

February 13, 2013

Integrated Campus

Requirement Analysis

Group 2

INTEGRATED CAMPUS | SEN-Winter 2013

Revision History:

Version	Primary Author(s)	Description of Version	Reviewed By	Date Completed
v_1.0	Vidhan Agarwal, Ayush Jain	Analysis of the surveys collected from professors and students, precursor to SRS generation	Anubhav Maity, Sushant Pritmani	13-02-2013

Contents:

PART 1: FACULTY

Methodology ----- 3

Questionnaire ----- 4

Response and Analysis ----- 5

Conclusions ----- 7

PART 2: STUDENTS

Methodology ----- 8

Questionnaire and the Responses ----- 9

Analysis ----- 15

Conclusion ----- 15

PART 3: FINAL CONCLUSIONS ----- 16

I - FACULTY

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 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:

The questionnaire with which the faculty were approached is as follows:

Q1.1 Which of them do you prefer/use the most? Why?

- Moodle
- Intranet
- Both

Q1.2 (If moodle), What advantages do you get in Moodle? Why not Intranet?

Q1.3 (If intranet), What advantages do you get in Intranet? Why not Moodle?

Q2. Is there a need for both of them? Why? Why not?

Q3. What shortcomings do you face while using them?

Q4. How many students approach you individually for any kind of query?

- 0 per week
- 1-5 per week
- 5-10 per week
- Above 10

Q5. What kind of queries do students generally come up with?

- Pure academic related
- Grading concerns
- Further career options
- Placement/Internship option- recommendations
- Other, specify:

Q6. Do you think students are interacting enough with the professors?

- Yes
- No, reasons:

Q7. Do you use the public forums provided by moodle to facilitate academic interaction?

- Yes, I use it frequently
- No I don't use it frequently because:

Q8. Would you prefer uploading students' marks/attendance on the moodle so that they can view it individually?

- Yes
- No

Q9. Would you like an intra-faculty chat forum?

- Yes
- No

Q10. What are your takes on incorporation of feedback-related polls on the moodle?

- Support
- Don't support

Response and the Analysis:

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

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

Moodle allowed the faculty 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 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 eight 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

⁴ Prof. Laxminarayana Pillutla

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 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.

II – STUDENTS

Methodology:

For the success of any project, we need to be clear about what our end user's needs are, what they want and how they want? So survey and analysis play major part in deciding, what are the things that we should focus on for the success of the project.

For the purpose of survey and analysis we decided to use two main means to gather information from users (students), they were:

- Person-to-Person Interaction
- Online Survey

We circulated the questionnaire using webmail as the main source, and decided to personally interact with some of the students so that we can get better clarity about what they want, and what are their expectations from us. For interaction purposes we decided to target students from every batch, so that we can target the needs of maximum students.

Our questionnaire was prepared keeping in mind the current deployed system, to find out the means of interaction that students are using to interact with their seniors and faculty members regarding academic issues, and what are the changes that can be made to improve the current scenario.

At the completion of survey and analysis, we were successful in collecting about 140 responses through the questionnaire we circulated, and about 40 responses by individual interaction.

The questionnaire was prepared by Ayush Jain, Vipul Garg and Anubhav Maity, and the responsibility to interact with individual was given to Sushant Pritmani, Dishant Patel. The remaining five members were assigned the responsibility of collecting responses from faculty members.

Questionnaire and the Responses:

In this section we will be discussing in detail why each question was part of our questionnaire, and what we infer from the responses given by the students.

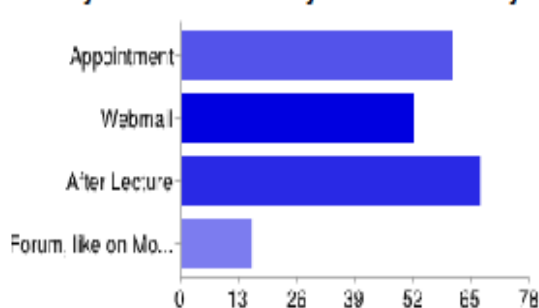
Question 1.

What do you find to be the best way to interact with Faculty?

- Appointment
- Webmail
- After Lecture
- Forum, like on Moodle

Responses:

What do you find to be the best way to interact with Faculty?



Appointment	61	44%
Webmail	52	38%
After Lecture	67	49%
Forum, like on Moodle	16	12%

People may select more than one checkbox, so percentages may add up to more than 100%.

