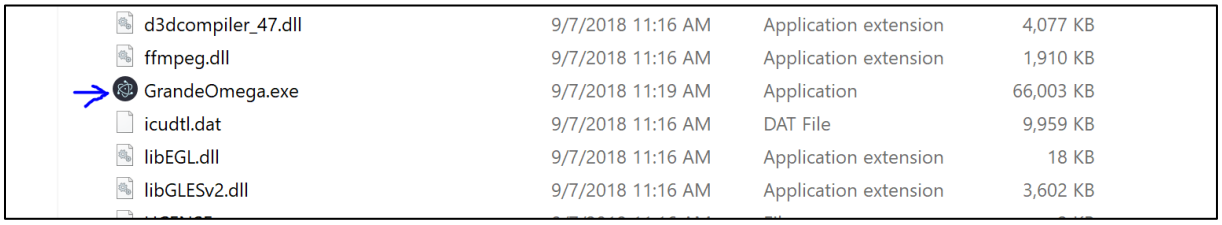
# Guide to GrandeOmega (GO)

## Installation

- Download node.js (LTS) from: https://nodejs.org/en/download/
- Download Python from: https://www.python.org/downloads/
    - For Windows users, make sure to have Python added to your environment variables (https://www.architectryan.com/2018/03/17/add-to-the-path-on-windows-10/ )
- Download the client of GO from: http://grandeomega.com/go_student_win.7z
    - Note: the file is archived with 7zip (download it, if needed)
- Unzip the compressed folder downloaded at the previous step
- Execute the **GrandeOmega.exe** file:

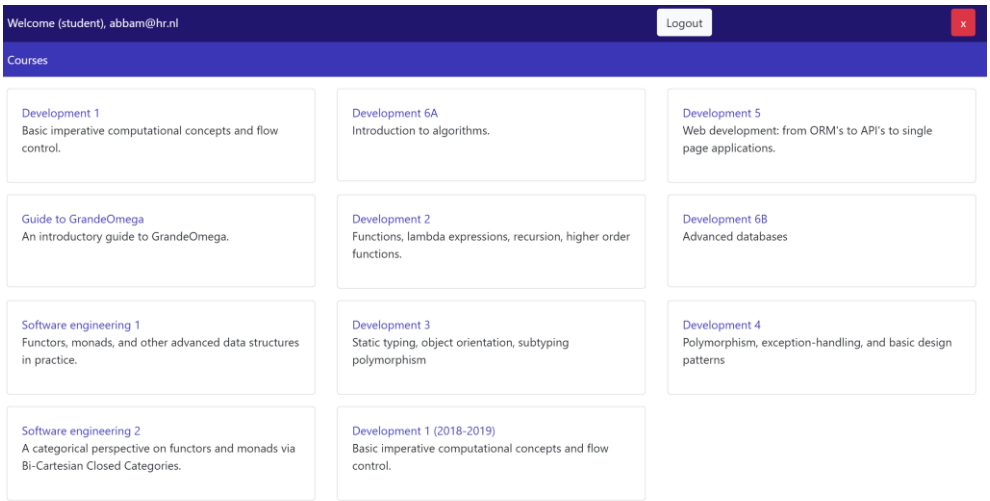


| | | | |
|---|---|---|---|
| d3dcompiler_47.dll | 9/7/2018 11:16 AM | Application extension | 4,077 KB |
| ffmpeg.dll | 9/7/2018 11:16 AM | Application extension | 1,910 KB |
| GrandeOmega.exe | 9/7/2018 11:19 AM | Application | 66,003 KB |
| icudtl.dat | 9/7/2018 11:16 AM | DAT File | 9,959 KB |
| libEGL.dll | 9/7/2018 11:16 AM | Application extension | 18 KB |
| libGLESv2.dll | 9/7/2018 11:16 AM | Application extension | 3,602 KB |

