

Project structure:

- Team of 2 people is allowed
- 2+ weeks: preparation of the project (homework 6 & 7 = exercises 6 & 7)
- Submission of the project code, documentation and presentation on a deadline
- Grading of the project

Part of the project	Points	Total
Implementation of machine learning model training	20	20
Implementation of the usable code API	20	40
Written report on motivation for particular learning problem + presentation	40	80
Documentation of API	20	100
Data collection description and obtained data (<i>optional</i>)	20	120

It is important that you motivate well the business idea of a data driven service that you are trying to construct. Please try to abstain from setting the learning problem just for the sake of solving a learning problem.

Provided points are not equal to the points from the exercise, and will be weighted by a coefficients. So to convert P points that you get for the project into exercise points, you need to multiply P with some weight W, which will be announced later.

There is no limit on the size or structure of reports or documentation. Keep in mind however that people who are intended to read your documentation (your users):

- Are really busy with all kinds of tasks, hence cannot and do not want to spend a lot of time to read your report, and might just give up if it is too long;
- Can easily misunderstand what you state in your report, and might give up on trying to understand what you say if it gets overly complex;
- Really want to get things working with your system as soon as possible;
- Get angry and frustrated easily if something does not work.

Source of datasets that can be used in a project:

- <https://www.kaggle.com/datasets>
- <http://archive.ics.uci.edu/ml/index.php>

The datasets should be of one of the topics below:

- Services for vital signs processing in healthcare or sports domain
 - **Example data:**
 - <http://archive.ics.uci.edu/ml/datasets/arrhythmia>
 - <https://archive.ics.uci.edu/ml/datasets/PAMAP2+Physical+Activity+Monitoring>
 - <http://academictorrents.com/details/af55533bf8229c3bff260b77a652f8b8058f6c9e>
- Financial series forecasting and processing service
 - **Example data:**
 - <https://www.kaack-terminhandel.de/de/eex-kartoffeln.html>
 - <https://www.eex.com/en/>
- Text processing service:
 - **Example data:**
 - <https://www.kaggle.com/c/word2vec-nlp-tutorial/data>
- Data collection by hand using [google sheets](#) or [google forms](#) (here you can freely define your own topics) or IoT devices:
 - Audio recording using web app: <https://webaudiodemos.appspot.com/AudioRecorder/index.html>
 - Image capture from webcam: https://amw.github.io/jpeg_camera/demo/
 - Video / audio / image data collection: using your smartphone!