**Minute of Biodex meeting on March 31st(2.25h)**

**Topics:**

**Unclarities:**

* Why is the Biodex Monitor and the belonging Software not used?
* How are the Calculations of the Matlab application referenced?
* How is the whole software used? -What kind of data does the Microcontroller send? How does Matlab get the Data? Does the Microcontroller establish a .txt file and Matlab read that one? How is the Microcontroller regulated? How does the data look like that should be really saved into the database?

**Customer Requirements:**

* graphical presentation of the course of force, velocity and angle
* the finished application should be able to be used in laboratory courses and for research
* Creation of measurement setups for maximum force measurements
* EMG Data Collection
* Ergonomics, everyday measurement tasks
* EMG/force data analysis/evaluation

**Project Goals:**

**Database:**

* Structure: Person-exercise-exercise attributes- data
* Please Extend this part I don’t know what to write here exactly

**GUI:**

* Using old software as base and improve it or write new one (Matlab/C#)
* Usability for daily use in laboratory
* Live plotting of force velocity and angle
* Data export to database
* Start and Stop of measurement
* Reading of sent data of microcontroller
* Inserting patient data
* Individual changing of plots (checkboxes of shown plots)
* Graphical observation of microcontroller
* Correct processed data

**Extensibility:**

* Having a fully documented application
* Building an application fulfilling ISO guidelines
* Ensured by proper quality management system

**Optional Goals:**

* Comparison of User data
* e-card authentification system

**Non Goals:**

* Microcontroller should not be changed

**Implementation standards:**

* Dont know if we need that one: HL7 Implementation Guide for CDA® R2: Allgemeiner Implementierungsleitfaden für ELGA CDA Dokumente
* Medizinische Informatik - Kommunikation von Geräten für die persönliche Gesundheit - Teil 10442: Gerätespezifikation - Fitnessgeräte für das Krafttraining (ISO/IEEE 11073-10442:2015, korrigierte Fassung 2017-11-01)
* ISO/IEC 62304:2006
* ISO 13485

**Sharing of documents:**

* GitHub

**Naming standards:**

* Integer n
* String s
* List<Object> aObjectList
* Enumerations E
* Constant values Capital letters
* Methoden: Comment block abvove, starting lowercase, name of function describing functionality, 1 method = 1 function
* Documents: no idea yet but will be developed by the time
* Databases: using similar rules as for GUI but has to be extended.

**Work packages:**

* Rishad Database, Database App interface
* Paul Database, Database App interface
* Tobias GUI, Data Acquisition
* Jonathan GUI, Data Acquisition

**Tasks till next Meeting (April 5th):**

* Sending email to Nemec about unclarities 🡪 Jonathan
* ER diagram for database 🡪 Rishad Paul
* Data identification 🡪 Tobias Jonathan
* Setting up Group documentation 🡪 Tobias Jonathan
* Setting up GitHub 🡪Jonathan
* Setting up individual Time Table 🡪 Everyone
* Setting up Wiki 🡪Jonathan