Project Plan

(Version 1.0)

Team - 5

Created on: 3rd February, 2011

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b. Timeline

Though the presentation of the project would effectively commence mid March, excluding holidays and the in-semester exams days, the team has few days to complete the project. An approximate timeline for the execution of the project is as follows:

Sr. No.	Task	Assignment Date	Completion Date
1.	Discussion of the project problem	4th January, 2011	10th January, 2011

2.	Feasibility and Cost-Benefit analysis	13th January, 2011	17th January, 2011
3.	Project Planning	18th January, 2011	24th January, 2011
4.	Requirements gathering and SRS[1]	25th January, 2011	1st February, 2011
5.	Design phase	9th February, 2011	20th February, 2011
6.	Coding, Integration, Implementation	21st February, 2011	4th March, 2011
7.	Testing(Including alpha and beta testing)	5th March, 2011	31st March, 2011

[1] SRS stands for system requirements specification

c. Organisation and role of individuals

i. Members and their roles

Sr. No.	Member Name	ID	Role
1.	Prof. Asim Banerjee		Course Instructor/Mentor
2		201011011	TA/ Mentor
3		201011035	TA/ Mentor
4.	Malav Bhavsar	200801054	Team Leader
5.	P Venkata Sai Ravali	200801022	Student Developer
6.	Hetaswi Vankani	200801016	Student Developer
7	Vivek Fitkariwala	200801055	Student Developer
8.	Sushant Kumar	200801058	Student Developer
9.	Rajat Talwar	200801005	Student Developer
10.	Salil Shukla	200801001	Student Developer
11.	Anubhav Sharma	200801003	Student Developer
12.	Dhiren Velari	200801031	Student Developer
13.	Sonu Ladia	200801032	Student Developer

ii. Tasks and Responsibilities

Sr. No.	Task	Responsibility	Member
1.	Project Proposal		All
2.	Feasibility Report		All
3.	Cost Benefit Analysis	Analysis	Vivek, Malav
		Review	Hetaswi, Ravali
4.	Project Plan Document	Project Management and Approach	Hetaswi
		Budget	Dhiren
		Development environment	Malav, Vivek
		Risk Management	Ravali

		Constraints	Rajat, Sonu
		Monitoring, reporting and controlling mechanisms	Sushant, Anubhav
		Compilation and review	Hetaswi
5.	Requirements gathering and SRS		All
6.	Coding, Implementation and Integration		All
7.	Testing		All

Getting started:

Since the project requires a lot of background knowledge, starting from knowing how to configure an SMS gateway, to setting up a Zimbra server to working with Zimbra APIs, it would wisest to divide into three groups (The following have been started in parallel, commencing on the 22nd January, 2011):

Sr. No.	Task	Members
1.	Zimlet Development, ZCS Architecture and Components.ZCS Configuration	Hetaswi, Sushant
2.	Management User Interface Development	Sushant, Rajat, Salil, Anubhav
3.	Setting up server side	Vivek, Malav, Ravali
4.	Configuring the SMS gateway	Malav

d. Budget

Considering that the institute has strength of 1,000 students and that each student receives around 1,000 mails a year, a total of 10, 00,000 SMSs would be sent. Since the cost of 10, 00,000 SMSs is INR 30,000, each student would have to pay INR 30, which can be deducted from the caution deposit. The cost of the project is driven mainly by the cost of the SMSs sent for the notifications; SMS Gateway has to be purchased

for large number of SMSs, the per user cost of which is around INR 30 for a year. Since Zimbra is an open source project and server used would be that of the institute, we speculate that it would not add to the expenses. An alternative to this implementation is to convince the service provider to waive of the charges for SMSs because the service is going to be used for academic purposes only. It is also possible that the Service provider may agree on giving ads in SMSs in lieu of SMS charges.

Apart from the investment by the group members in terms of the man hours invested and the efforts thus, put in the budget of the project is INR 800 i.e., the cost of buying the SMS gateway.

