Domain Model 🡪 DLO Descriptions

DLO 1: **Administrator**: The administrator is one of the two types of users of the Scheduler application. The administrator is a privileged user as they will have higher access rights than the other type of user, which is the student. The administrator will have the rights to set/edit the capacity of a course section, to empty a course section, and in general manages a course section. The administrator is typically expected to be a course advisor or program coordinator of sorts. A single administrator has rights to as many sections as they want. This object has an ID number as an attribute, which serves as a unique identifier of the Administrator.

DLO 2: **Student**: The student is the second type of user that will access the Scheduler application. The student is not a privileged user like the administrator because they have limited access rights to the Scheduler. The student has preferences which will be what the user prefers their schedule to look like, and has access to the scheduler. The student has no direct access to the course sections. This object has the attributes of an I.D. number which is the student’s unique identifier, a Program which is expected to be Software Engineering or Computer Science, Courses Completed which are the courses that the individual student has completed, a CGPA which is the cumulative GPA from the start of the student’s studies, and an AGPA which is the student’s total GPA from the latest year.

DLO 3: **Courses**: The course is the class that can be taken by a student. A student’s course sequence is composed of courses, as well as the schedule. Each course has at least one section, which is what a student picks when choosing a specific course group. The course object has several important attributes. Course ID is the specific identification number associated with the course in question. Professor is the assigned professor’s identification. Name is the course name, Credits represents the number of credits that course presents, description is a summary of the course contents, and prerequisites are a list of courses that are prerequisites to the course, if any.

DLO 4: **Courses Passed**: The courses passed object is an extension of the courses object, and it represents a course that a student has taken and completed, meaning that the student has received full credit for the course. It inherits the attributes of the course object.

DLO 5: **Section**: The section of a course, managed by an administrator, is an entity representing a time slot at which students can attend a course given by an instructor in a certain classroom. There can therefore be multiple sections for the same course. A section holds as information its section number, the full name of the instructor teaching the course, the times and the classroom numbers at which the lectures, laboratories and tutorials are held.

DLO 6: **Preferences**: The preferences of a student are filters to be applied when the course sequence of that student is generated. Those preferences include the times in a day at which the student prefers to have classes and a set of days on which the student wishes to have less classes. At least one preference is to be applied when the sequence is generated.

DLO 7: **Sequence**: The sequence is the list of courses that the student must take. The sequence may either be the static sequence that every SOEN student takes, or an adapted sequence in case the student deviates from the original sequence. The sequence is generated by the scheduler based on the preferences that are set by the student.

DLO 8: **Schedule**: The schedule is an object that is generated by the scheduler. It is comprised of several courses throughout the week. It can be viewed by a list view where all courses are shown one after another.

DLO 9: **Saved Schedule**: The saved schedules object is an extension of the schedule object. It represents the schedules that the user, a student, has saved under their account. It inherits the attributes that are presented in the schedule object of the model, mainly the list view attribute.