**Motivation and project goal**

For our team-oriented Project we had the task to make a software that uses face recognition. Our idea was to create a program that works as a digital attendance list. Usually when there is a mandatory course, the professor will pass around a list where everyone has to sign that they attended the lecture. However, this approach has some disadvantages for the students as well as for the professor. First of all, students could forget to sign the list. Also, this approach is prone to cheating as students can just sing the list for someone else too. But there are also disadvantages for the professor. They have to manually enter the data on a computer and check if students attended every lecture. These Problems could impact the students motivation and grades and also causes more work for the professors.

Our idea of creating a facial recognition software that detects and recognizes students in the lecture room would solve these problems by creating the list at the end of the lecture and marking all students that it recognized as attended. An additional advantage of this software would be that we automatically show the names of all the students sitting in the classroom in the camera feed. This helps the professor to remember the names of students and can help to create a more comfortable learning environment for the students. The goal of our project was to create a proof of concept that shows that this idea could be used as an alternative to the attendance list on paper that is currently used. The software could also be improved to save more detailed statistics about the students attendance.