Purpose:

The main purpose of adding this question in the questionnaire was to find out what people found the most appropriate way to interact with the faculty. With the help of this we want to analyse the current scenario, and how can we by our project help users (student/faculty) to interact with each other.

This question will also help in cross analysing the responses which we get from students and faculties.

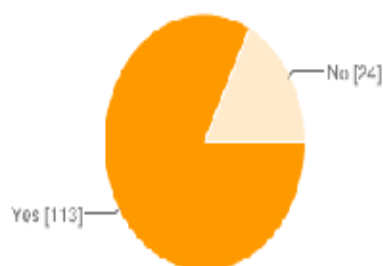
Question 2.

Would you like to have a platform to interact with Faculty?

- ☐ Yes
- ☐ No

Responses:

Would you like to have a platform to interact with Faculty?



Yes

113

81%

No

24

17%

Purpose:

The purpose of including this question was to find out that the students are satisfied with the current system, or do they want changes in the current system. This also supports us to the previous question to find out what the students want.

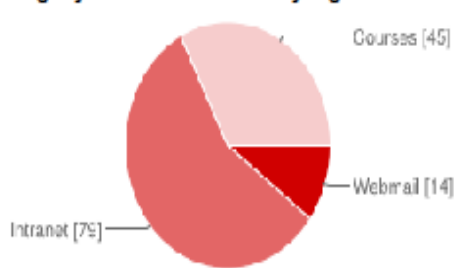
Question 3.

According to you which is the best way to get the course material?

- ☐ Webmail
- ☐ Intranet
- ☐ Courses

Responses:

According to you which is the best way to get the course material?



Webmail	14	10%
Intranet	79	58%
Courses	45	32%

Purpose:

This was added to find out that what are students currently using and what they prefer to get access to the course material. This will also help in cross checking the responses we get from student and faculty, which will help in answering questions like: what and why the faculties think is the best for them to upload the course material, and what students think is the best way.

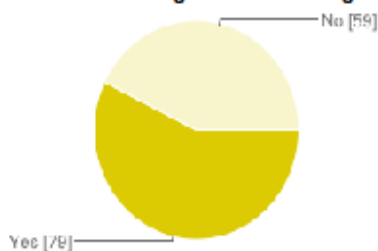
Question 4.

Do you find occasional changes in lecture timing inconvenient?

- ☐ Yes
- ☐ No

Responses:

Do you find occasional changes in lecture timing inconvenient?



Yes	59	42%
No	79	58%

Purpose:

The purpose was to find out whether students feel that, changing the lecture timing is inconvenient, so that we can add some features to our timetable module to help them.

Question 5 & 6.

Do you interact with your seniors about academic issues?

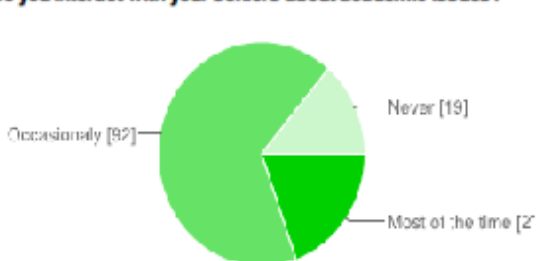
- Most of the time
- Occasionally
- Never

If not, what are the reasons?

- Doesn't matter
- Seniors are inaccessible
- Lack of means of interaction
- Other:

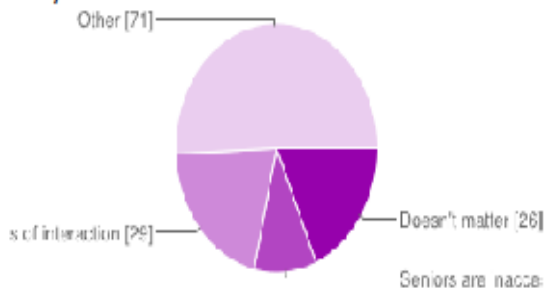
Responses:

Do you interact with your seniors about academic issues?



Most of the time	27	19%
Occasionallly	92	66%
Never	19	14%

If not, what are the reasons?



