Automatic Timetable Generator

The creation of a timetable is a very time consuming and thought intensive process. There are various constraints and clashes which need to be ironed out during the creation of the timetable. Each teacher needs to be free at that specific time to be able to take class and one small mishap could lead to a chaotic confusion. We hope to resolve these problems by creating an automatic timetable generator which takes input from the various teachers and allot a timetable accordingly. This would drastically reduce the amount of work to create a timetable and automated time tables leave little room for human error. Changes to this timetable can be made later with the consent of the parties affected by the change and this timetable will be available to all students and faculty.

Aim:To create a timetable generator for a school which considers the constraints,general and availability of faculty,and creates a timetable which is suitable for everyone.

Constraints:

* No physical Education period immediately after lunch.
* Fixed amount of period for each subject depending on complexity of subject.
* Lab periods would span two periods with no breaks in between.
* Availability of certain teachers.
* Fixed period for Tests, Assembly etc.

The project will be done using Python and MYSQL for managing the data of the teachers and subjects of the school. The basic idea of the project is to use multiple conditions and random modules for allotting periods in such a way that all constraints are met thereby automating the process of allocating timetable for classes in schools.