Classroom and Laboratory Scheduling System

Project Description

This project focuses on developing a C console-based Classroom and Laboratory Scheduling System for Bahir Dar University. The system is designed to help academic administrators manage classrooms and laboratories efficiently by reducing manual work and avoiding scheduling conflicts. The system allows users to create, update, delete, and view room information and class schedules. After receiving scheduling data, the system automatically generates a valid schedule based on predefined academic priorities such as student year, program type, and room requirements.

Main Features

- Manage classrooms and laboratories (add, edit, delete, view)
- Create and manage class schedules with department, year, major/minor, and time range
- Automatic priority-based schedule generation
- Conflict prevention for room and time overlaps
- Clear timetable-style schedule display

Library Desktop Usage and Queue Management System

Project Description

This project aims to develop a C console-based Library Desktop Usage and Queue Management System for Bahir Dar University. The system is intended to support students who do not have personal computers by managing shared library desktops fairly and efficiently. It simulates real-time desktop usage where students are assigned computers for a fixed time duration. When a session ends, the system automatically reallocates the desktop to the next waiting student.

Main Features

- Maintain a list of available desktop computers with model and year information
- Register students using student ID
- Real-time simulation of desktop usage sessions
- Automatic session expiration and reassignment
- Fair computer allocation using queue-based scheduling
- Live status display of active and waiting users