February 15, 2013

Integrated Campus

Requirement Analysis - Faculty

Revision History:

Version	Primary	Description of	Reviewed By	Date
	Author(s)	Version		Completed
V_1.0	Vidhan Agarwal	Analysis of the		
		questionnaires		
		filled by		
		different		
		professors,		
		precursor to		
		SRS generation		

Contents:

Methodology	- 3
Questionnaire and the Response	- 4
Conclusions	- 6

Methodology:

The Client - Professor Vijay Kumar Chakka –put forth a proper attendance maintenance system and a polling feature to collect feedback from the students as his major requirements. The client wants an attendance module that would assist the TA of the course to maintain the attendance of the course in such a way that the only task of the TA would be to be collect the attendance during the lecture and simply feed it into the system on a daily basis. The system should be capable enough to calculate the regularity of each student and alert students who fail to meet the requirements as prescribed by the concerned faculty. If the professor feels like, automated SMS can be sent to the parents of the defaulters. Apart from this, a polling feature that would collect students' feedback in between the semester would be very helpful for the professor to streamline the course further.

Once these core modules were fixed, different faculty members were approached so that clarity in what the professors felt about the presently deployed systems could be achieved. A questionnaire was designed for the faculty with the objective of obtaining knowledge about their common requirements from an integrated e-campus system. The choice of the sample space was determined by the availability of the professor and the consideration that at least one professor from each field (IT/EL-CT/HM) was chosen. The following professors were approached personally with the questionnaire: Prof. Vijay Kumar Chakka, Prof. Gautam Dutta, Prof. Srikrishnan Divakaran, Prof. B.N. Hiremath, Prof. Alka Parikh, Prof. Aditya Tatu, Prof. Laxminarayana Pillutla, Prof. Mukesh Tiwari and Prof. Maniklal Das. The interview team comprised of five members: Vidhan Agarwal, Jayesh Hathila, Nalin Patidar, Ishita Agarwal and Pinky Meena. The remaining five members were assigned the responsibility of collecting response from students.

Questionnaire and the Response:

The first three question in the questionnaire was aimed at finding out which platform did the faculty prefer to use more – the Intranet or the Moodle and whether they felt there was a need for an integrated system. We also encouraged the professors to compare the two systems and draw out their advantages against each other. Six out of nine professors¹ said that they were more comfortable using intranet due to its simplicity while just one² professor felt Moodle was better off to meet his needs. The remaining³ felt they didn't require either of the system as their courses were designed in a way that majority of the work was done within the class itself and hardly required features of a course management system (like file upload).

Unanimously, all the professors were in favour of a unified system that would incorporate the best of both the systems. It can be said that simplicity in design and ease of use were the essence of all the discussions. Many professors voiced the need for having a file hosting system that could be accessible from outside the campus and was simple to organise and manage. While the Moodle allowed the faulty to upload content from even outside the premises of the campus, its complicated interface and bad design prevents many faculty members from using it. On the other hand, though the intranet is the easiest of ways to place files for public view, it suffers from the drawback that it is inaccessible from outside the campus and also the fact that there is no provision of authentication to limit the accessibility of these resources within the campus. It was learnt that users needed to save a file after they uploaded in Moodle. Often the file would get abandoned and the user wouldn't realise that the file hasn't been uploaded. Thus there was a requirement of directly uploading the file without this need of Save button. One professor claimed that students in the initial days could properly download materials from Moodle without serious hang-ups. Sometimes the Ajax uploader wouldn't work on some browser. So it became

¹ Prof. Vijay Kumar Chakka, Prof. Gautam Dutta, Prof. Srikrishnan Divakaran, Prof. B.N. Hiremath, Prof. Mukesh

Tiwari and Prof. Maniklal Das. ² Prof. Laxminarayana Pillutla

³ Prof. Alka Parikh, Prof. Aditya Tatu

clear that PHP code that invokes pure browser upload could bail the users out of the problem. The existing system also doesn't infer the extension from the file system itself.

One professor⁴ also put forth the requirement of having a system for pre-registration of students in the courses they have enrolled so that students needn't be mailed again and again to get themselves enrolled in the particular course.

The next four questions were aimed to find out whether the professors felt a need for having an online discussion forum between the professors and the student body. Again almost unanimously the answer was affirmative. We realised that students were already approaching professors directly to quench their queries on academics, grading policies, career and internships. The frequency of interaction and the strength of such groups increase drastically during the exam period. It became apparent enough that many professors were in requirement of an online discussion forum with different categories that could handle such wide variety of queries. Many professors felt the interaction between students and professors have declined over a period of time. Strong interaction therefore definitely demands shifting to an online system. The professors believed that the success of such forums depend a lot on degree of participation by the students. Question number eigth again won a unanimous affirmation. Each of the interviewee was in favour of having an attendance module that could alert the students and help them plan their classes more effectively. Prof. Mukesh Tiwari also said that they tried to use the attendance module of e-campus last semester but he found out that it wasn't working properly. It was realised that Marks upload was a lesser priority as compared to Attendance upload.

Question number nine was framed to enquire if there was a need for developing an intra-faculty chat forum. Surprisingly, not many professors were in for the idea as they felt the professors were already a closely knitted group and it would be an overkill to have an intra-faculty chat system.

The most interesting responses were obtained for the last question of the questionnaire that was aimed at determining would the professors be utilising a polling/feedback feature to take regular feedbacks from the student. Though some professors like Prof. Maniklal Das and Prof. Aditya

_

⁴ Prof. Laxminarayana Pillutla

Tatu said they couldn't foresee much utility of this feature as feedback can be conducted during the class itself, many professors who are taking core courses (our Client included) begged to differ stating forth the point that a bigger class size would require a more organised mode of response accumulation.

Conclusions:

From the surveys, we arrived at the following observations:-

- 1. Attendance module and Polling module are high priority modules
- 2. File Hosting is by default a major requirement of any course management system
- 3. Major drawbacks in Moodle and Intranet were discovered and the rectification and unification required became clear.
- 4. Pre-registration of students into various courses was required.
- 5. Online discussion forum between faculty and students that is capable of addressing various kinds of queries was needed.
- 6. Marks upload system wasn't a major priority.
- 7. Intra-faculty chat system wasn't required at all.