

## Hanyang personal gym trainer

Authors: William Chan, Mickaël Nguyen, Fabian Beck and Kobe Grobben

### Abstract

We are planning to make a website that can be used as a personal trainer in the gym of Hanyang university. This website will tell you your training schedule which includes when you will have to go and what exercises you have to do all based on the feedback data that you put in. For example: how do you feel, how much sleep did you get, how did it go last time, was the intensity appropriate...

Furthermore, a function provides the gym owner with information about which weights he has to order in future times based on the usage of the weights.

### Role assignment

Roles	Name	Task description and etc.
User	Kobe Grobben	Give feedback about useability.
Customer	Fabian Beck	Giving requirements and setting limits to cost and time.
Software developer	Mickaël Nguyen	Developing and designing the website.
Development manager	William Chan	Making sure the project is done on time, the cost isn't too high and that all the requirements are met.

### I) Introduction and motivation

We chose this topic because we think that it can be really useful for a lot of students. It can motivate and guide beginners through the first training sessions because the website will provide clear explanations about the exercises, it makes sure you do not start with too much weight and even helps you with stretching afterwards with the use of helpful videos. At the same time it can also be helpful for students who have been going to the gym for a long time and want to take their workout to the next level, making sure that they achieve their goals by slowly increasing the intensity without the danger of overloading. All these functionalities will increase the popularity of the gym in Hanyang and therefore will give the university a healthier image.

### II) Requirements

- Website should load without using too much data
- log in and log out of your account
- Set up a starting point (how many days a week (min. 2), what is your goal, what can you already do)
- enter your schedule (hiking, swimming, ...)
- pick favorite machine or favorite exercises

- Keep all your data stored on an account (database of your data and the data of the gym)
- An algorithm that knows how much you can take (based on all the data of all the users)
- Generate a workout schedule for you (with weights, repetitions, machines) based on your preferences
- See your upcoming schedule (a weekly overview in the calendar)
- display real time user activity
- start and stop your workout
- Processing feedback frequently: input your health, how you feel (suggest not to go, suggest stopping, do a less intense workout) Maybe ask it after warming up
- input your sleep quality and amount
- Warming up
- Map with locations of the machines you use that workout, interactive map to click on machines for more information
- Sending push notifications to motivate you to keep going/to go to the gym (make it funny)
- Show stretching guides (pictures on how to do it or show a video clip) depending on which muscles you train
- show your progress (with numbers and a graph or a percentage on each exercise)

Gym owner:

- Provides information about equipment usage



