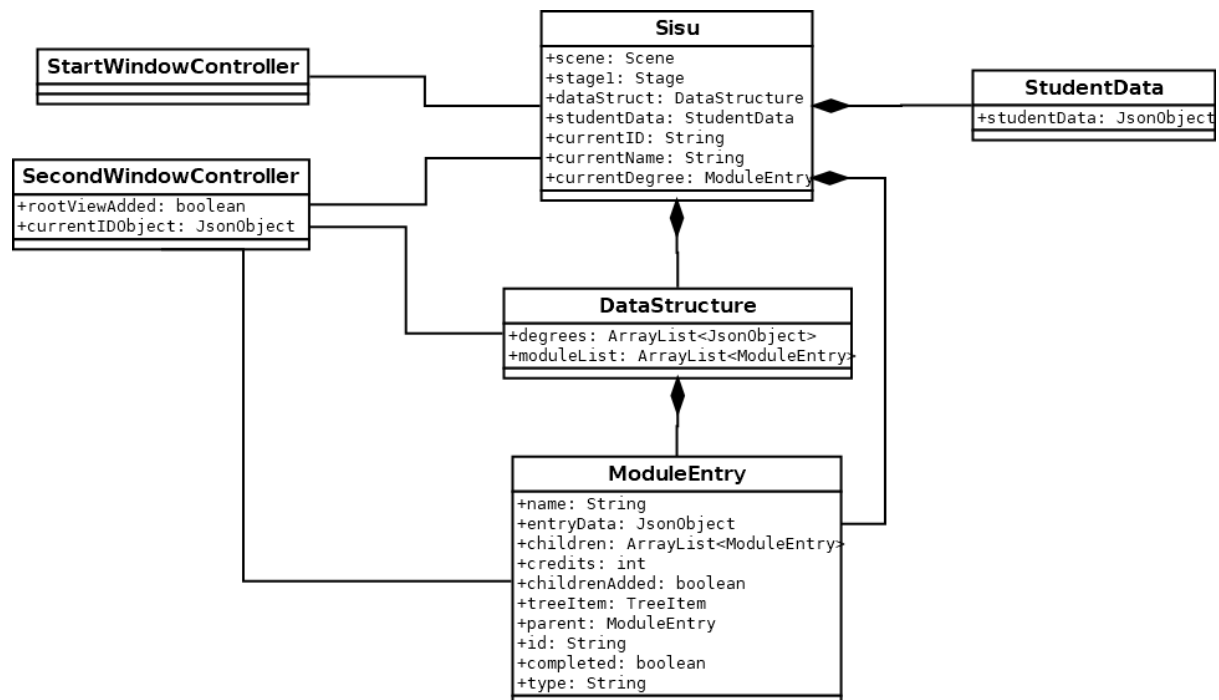


SISU Desktop program

Project name: sisufxml

By: A [REDACTED], Ellinoora and N [REDACTED]

Basic structure of the program, shown by its classes



Responsibilities of the key classes

Sisu: A class representing the main application. Basically responsible for the start of the program, sets everything up and has the attributes that hold core data needed to run the program.

StudentData: Responsible for holding students' study information.

StartWindowController: Responsible for the interface functionality of the initial log in window to the application.

SecondWindowController: Responsible for the interface functionalities after the login window.

DataStructure: A class representing a data structure, that consists of **ModuleEntry** objects. Responsible for all the course etc. related data handling. Has the functions needed to initialize, modify and/or expand the structure. Uses **Sisu** API as a source for the module data and information.

ModuleEntry: A class for representing a module in the study structure. Responsible for individual module functions, e.g. initialization, modifications.

Project functionality & manual on how to use the program

This program is a way for students to manage their progress during their studies. User data is saved so it can be accessed with the students name and student ID anytime. First usage of this program will create the user data file. If you've previously used the program, you can log in with your name and id. Using invalid id & name combination prevents login. When using correct name & id, your data and degree progression will be loaded and you can simply continue from where you left off.

To use the program you simply log in with your name and student ID. Navigate to the "Student information" tab and choose your preferred degree from the dropdown menu. You can also enter additional information such as your email address, the beginning year of your studies and the name of your study direction. The "Student information" field has a label showing the amount of credits you currently have completed in the chosen degree!

After saving this information, you can navigate to the study structure where your chosen degree will be laid out in a tree hierarchy grouped into all the different modules. Under the grouping modules you can find the courses for your degree and read upon their information, such as the amount of available credits, the description and outcome for the course/module.

To navigate the treeview, click on modules in order to see information about them. Grouping modules can be expanded and contracted with a single click. Be sure to click on the name of the module, as the treeview doesn't detect clicks on empty areas!

If you want to set a course as completed, you can click the "Completed" checkbox, which appears for every course. This will advance your earned credits and save the course as completed to your personal data. To highlight a course that has been completed, the sisu completion icon will turn dark next to the module name. The treeview of courses also shows the total credits under a certain grouping module. I.E "Aircraft Engineering 5/30 op". The credits on these tabs will update once you click on them, so you can quickly see the amount of earned credits in a certain group!

Language: The program prioritizes English language descriptions and data, if those are not found, Finnish descriptions will be used.

Additional features

- Course preview window, built on the right side of the view, so that you can click and check course contents without switching pages! So fast
- Student settings, the student can enter the beginning of their studies, their email and their study direction, all of which will be saved in the students data
- All the modules and their information are pulled from the SISU API and displayed beautifully when clicking on a module, elements that are not present in some module are hidden to keep the UI looking clean!
- Good quality documentation (apidocs)
- Extremely nice user interface
- DYNAMIC loading of the course/module data through SISU API. During the use of the program, data is loaded only when actually needed. Example: module loads its children modules when getting closer to them in the treeview. Waiting times are usually less than a second per each load. This is overall much more enjoyable than loading all the data at the beginning or when selecting a degree, which can take at some cases easily over ten seconds.

Known bugs and missing features

If internet not available or SISU is down, program cannot download the studystructure and its modules. When this happens, the program doesn't crash or throw errors, but the program doesn't inform user that this has happened. One can realise this from the empty dropdown menu in Student Information tab.

The treeview presenting information about given degree can only be properly operated by clicking the name of the module, clicking the treecell isn't enough.

Loading time at the beginning of the program is quite long, because the degree data is loaded from SISU. Not a bug, but a nuisance.