

group 24

Eric Druid (edruid@kth.se)
Erika Ekberg (eekeberg@kth.se)
Mattias Johansson (mattias4@kth.se)
Enault Adrien-Marie (enault@kth.se)

14/11/2007

1 Users

Our project is to write a student result report system. The users will be the students, the teachers and the assistants at KTH. The students will be able to see if they passed and what grade they got on their labs and other course parts. The teachers will be able to use the system to keep track of all the students grades, and as a way to report the grades to the students.

The current system, res, has several problems some of which are:

Assistants can't report grades for students in the same course at the same times.

backspace doesn't work.

We also want to make it easier for the students to access the system from home through a web-interface.

The system will also be an aid in the administration of the courses such as keeping track of assistants working hours.

2 Usage

2.1 Anders reporting grades

Anders, tired after a long lab session and a bit stressed because his next lecture starts in 15 minutes, logs on to a computer, runs res report intro09, presses enter a few times to accept the defaults of date and course part. He starts writing the first name of his list of students that passed the lab. He continues typing the name until the list of students that matches is short enough that he can scroll to the student. When has selected the student he presses enter to select it and presses "P", for pass, to set the grade, he then continues with writing the next name. When he is done grading all the students on his list he presses ctrl+Q to quit. He then gets a list of all the students he has graded and is prompted to accept the grades which he does by pressing "Y". He then logs out of the system.

2.2 Mikael viewing his status

Mikael, a student who follows the "intnet09" course, wants to see how many labs he has finished, to see how he had done so far. He clicks on the link to the res system on the course's homepage, as he doesn't remember it's address. After logging in, he clicks on "intnet09" course from a list of the courses hes registered in, then clicks on "Assignments", which lists every assignments due for the courses, and the grade and/or extra points the student managed to get so far. Seeing that he had only done the first laboratory without getting any extra points, he decides to start working a bit. What Mikael likes about

the web-based user interface is its clarity, its user-friendly interface, and, of course, the fact he can access to it from his home.

3 Environment

The web-based UI is to be used from everywhere. The goal here is to enable students and teacher to access the database from home, or wherever they work.

The command-line UI is to be used on any secured UNIX post where the res terminal application is installed, and use the login and password used to log in the post.

Both will let the user know which courses they applied to, if they passed an exam, if the assistant did take in account the fact they have done such assignment, or could return the list of students who have applied to a particular course, etc.

4 Scope

Res2 will handle results from laboratory exercises, and let users search through these results and display them in a easy-to-use manner. The system will also let teachers add new courses, and add or update their students results.

There will be two ways to access this system, both a command line interface for compatibility with the old system usage, and a web interface to be used either from the terminals at the school or from any Internet browser at home or elsewhere.

We will not implement a non-web graphical interface.

Teachers will be able to do complex queries, such as "Give me a list of all students who passed 4 or 5 of the 8 assignments for this course" or "Give me a list of students who was one or two days late with the first assignment in that course".

Topic	In	Out
Graphical user interface		X
Command line user interface	X	
Web user interface	X	
Non-software components		X
Encryption	X	
Remote access	X	
Simultaneous reporting	X	
Getting a list of your results	X	
Obtaining results from old res	X	
Complex queries	X	
Time reporting for assistants	X	
Evaluation of courses		X
Booking examination time		X

5 Main factors

The system need to be secure. The system will handle information about students grades and most people don't want that information to be readable for anyone. Also only teacher or assistants should be able to change the grade on someone. Its also important that non except the assistants and the teachers can access the time-reporting part of the system. The system should be easy to use so that it can be used on other sections and not only the computer-section. Also it wont scare the new students.

6 Technologies and Risks

6.1 Technologies

We plan to use Java with a PostgreSQL backend. The web interface will be writen using Java servlets.

6.2 Risks

Risk	Probability	Impact
Short on time	high	serious
Low of interest from teachers	high	low
The competition is to harsh	moderate	serious
Lack of knowledge	moderate	moderate
Comunication failiure	moderate	moderate
Hardware error	low	moderate