**Contributions to the project result – Lukas Heimann**

I had two main responsibilities in the project. The first one was creating a good looking, easy to use, modern user interface. The other one was to write the Camera class that contains all the methods to grab frames from the webcam and then later display them in the GUI.

For the GUI I went with a modern, flat UI design. The main colors of the interface are white and blue to also match the general design of the THU. I created our Logo with open source icons from %ICON%SOURCES%HERE%. All of the GUI elements are borderless and flat to give the interface a modern look and feel. We didn’t want to have too many different windows for the different parts of our software (main menu, options, attendance mode etc.). Therefore, I used only one form to display the main menu, options menu and training menu. The main menu contains 4 buttons.

* Start: starts the attendance mode
* Options: shows the options menu
* Train: shows the training menu
* Exit: closes the window and saves the attendance list as a .csv file.

In the options menu there is a dropdown list containing all cameras that are connected to the computer so the user can choose which camera will be used in the attendance mode. Also there is a text box where the user can enter a matriculation number. If they then press the delete button the student with the matching matriculation number will be deleted form the database.

The training menu is used to enter students in the database. First the user can enter the students name and matriculation number. When the user presses the Capture button the software captures ten image of the face in view of the camera. If they press it again the software captures ten more images. After enough images have been captured the user can press the Save button to then save the data in the database.