2. Development Environment

Primarily, Zimbra Collobration Suit (ZCS) would be used, which is open source project. GNR-6.0.5 would be taken as a reference and system would be built on the same. ZCS has mainly 3 parts: 1) Web Client Application, 2) Desktop client Application, 3) Mail Server

The main focus of the project is on Web Client Application and the Mail Server given that the current system at DA-IICT does not use Web Client Application. The operating system for development environment will be Ubuntu 10.10 LTS. Eclipse 3.5 Helios would be used as an IDE[2] and patches in Mail Server would be written in Java. Macromedia Dreamweaver would be put into use for the Web development of Web Client.

Zimlets would also be required. Zimlets makes it easy to customize and extend Zimbra to suit one’s needs, allowing one to add new features to fulfil particular requirements. Zimlets are a mechanism for integrating and extending the functionality of Zimbra Collaboration Suite (ZCS) and Zimbra Desktop (ZD). The IDE used for development of Zimlets would be Eclipse 3.5 Helios. APIs provided by Zimbra would also be helpful for the project.

[2] IDE stands for Integrated Development Environment.

3. Risk Management

The following present potential risks:

- Since the project is being developed in a domain none of the team members have a previous experience in, we speculate that a lot of time would be consumed in background reading. A leeway has been maintained keeping in mind the uncertainty associated with learning a new, complex subject.
- A major risk posed is the delay in acquiring an SMS gateway. The group would be procuring one after the initial setup is ready.
- Due to various unavoidable circumstances it is possible that a group member may not be able to complete the task assigned to him/her. To prevent such factors from affecting the smooth functioning of the project, a piece of work is assigned to a group of individuals (not just one). Thus expected output is achieved by the subgroups working collectively.
- Keeping in mind exams and other academic and technical events taking place, proper schedule feasibility analysis has been done.
- Loss of data or chances of data getting corrupted: to avoid this, a back up the work done would be continuously be maintained by each member.

4. Constraints

We speculate that we may encounter the following constraints during the making of the project and after its deployment:

i. Limitation of the number of characters that can be sent in one SMS. Usually 160, thus only the subject and senders e-mail id would be mentioned in the message. This is done keeping in mind the security issues as well.

ii. Server loading-group messaging may cause heavy load on server. This may have to be taken care of by devising proper algorithms such as queuing, etc.

5. Monitoring, Reporting and Controlling Mechanisms

Given the nature of the project, proper monitoring, controlling and regulating mechanisms would be required to ensure the successful completion of the project. The performance tracking and an evaluation check would be done continuously for each of the team

members. Proper load distribution and scheduling could help each member to perform to the best of his/her capability. To keep the work outputs of the various groups synchronized, a google group for the team has been created. The documentation parts are/would be continuously uploaded on the internet group. The internet group not only works as a means for uploading various documents/assignments, it also acts as a forum for all the team members to stay connected, keeping track of the progress made. Moreover, a clarification would be demanded from the team members in case he/she fails to do the assigned work. Besides a periodic review meeting at least twice a week will help monitor the project effectively and efficiently.

For the coding part of the project the team will be coordinating via SVN (Sub-Version)[3]. The team arrived on SVN because of the fact that any changes to the source code could be seen by every team member, moreover, keeping the original source code intact at the same time. The work done would be reviewed and discussed to analyze whether it meets the desired requirements or not. For the quality and bug-free code, the team would be using Bugzilla[4]. For quality assurance, the team will be using the mentioned software.

Following the timeline and schedule set, attending the periodic group meetings, discussing with the assigned mentors and TA, the team hopes for a proper regulation of the project.

[3] The Sub-version also known as Apache sub-version is a software versioning and control system. Developers use SVN for maintaining current and historical versions of file such as source code and documentations.
[4] Bugzilla is a web-based general purpose bug-tracker.