

Informatik

Vorlesung am D-MAVT der ETH Zürich

Hermann Lehner, Malte Schwerhoff

SS 2018

Welcome

to the Course Informatik

at the MAVT departement of ETH Zürich.

Place and time:

Thursday 10:15 - 11:55, HG F7/F5.

Pause 11:00 - 11:10, slight shift possible.

Course web page

<https://lec.inf.ethz.ch/mavt/informatik>

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Team

chef assistant Marco Ancona

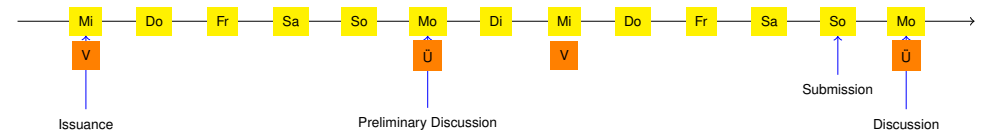
back office Thomas Müller

assistants Ben Weber
Ivan Ovinnikov
Oliver Glauser
Cedric Tompkin
Luc Holzherr
Moisés Torres
Zoltan Tschirren
Kailin Huang
Rafael Wampfler
Pelin Dogan
Byungsoo Kim
Bosshard Yvan

Gian Andrea Müller
Benjamin Rothenberger
Grzegorz Malczyk
Leonhard Helminger
Mohammed Khouni
Irene Baeza Rojo
Yifan Wang
Daniel Bogado Duffner
Jonas Lauener
Simone Meyer
Maximilian Holst

lecturers Dr. Hermann Lehner / Dr. Malte Schwerhoff

Procedure



- Exercises available at lectures.
- Preliminary discussion in the following recitation session
- Solution of the exercise until the day before the next recitation session.
- Discussion of the exercise in the next recitation session.

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Exercises

- At ETH an exercise certificate is not required in order to subscribe for the exams.
- The solution of the weekly exercises is thus voluntary but *strongly* recommended.

No lacking resources!

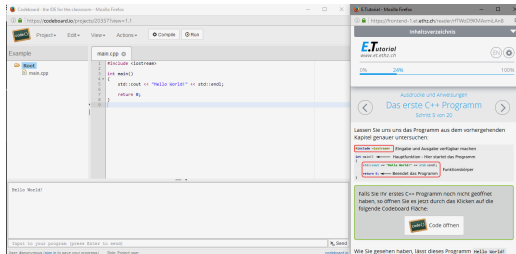
For the exercises we use an online development environment that requires only a browser, internet connection and your ETH login.

If you do not have access to a computer: there are a lot of computers publicly accessible at ETH.

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Online Tutorial



For a smooth course entry we provide an *online C++ tutorial*
Goal: leveling of the different programming skills.
Written mini test for your *self assessment* in the first recitation session.

Exams

The exam (in examination period 2018) will cover

- Lectures content (lectures, handouts)
- Exercise content (exercise sessions, exercises).

Written exam without any examination adds.

We will test your practical skills (programming skills²) and theoretical knowledge (background knowledge, systematics).

²as far as possible in a written exam

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Offer

- During the semester we offer weekly programming exercises that are graded. Points achieved will be taken as a bonus to the exam.
- The achieved grade bonus is proportional to the achieved points of all exercise series. Achieving all points corresponds to 1/4 grade.

Academic integrity

Rule: You submit solutions that you have written yourself and that you have understood.

We check this (partially automatically) and reserve our rights to invite you to interviews.

Should you be invited to an interview: don't panic. Primary we presume your innocence and want to know if you understood what you have submitted.

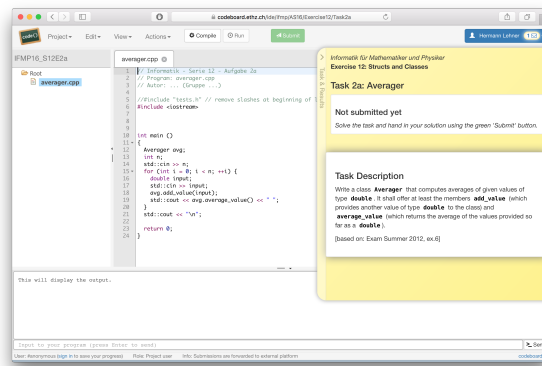
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Codeboard

Codeboard is an online IDE: programming in the browser

- Bring your laptop / tablet / ... along, if available.
- You can try out examples in class without having to install any tools.

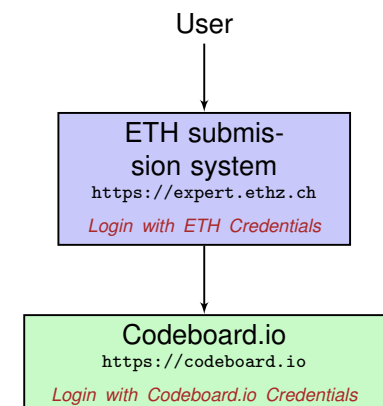


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Code Expert

Our exercise system consists of two independent systems that communicate with each other:

- **The ETH submission system:** Allows us to evaluate your tasks.
- **The online IDE:** The programming environment



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Enrollment for the project

Codeboard.io Registration

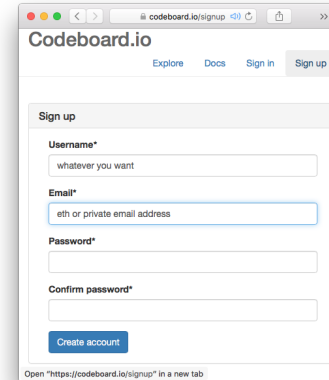
Go to <https://codeboard.io> and create an account, stay logged in.

