Project Name (TBD)

Requirements Specification

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1 Product Overview

TBD

2 Purpose

TBD

2.1 Web Client

2.1.1 Core criteria

- The web page is the graphical user interface (GUI) for users and administrators.
- Seperate web pages should be displayed on desktop and mobile devices.
- The desktop client presents a QR code that when scanned creates a new workspace and connects the mobile client to this workspace.
- The workspace serves a link to reaccess it.
- The mobile web client allows for selecting the sensors the users wish to use.
- The mobile web client allows for labeling the recorded data.
- The mobile web client gives a real time feedback of sensor data to the user.
- The mobile web client sends the collected sensor data to the web server.
- The desktop web client displays the collected samples and allows preprocessing and filtering.
- The mobile web client identifies the trained model in real time.

2.1.2 Optional criteria

- Other data capturing devices are supported, e.g. Arduino.
- The workspaces can be protected with a password.
- The mobile web client can define triggers if something is detected, e.g. play a sound.

- The desktop web client can show performance metrics to the user.

2.1.3 Exclusion criteria

-

2.2 Backend *(change to Data Processing maybe?)*

2.2.1 Core criteria

- The sent sensor data is stored in the central database in a unified format.
- A selection of machine learning models are offered.
- A model is trained and stored in the database.
- The features which were selected by the user are computed and stored in the database.

2.2.2 Optional criteria

- TBD

2.2.3 Exclusion criteria

- TBD

3 Usage

TBD

3.1 Area of Application

TBD

3.2 Target Groups

TBD

3.3 Operating Conditions

TBD

4 Operating Environment

TBD

4.1 Software

TBD

4.2 Hardware

TBD

5 Functional Requirements

TBD

5.1 Main Functions

TBD

5.2 Extending Functions

TBD

6 Data

TBD

6.1 System Data

TBD

6.2 User Data

TBD

6.3 Database

TBD (Data-Warehouse data ?)

7 Nonfunctional Requirements

TBD

8 System Models

TBD

8.1 Scenarios

TBD

8.2 Use Cases

TBD

9 User Interface

TBD

9.1 Desktop

TBD

9.2 Mobile

TBD

10 ??Qualitatszielbestimmung??

11 Test Cases and Test Scenarios

TBD

11.1 Test Cases

TBD

11.2 Test Scenarios

TBD

12 Development Environment

TBD

12.1 Software

TBD

12.2 Hardware

TBD