plan

Phasing	Start date	Finish date
Analyzation & research	7-02-2022	25-02-2022
Ideation & concepting	28-02-2022	18-03-2022
Realization	21-03-2022	08-04-2022
Final deliverable	11-04-2022	29-04-2022
Evaluation & reflection	02-05-2022	20-05-2022

Testing strategy and configuration management

TESTING STRATEGY

We are going to update our stakeholders on a 2-week basis by presenting our progress. We will also update our stakeholders through the Microsoft Teams environment and via e-mail when necessary.

For communication between ourselves, we will use our Discord group for doing stand-ups, update each other on everyone's individual process on the project and help each other out when we are meeting an obstacle, we cannot solve ourselves. When a team member cannot work that day, or partially, due to an appointment or illness, we inform our team members through our Discord group.

TEST ENVIRONMENT AND REQUIRED RESOURCES

We plan to conduct the tests online, preferably through teams. We will record the sessions so that we can use them as future references. Each user will be asked for permission to record the session.

A possible interesting product we could use to aid us with the tests would be heatmap software. With the help of this kind of software we will know exactly what our users are pressing so that we do not have useless features/ buttons etc.

User Stories

Learning outcomes	Why do people stop using the app?	What do people encounter in the app?	How do you form a habit in a virtual environment?	How can we keep the user engaged? (gamification?)	How can we make people aware of the consequences and benefits?	How can we get more attention from people who aren't using the app yet?	How can we keep the app relevant after the pandemic?
Learning outcome 1: User interaction (analysis & advice) You analyse the user, the interaction, and the user experience, also taking state of the art interactive technologies into account. You select a suitable design process to be able to advise on UX interventions based on a validated UX design.	User Story: Make a habit out of using the app ... So that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back	User story: Have a simple user interface Can easily navigate through the app and see if my feet are healthy	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user As a patient I want to be able to setup personal goals so that I can have a more personalized experience that caters to my specific needs. Requirement(s): • Help users stick to using the app with the help of their personal goals. • achievements, incentives, reminder prompts	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user	User stories: As a doctor I want my patients to know the consequences and benefits of them using the app, so that fewer people end up in a critical situation. Requirement(s): • Inform the patient about the risks they are taking not using the app As a patient I want to be more informed about what the consequences are when I'm not regularly checking my feet. Requirement(s): • Platform where I can find information about condition and what I can do to prevent it from becoming worse. • A community and/or doctor with whom I can discuss about my condition without feeling neglected	User stories: Learn about apps that will help with taking good care of my condition ... so that I ... prevent the unnecessary worsening of my condition. Requirement(s): • marketing of the app with the help of social media posts.	User stories: As a doctor I want to give better care towards my patients by using the app in addition to the weekly check-ups so that there are less patients ending up with severe complications. Requirement(s): • Improve the way the app gives healthcare from a distance As a patient I want to receive better healthcare from a distance so that I don't have to go for weekly check-ups with my podiatrist. Requirement(s): • More reasons to use the app
Learning outcome 2: User interaction (execution & validation) You execute and evaluate the user experience of an interactive product. You document the development process for the stakeholders.	User Story: Make a habit out of using the app ... So that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back	User story: Have a simple user interface Can easily navigate through the app and see if my feet are healthy	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user As a patient I want to be able to setup personal goals so that I can have a more personalized experience that caters to my specific needs. Requirement(s): • Help users stick to using the app with the help of their personal goals. • achievements, incentives, reminder prompts	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user	User stories: As a doctor I want my patients to know the consequences and benefits of them using the app, so that fewer people end up in a critical situation. Requirement(s): • Inform the patient about the risks they are taking not using the app As a patient I want to be more informed about what the consequences are when I'm not regularly checking my feet. Requirement(s): • Platform where I can find information about condition and what I can do to prevent it from becoming worse. • A community and/or doctor with whom I can discuss about my condition without feeling neglected	User stories: Learn about apps that will help with taking good care of my condition ... so that I ... prevent the unnecessary worsening of my condition. Requirement(s): • marketing of the app with the help of social media posts.	User Stories: As a doctor I want to give better care towards my patients by using the app in addition to the weekly check-ups so that there are less patients ending up with severe complications. Requirement(s): • Improve the way the app gives healthcare from a distance As a patient I want to receive better healthcare from a distance so that I don't have to go for weekly check-ups with my podiatrist. Requirement(s): • More reasons to use the app
