Vision Document

Group 11

Revision History

Date	Version	Description	Author
20/1/2021	1.0	First version of the vision document	Mathias....
23/2/2021	1.0	Second version	Mathias Øvreseth, Odin velle Ulvestad, Mathias Jørgensen, Fredrik Hoelseter, Joakim Berge, Kristoffer Svedal

1 Introduction

The purpose of this document is to define high-level needs and features of this project in the System Development course. The project assignment consists of developing a to-do application and will be developed by 1st year students in the computer engineering degree program in the spring semester.

2.1 Product Summary

For	Fitness enthusiasts and others who want to get in shape
The app	Will allow users to create and log workouts
In contrast to	Other training apps
The new app is	More user friendly and faster, with more functions

2.2 Product specifications

This document outlines the vision for the training to-do application. The purposes of this application are to:

- Register workouts to the application
- When the workouts are added, the application should store all data about the workout in local files
- Workout data includes data such as: Workout names, repetitions, sets.
- The user can go back to earlier logged workouts
- Calculators (max rep, improvement over a set time, etc.)

3.1 User environment

The application must be used on a computer, and it won't be available on other platforms like smartphones, tablets etc.

3.2 Summary users

Name	Detailed description	Role under development	Represented by
Ole Dvergsdal	Student at NTNU. Not very physically active, however would like to begin exercising	User tester	Himself
Hans Lindgård	Student at NTNU. Is regularly physical active but does not go to the gym.	User tester	Himself
Kristian Rekkedal	Not very physically active, however would like to begin exercising	User tester	Himself
Herman Mayer	Goes to gyms and exercises regularly	User tester	Himself

3.3 Summary of the user's needs

Need	Priority	Current solution	Proposed Solution
Register new workouts	High	None	Self-registration through a form. Workouts will be stored in a local JSON file??
Edit/Delete old workouts	High	None	Write changes to the local JSON file.
Insert workouts into a calendar	Medium	None	Find an open-source calendar framework/library
Calculate 1rpm for exercises	Medium	None	Use the Epley formula (oneRepMax = weight*(1 + repetitions/30))

Calculate improvement over time	Medium	None	Use the users input information about reps, weight and time to calculate and display its improvement over time
Mark a workout as completed	High	None	Include information about each workout's status. When marked as completed change status to correct value. (Maybe this goes under the category Edit workout?)
Change order of workouts	Medium	None	Save order information for each workout then sort the list based on order number. Change order number when user changes order.
Add rating on workout	Medium	None	Add option after workout to rate the workout from 1-5(?).

3.4 Alternatives to our app

- Other training logging apps

3.5 Risk analysis

Risk Short Description	Impact	Probability	Significance
Corona virus (COVID-19)	5	5	25
Team not experienced	4	5	20
Team not on time	2	5	10
Too many conflicting interests	4	2	8
Project manager overwhelmed	2	3	6
Language misunderstandings	1	4	4
Bad cooperation	4	1	4
Testers not available	1	1	1

3.6 Cost and benefits

As a system consultant, you have an hourly salary rate of NOK 1470. Each member of the group should work around 150 hours. This totals around 900 hours. Total cost would approximate around NOK 1'323'000.

4.1 Preconditions and dependencies

It’s been stipulated that the application shall store the data in local files. Other than this we are free to approach the project in any way we may deem fit.

5.1 Products functional properties

Functional properties
When the starting window/main window opens the user is presented with 3 options. Create workout, existing workout and calculate rem.
Users can create a new workout which can be saved to existing workouts
Users can choose an existing workout
Users can calculate their 1 rep max based on repetition they did with a certain weight
Users can choose to display their improvement over time
Users can rate their own workout

6.1 Non-functional properties and other specifications

The task we are working on stipulates that we save the users data in a local file. It also stipulates that we use Balsamiq for modelling how we wanted the application to look and function.

Documentation that will be delivered with the finished rapport:

- Requirement document
- Architecture and operations documents
- WIKI
- JavaDoc
- Process documentation
    - Backlog
    - Retrospective
    - Reflections of all individual group members
- Other relevant documentation