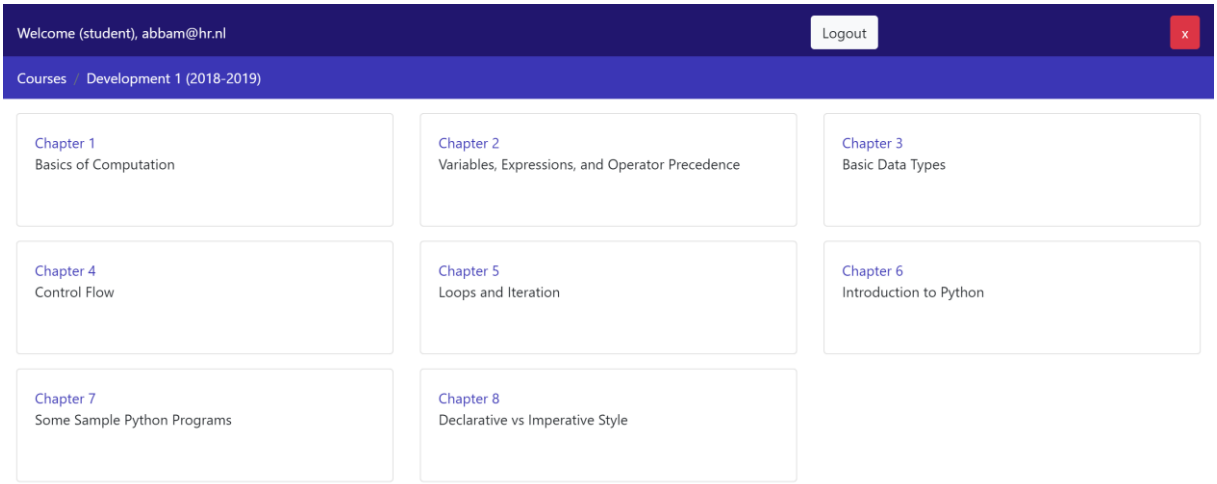
## Use

- After the client starts, you need to login with your credentials (you will receive via your student email instructions to get access):