Learning outcome 3: Software design You design and evaluate a software system with existing components or libraries using predetermined quality criteria.	[Redacted]	• Make all a C4 model	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user As a patient I want to be able to setup personal goals so that I can have a more personalized experience that caters to my specific needs. Requirement(s): • Help users stick to using the app with the help of their personal goals. • achievements, incentives, reminder prompts	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user	User stories: As a doctor I want my patients to know the consequences and benefits of them using the app, so that fewer people end up in a critical situation. Requirement(s): • Inform the patient about the risks they are taking not using the app As a patient I want to be more informed about what the consequences are when I'm not regularly checking my feet. Requirement(s): • Platform where I can find information about condition and what I can do to prevent it from becoming worse. • A community and/or doctor with whom I can discuss about my condition without feeling neglected	User stories: Learn about apps that will help with taking good care of my condition ... so that I ... prevent the unnecessary worsening of my condition. Requirement(s): • marketing of the app with the help of social media posts.	[Redacted]
Learning outcome 4: Future-oriented organisation You carry out a problem analysis and on that basis, you determine the definitive problem and elaborate on this in a project plan.	User Story: Make a habit out of using the app ... So that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back	User story: Have a simple user interface Can easily navigate through the app and see if my feet are healthy	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user As a patient I want to be able to setup personal goals so that I can have a more personalized experience that caters to my specific needs. Requirement(s): • Help users stick to using the app with the help of their personal goals. • achievements, incentives, reminder prompts	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user	User stories: As a doctor I want my patients to know the consequences and benefits of them using the app, so that fewer people end up in a critical situation. Requirement(s): • Inform the patient about the risks they are taking not using the app As a patient I want to be more informed about what the consequences are when I'm not regularly checking my feet. Requirement(s): • Platform where I can find information about condition and what I can do to prevent it from becoming worse. • A community and/or doctor with whom I can discuss about my condition without feeling neglected	User stories: Learn about apps that will help with taking good care of my condition ... so that I ... prevent the unnecessary worsening of my condition. Requirement(s): • marketing of the app with the help of social media posts.	User Stories: As a doctor I want to give better care towards my patients by using the app in addition to the weekly check-ups so that there are less patients ending up with severe complications. Requirement(s): • Improve the way the app gives healthcare from a distance As a patient I want to receive better healthcare from a distance so that I don't have to go for weekly check-ups with my podiatrist. Requirement(s): • More reasons to use the app
Learning outcome 5: Investigative problem solving You formulate sub-questions pertaining to the primary question and answer these using relevant research methods. You use the conclusions of the sub-questions to justify (design) choices.	User Story: Make a habit out of using the app ... So that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back	[Redacted]	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user As a patient I want to be able to setup personal goals so that I can have a more personalized experience that caters to my specific needs. Requirement(s): • Help users stick to using the app with the help of their personal goals. • achievements, incentives, reminder prompts	User stories: As a patient I want to make a habit out of using the app so that I don't lose track of my condition's situation. Requirement(s): • Incentives, give them a reason to come back • make the application "addictive" for the user	User stories: As a doctor I want my patients to know the consequences and benefits of them using the app, so that fewer people end up in a critical situation. Requirement(s): • Inform the patient about the risks they are taking not using the app As a patient I want to be more informed about what the consequences are when I'm not regularly checking my feet. Requirement(s): • Platform where I can find information about condition and what I can do to prevent it from becoming worse. • A community and/or doctor with whom I can discuss about my condition without feeling neglected	User stories: Learn about apps that will help with taking good care of my condition ... so that I ... prevent the unnecessary worsening of my condition. Requirement(s): • marketing of the app with the help of social media posts.	User Stories: As a doctor I want to give better care towards my patients by using the app in addition to the weekly check-ups so that there are less patients ending up with severe complications. Requirement(s): • Improve the way the app gives healthcare from a distance As a patient I want to receive better healthcare from a distance so that I don't have to go for weekly check-ups with my podiatrist. Requirement(s): • More reasons to use the app