FH Salzburg

Machine Learning

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Course Outline

	Dates	Lecture	Assignment
ILV01	24.03.2020	Recap Feature Engineering	Not Graded
LB02	31.03.2020	Naive Bayes	Before Next Lecture
LB03	05.05.2020	The Perceptron	Before Next Lecture
ILV04	19.05.2020	Interpreting Learning Progress	Not Graded
LB05	26.05.2020	Multilayer Perceptron & Parameter Tuning	14.06.2020
LB06	26.05.2020		

Course Grading

Assignment	Percentage
LB02	25%
LB03	25%
LB05 & LB06	50%

This course constitutes 33% of your overall grade.

Toolkit

- Anaconda for Python 3.7 with Jupyter Notebook
- scikit-learn 0.22.1
- Keras 2.3.1
- TensorFlow 2.1.0
- ... or use the given Docker image

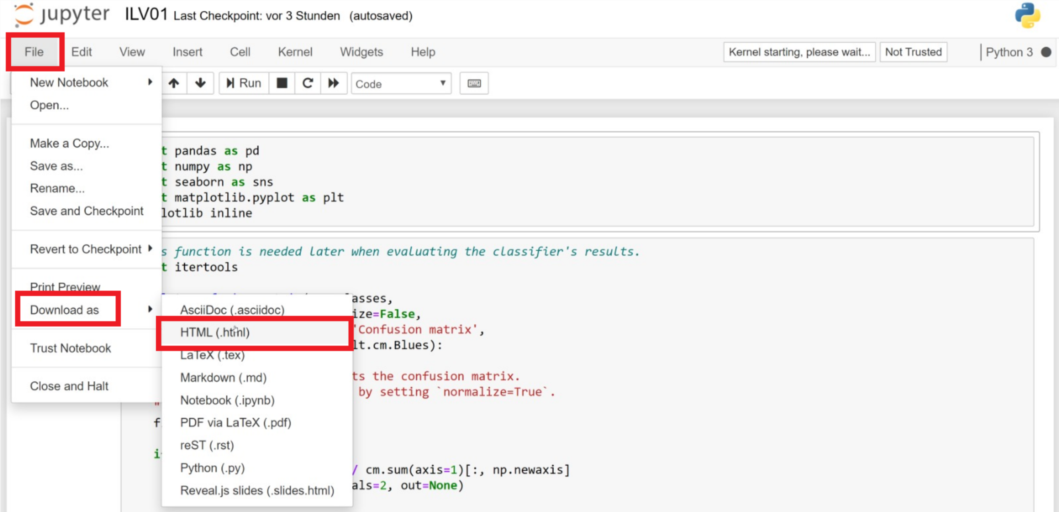
Preparation

- Install Docker for your operating system
- Follow the usage section of the custom Docker image
- Within the Docker container, change your working directory to `/notebooks`
- Clone the given repository
  `https://github.com/mschirl/machine-learning.git`

Submission of Assignments

- Export your Jupyter Notebook as HTML file
- Upload the exported file to Moodle before the deadline specified in the Course Outline

Jupyter Notebook HTML Export



```
t pandas as pd
t numpy as np
t seaborn as sns
t matplotlib.pyplot as plt
lotlib inline
```

```
s function is needed later when evaluating the classifier's results.
t itertools

                      asses,
                      ize=False,
                      'Confusion matrix',
                      lt.cm.Blues):

                      ts the confusion matrix.
                       by setting `normalize=True`.
"
f

i
                      / cm.sum(axis=1)[:, np.newaxis]
                      als=2, out=None)
```