## Introduction

## Hello, world

It is common for students learning programming to go through courses in a practical way with assignments and programming exercises. Assignments and exercises usually consists of a number of tasks that the student will have to solve. When the student is finished, the code is submitted to the teacher. The teacher downloads the code, runs it and grades the student. This approach is time consuming, and by the time the teacher has graded all the exercises, the students have already started on their next assignment. This process is both time consuming, and requires a lot of extra work, both for the student and the teachers. This can lead to students not fully understanding the curriculum and in worst case miss out on key parts of the course. When the courses get more advanced, and the code base increases, this problem gets even bigger. A lot of time is wasted on the overhead work, rather than giving student the help and feedback they need. The University of Stavanger already uses a system called Autograder for code management and grading of code. The system collects student submitted code from Github, a version control system based on Git, and grades it based on test written by the teacher. The system was written by Heine Furubotten [ref], and has been used in some of the courses held at bachelor and master level at UiS in 2015.