**The University Timetabling System**

• The University Timetabling System is a powerful tool designed to simplify the process of creating and modifying course and exam schedules. It allows university and departmental schedule managers to collaborate and create schedules that meet their organizational needs, while prioritizing the needs of students and minimizing scheduling conflicts.

• The system incorporates advanced algorithms to ensure that courses are scheduled without conflicts or overlaps, even when dealing with constraints such as limited faculty, rooms, or time. Faculty preferences and desired relationships between classes are also considered.

• Users can modify timetables for various reasons, and the interactive solver suggests alternative solutions to minimize the impact on students. The system also includes an examination timetabling feature that creates an exam schedule that minimizes conflicts and prevents back-to-back or multiple exams in a single day.

• The event management feature allows universities to schedule events and other activities in campus facilities, while the student scheduling feature matches each student's required classes to their class spaces, taking into account individual preferences for class times. This ensures that there are no conflicts or overlapping schedules for students who need a particular class section.

• The code comprehension approach used is the Top-Down approach. In the Top-Down approach, the user starts by reading through the high-level structure of the code, such as functions or modules, to get a general understanding of how the code works. This helps the user develop a mental model of how the code is organized and what it does.

• The top-down approach is often preferred when the programmers are familiar with the type of program to be comprehended. They can know what components must be present, what these components consist of, and they can use hypotheses to refine their view of the system incrementally.

• Overall, the University Timetabling System is an essential tool for universities to simplify the scheduling process while prioritizing the needs of their students.