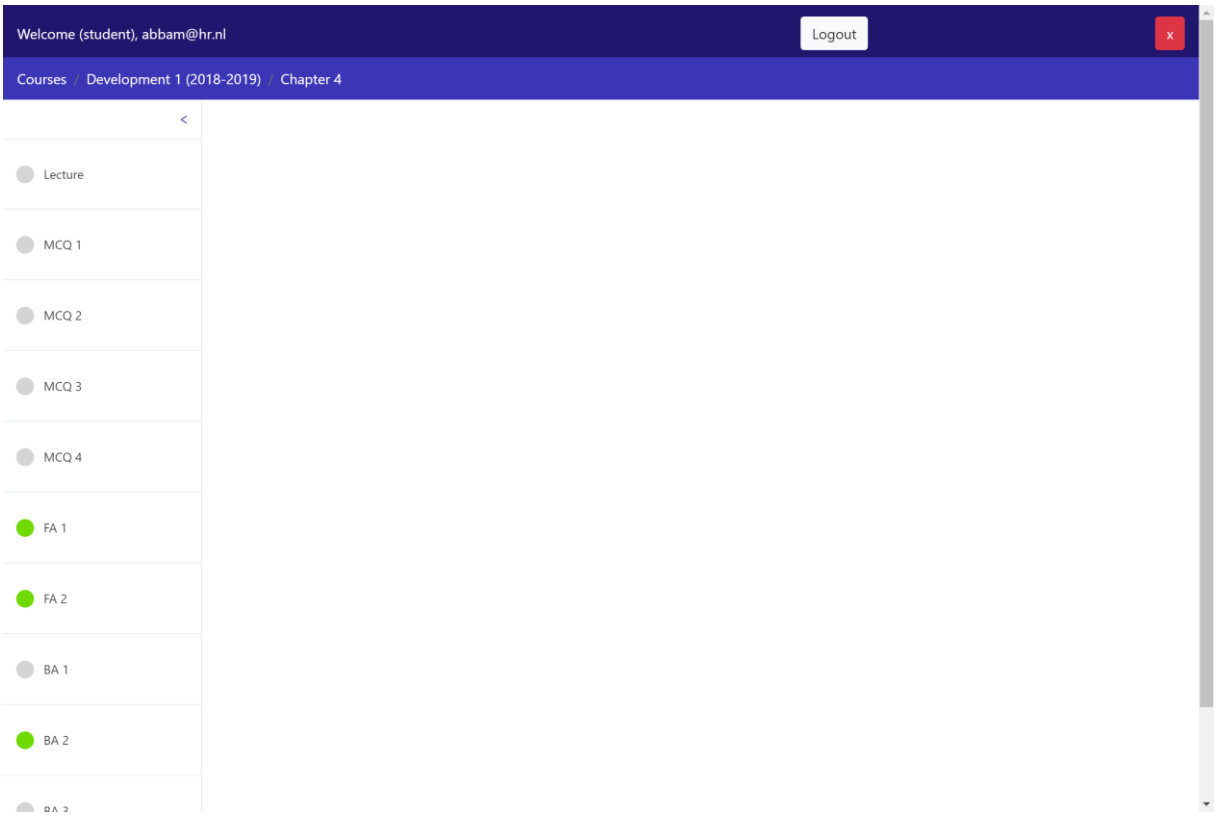

- After having logged in, you will see a screen with the courses you are subscribed to:



- Clicking on a course, you will see the chapters of materials available for such course:




- Clicking on a chapter, you will see the materials associated to such chapter in a column on the left of the screen. Click on the name of an item to open its associated content.



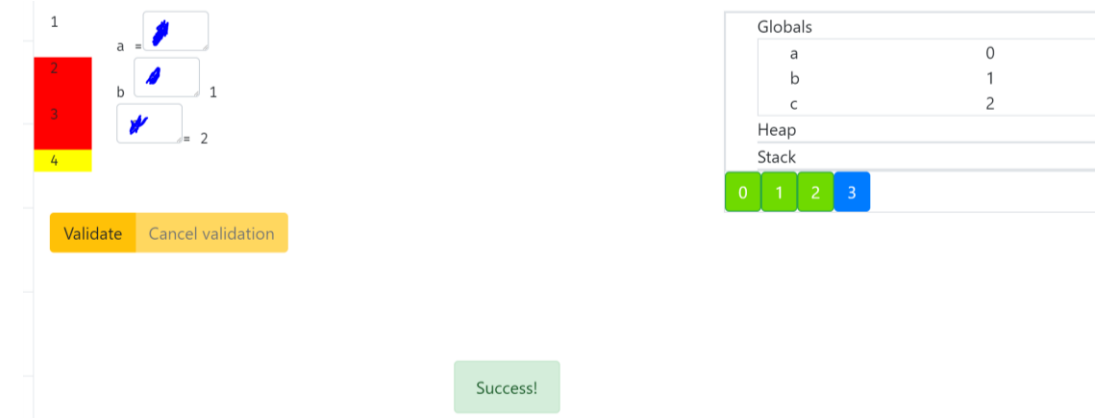

- A single chapter is usually composed by:
  - The reader of the corresponding lecture
  - A series of exercises which are a combination of:
    - Multiple Choice Questions (MCQ)
    - Forward Assignments (FA)
    - Backward Assignments (BA)
- During the practicums, the teachers will show you more in detail how to solve the Forward and Backward assignments.

- In short, a **Forward Assignment** shows you a program and the (sometimes incomplete) state associated to certain steps of the execution of such program (marked with red blocks to the left of the code). To solve a FA, you need to insert the missing values of variables in *all* incomplete states (remember to click "Next" until the last state is reached). For example:


The state on the right (Globals, etc.) corresponds to the state of the program when the line of code marked with a yellow block is about to be executed (in the example above, when line 2 is about to be executed).

A **Backward assignment**, instead, shows you an incomplete program and the states associated to some steps of the execution of the complete program (again, marked by red/yellow blocks to the left of the code). By looking at such states, you should be able to fill in the missing parts of the program. For example:


To see if your code solves the BA, click on "Validate" and you will get feedback.
When an assignment is correctly solved (both FA and BA) a "Success!" green message will appear on screen:



Otherwise, a “Wrong!” red message appears (and in BAs the wrong values of your program are shown in red close to the correct ones in green in the state):


The round icon close to the assignment name in the left column also gets such color (orange for incomplete/wrong and green for complete):