Project Description

UniTime is a comprehensive educational scheduling system that supports developing course and exam timetables, managing changes to these timetables, sharing rooms with other events, and scheduling students to individual classes. University timetabling can be a complex and time-consuming process, especially for large universities with hundreds or even thousands of courses and students. Many universities use specialized software or tools to help automate the timetabling process, which can help to reduce errors and improve efficiency. The software is distributed free under an open-source license in hopes that other colleges and universities can benefit their students through better scheduling that meets their diverse organizational needs.

The main functionalities that the software supports are Course Timetabling & Management, Examination Timetabling, Event Management, and Student Scheduling.

The primary objective behind course timetabling is to place each course at a time that does not conflict with the time assigned to any other course required by the students attending it, It becomes considerably more difficult as the combinations of courses requiring different time placements increase. The availability of faculty, rooms, and a variety of other constraints complicate the problem.

The used Technique is: ***Bottom-Up Approach***

In this approach, individual parts of the system are specified in detail. The parts are linked to form larger components, which are in turn linked until a complete system is formed.
It requires relatively more communication between modules, It does not contain redundant information, the Composition approach is used here & Data encapsulation and data hiding is implemented in this approach.