

FINAL YEAR PROJECTS

If you are interested in getting a head-start and plan to work on your final year projects, following are a few ideas. Feel free to contact me for the project details.

Traffic Signal Timing Control for a Small-scale Road Network

A dynamic traffic signaling system to minimize congestion on the roads. The system would include a signal preemption system for route clearance for emergency vehicles.

Prerequisites: Courses on Computer Architecture, Software Engineering, Computer Networks, Distributed Systems, Differential Equations and Multi-variable Calculus.

GPS Navigation System for Portable Navigation Devices

The application software would include street maps of Chaklala Scheme III supported with voice guidance for directions. The system would also include a PDA-based tour guide of the region.

Prerequisites: Courses on Computer Architecture, Software Engineering, Computer Networks, Distributed Systems and Calculus.

Stock Exchange Brokering Software and Interface for End-Users

Web-services would be developed for Karachi, Lahore and Islamabad Exchange and will later be integrated in the form of an application software. This application software shall be utilized by the broker. A client registered with the broker may also be provided an interface to submit requests for purchase/sales.

Also, the system shall save the statistics and trends for the days since it is deployed. This will allow to determine trends and provide forecasts enabling the users to educated decisions.

Prerequisites: Courses on Software Engineering, Computer Networks, Distributed Systems, Differential Equations and Distributed Databases.

An Intelligent Time-Table Generator

The application software would be given the list of available faculty, departments, preferences, available courses, courses assigned, available classrooms and university calendar etc and would be required to generate a combination of time-tables. The application would allow the user make updates/corrections if required.

Prerequisites: Courses on Artificial Intelligence, Software Engineering, Computer Networks, Distributed Systems and Calculus.

Human Resources Management Solution (System + Procedures)

The idea is to develop a Human Resources Management System to automate the entire recruit-to-retire process. It will include several human resources functions including administration, payroll, recruiting and training, and performance analysis and review into one system.

Prerequisites: Courses on Software Engineering, Computer Networks, Distributed Systems and Distributed Databases.

More ideas to follow ...