Doesn't matter	26	19%
Seniors are inaccessible	14	10%
Lack of means of interaction	29	21%
Other	71	51%

Purpose:

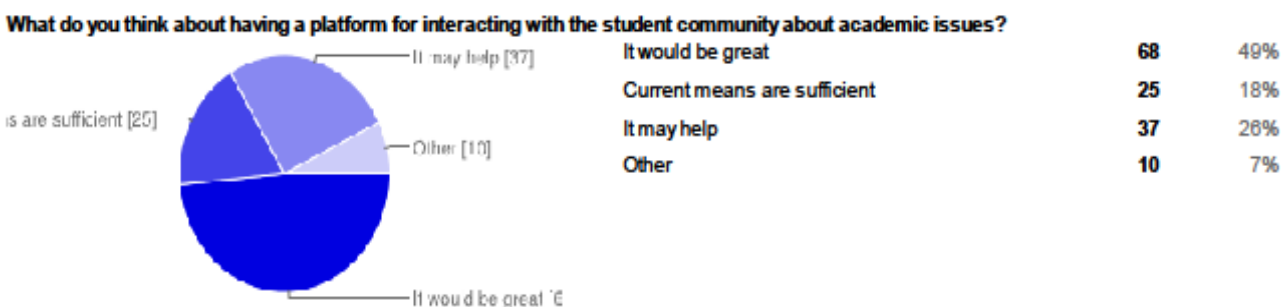
To find out the interaction pattern between students and their seniors. It will also help us to find out what are the reasons students don't interact with seniors.

Question 7.

What do you think about having a platform for interacting with the student community about academic issues?

- It would be great
- Current means are sufficient
- It may help
- Other:

Responses:



Purpose:

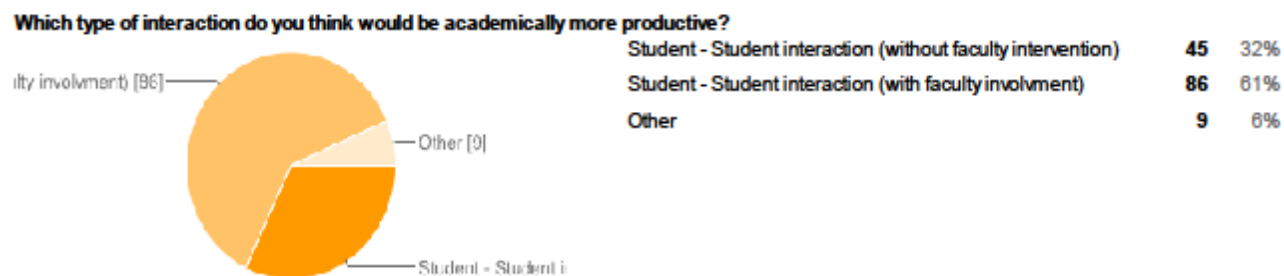
This was in continuation with the above two questions, to find out whether the students want a common platform where they can interact with the student community regarding academic issues, and are they satisfied with the current ways of interaction.

Question 8.

Which type of interaction do you think would be academically more productive?

- Student - Student interaction (without faculty intervention)
- Student - Student interaction (with faculty involvement)
- Other:

Responses:



Purpose:

This was added to find out whether the students want a separate discussion forum for the inter student interaction, or they also want faculty member to give their inputs.

Question 9.

Any problems faced by you in academic context?

Purpose:

This was added so that students can give suggestions related to academic problems and that we can solve with the help of our software.

Analysis:

From the survey done by us we can found that many students at present feel that the best way to interact with the faculty members is by taking appointment, through webmail, or after lecture. Very few students are using moodle to interact with the faculty members. From the next question we can find that many students want a platform like moodle to interact with faculty members, this makes us infer that the current deployed system is not helping many of the students, so we plan to implement a discussion forum where students can interact with faculties and can clear their course related doubts also.

We also found that students feel intranet a better way to access files related to course material, but due to the inaccessibility from outside college, they want a platform from where they can access course related material from outside the college also, this is recently deployed in the moodle but faculties aren't satisfied with the performance, so we will try to improve the performance. (This was found when we took individual responses from the students).

Many student also feel the need to have a common platform where the whole student community can interact with each other related to academic issues. The students also feel that intervention of faculty members will be more productive.

Students also feel that due to the changes in lecture timings it happen sometimes that they miss the lectures, so for that we will try to implement a time table module which will keep you updated regarding any changes in timing.

Conclusions:

- We will be implementing a discussion forum for interaction between students and faculty members
- We will be implementing the file upload feature so that students can access course related material from outside the campus, and faculty members can ask students to upload assignments.
- We will be implementing time table features also.

III – FINAL 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.
8. Students require a time-table feature with reminder notifications to keep pace with busy schedules.