

# PV207 Homework #2 – *Smart Gym: Customer Physiological Assessment*

Pavel Ugwitz, UČO 172577, seminar group 02 (EN)

March 30, 2020

## **Process summary**

A new customer signs up at a smart gym. Per their provided information, the smart gym system generates a unique customer DB ID (where their physiological results are to be stored).

In order for the customer to get the best recommended start per their current capabilities, their physical prowess is assessed. They are subjected to a medical machine-aided check-up, followed by an M.D. considering their overall physical condition. The customer is to authenticate themselves when using any machine (they are provided with login information). If the customer takes too long to pass a simple check-up or M.D. deems their physical condition too risky, the process ends. Otherwise, the M.D. hands the customer over to a trainer.

The customer is to perform with various smart gym machines. The trainer oversees this. The customer's performance on the machines is logged (all the smart gym machines are interfaced with the smart gym system). If the customer is unable to perform certain exercises, the trainer physically adjusts the machine. The provided results are compared to a database of existing workout plans. Based on this, the system recommends workout plans suitable for the customer (the system prints this out for the trainer). The trainer discusses the offered plans with the customer; based on their consultation and customer's fitness goals, an agreed-upon workout plan is set or adjusted. The process is finalized by the trainer submitting the workout plan into the system and the system sending it over to the customer.