Registration for exercises

Go to <https://expert.ethz.ch/mavt18> and inscribe for one of the exercise groups there.

Codeboard.io Registration

If you do not yet have an **Codeboard.io** account ...



The screenshot shows the Codeboard.io sign-up page. It has a dark header with the site name and navigation links. The main content area is white and contains a 'Sign up' form with the following fields: 'Username*' (placeholder: 'whatever you want'), 'Email*' (placeholder: 'eth or private email address'), 'Password*', and 'Confirm password*'. A blue 'Create account' button is at the bottom. The browser's address bar shows 'codeboard.io/signup'.

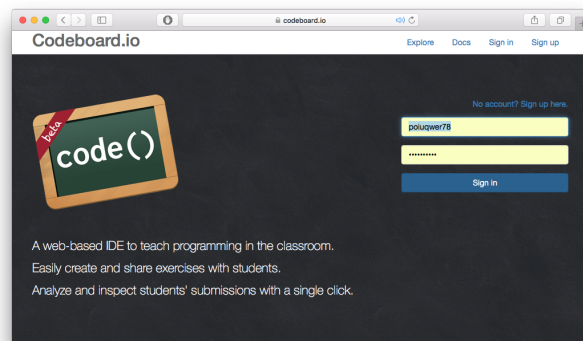
- We use the online IDE **Codeboard.io**
- Create an account to store your progress and be able to review submissions later on
- Credentials can be chose arbitrarily *Do not use the ETH password.*

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Codeboard.io Login

If you have an account, log in:

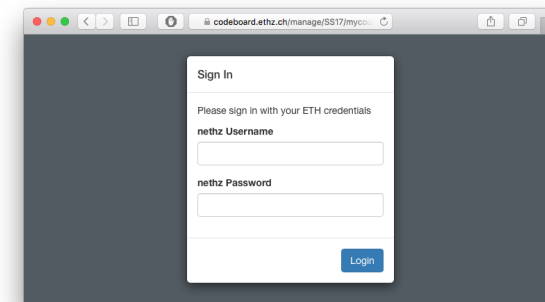


The screenshot shows the Codeboard.io login page. It has a dark background with a logo on the left and a login form on the right. The form has two input fields: one for the username (containing 'poluqwertz') and one for the password (masked with dots). A blue 'Sign in' button is below the fields. The browser's address bar shows 'codeboard.io'.

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Opening the Project

- Visit <https://expert.ethz.ch/mavt18>
- Log in with your nethz account.

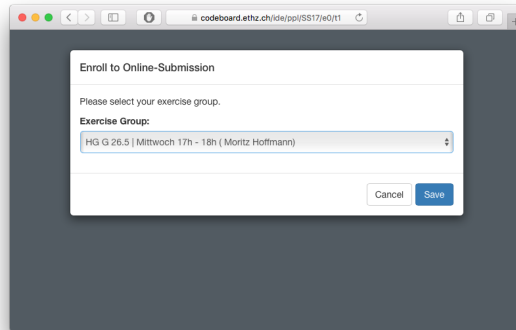


The screenshot shows the Codeboard.io login page with a white overlay form. The form is titled 'Sign In' and asks the user to sign in with their ETH credentials. It has two input fields: 'nethz Username' and 'nethz Password'. A blue 'Login' button is at the bottom right. The browser's address bar shows 'codeboard.ethz.ch/manage/SS17/myco...'.

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Opening the Project

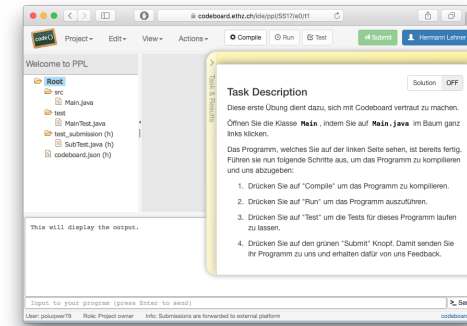
Register with this dialog for (the only possible) exercise group.



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The Project

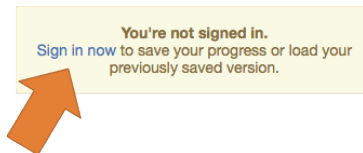
You are now registered and the first exercise is loaded. Follow the instructions in the yellow box.



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The Project – codeboard.io login

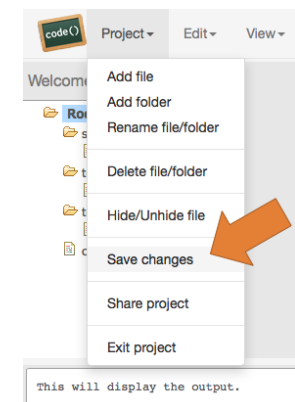
Attention If you see this message, click on [Sign in now](#) and register with you **codeboard.io** account.



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The Project – store progress

Attention! Store your progress regularly. So you can continue working at any different location.



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Literature

- The course is designed to be self explanatory.
- Skript together with the course Informatik at the D-MATH/D-PHYS department.
- Recommended Literature
 - B. Stroustrup. *Einführung in die Programmierung mit C++*, Pearson Studium, 2010.
 - B. Stroustrup, *The C++ Programming Language* (4th Edition) Addison-Wesley, 2013.
 - A. Koenig, B.E. Moo, *Accelerated C++*, Addison Wesley, 2000.
 - B. Stroustrup, *The design and evolution of C++*, Addison-Wesley, 1994.

Credits

- Course structure developed together with Prof. Bernd Gärtner
- Skript from Prof. Bernd Gärtner.