Sprint 1: Problem Formulation Foundation of a business case and problem statement

Problem: The training industry has become so complicated that it is hard for the average newcomer to get into fitness and the weight loss process.

Problem Statement:
How can BI and AI be leveraged to develop a personalized fitness training program for individuals without prior fitness knowledge or access to personal trainers?

Problem Questions: (TBD 1+2)

1. How do individuals without fitness expertise determine suitable exercises when initiating a gym routine?

2. In the absence of personal trainers and fitness expertise, what methods can individuals utilize to develop an effective training program?

3. What statistical data sources exist to evaluate the efficacy of different exercises for weight loss?

4. How can a personalized training program account for individual differences in intensity preferences and time availability?

5. What role does goal-setting play in fitness training, and how can individuals determine the achievability of their goals?

1. At this stage you brainstorm, browse sources of inspiration and information, collect ideas and discuss business or social domains, where BI and AI can bring value.

How do beginners decide on which exercises to do when starting in a gym?
Not everyone has the time and money for a personal trainer to develop a training program.
Is training just trial and error then? How does one find statistical facts on each exercise, and determine which ones are the best?
What exercises are the best for weight loss? Gaining strength? Building muscle? Rehabilitation? Mental happiness/state?
Training programs are not universal. Different people have different intensities and time schedules for working out.
Is it important to set a goal?
How does one achieve these goals or determine whether it's achievable?

With a model based on machine learning, we want to make it possible for individuals to enter their workout goal and other parameters. The model will then process a training program based on a time period (TBD). Included in this program are different exercises catered to achieving the goal set by the user. The exercises will vary in intensity and length, all to achieve a better result.

With BI and AI, we will be able to train the model to make user tailored programs of higher quality than with a fitness coach.

2. Choose one of your ideas and define context, purpose, research questions, and hypotheses for a BI problem statement. Write a brief annotation of your project, in about four sentences, explaining:

- Which challenge would you like to address? .

   We would like to provide an easy way for people who don't know a lot about fitness to get a training schedule and time frame for meeting their individual goals.

- Why is it an important or interesting research goal?

   It would spare a lot of people for the tiresome process of researching fitness exercises and making up their own training schedule without knowing much about the field. It would also give consumers a time frame for their efforts making it easier to set the correct expectations as early as possible. Health is becoming more of a global issue with lifestyle diseases becoming more frequent, we would therefore like to make the entry process as easy as possible.

- What is the expected solution your project would provide?

   Our solution includes an application where you can enter details defining your starting point, desired goals and be provided with a training plan + time schedule for your personal fitness journey. Details that should be defined by the user includes: Starting weight, how much time they want to spend/intensity, their target weight and potentially when they would like to meet their goal. The application will make a prediction on how long it will take the consumer to reach their goal and provide a training schedule.

- What would be the positive impact of the solution, which category of users could benefit from it?
   The Solution would give the "average Joe" a cheap and useful tool, to be able to get into the shape of their desire. regardless if their goal is to get stronger, lose weight, og get into the shape of their lives.
   The target user is more or less everyone. Everyone would be able to benefit from this program's endless possibilities.

3. Prepare the development environment

- give a title to your project
  - *NTP (Nordic Training Possibilities)*

- plan and organise the execution of the individual tasks in terms of time, milestones, deliverables, team members engagement
  - We're
- prepare the development platform and procedures – Github repository, IDE, software tools

4. Create a .md file containing the problem formulation and upload in the Github repository as first release of the project's documentation.