Web-based Booking System for Senior Physics Laboratory

In each semester, the School of Physics offers over 30 different experiments in Senior Physics Laboratory for the students (about 90 registered for doing lab) to undertake and to earn certain credit points.

In doing Software Development project two years ago, a group of IT students from School of IT, developed a web-based booking system for Senior Physics Lab. The system was written in ruby on rails, a well-known web application development framework.

The developed system serves three types of users: students (registered for doing experiments in the Lab), tutors (about 10 academic staff members in physics marking students' work) and administrator (laboratory manager).

Students use the system to book times for doing some experiments and to view marks of their work. Tutors use it to record the marks of students' work. Admin uses it to manage students, tutors, experiments, students' booking, work and marks.

The system is at the point of its development cycle where after its preliminary usage for the lab, the client brings the feedback to the developers and requests for its further improvement. Here listed are a few but not all issues,

- Make on-line booking more fairly among all students.
- Manage the experiments with different timetables
- Add scheduling function for students' final presentations
- Add email facilities.

As software developers, you are expected to confidently response to our requests.

In doing this project, the students will be able to quickly gain skills in Ruby-on-Rails and MySQL because the code of system mainframe is already available. The students will also have an opportunity to conquer more challenging problems based on the first version of the system.

For details of the project, please contacts: Dr. Sue Yang, School of Physics (email: xue.yang@sydney.edu.au, phone: 93516081, office: A28 Rm 106)