

February 13, 2013

Integrated Campus

Project Plan

Group-2

INTEGRATED CAMPUS | SEN-Winter 2013

Revision History:

Version	Primary Author(s)	Description of Version	Reviewed By	Date Completed
v 1.0	Nalin Patidar, Anubhav Maity	First Version of Project Plan	Dishant	27-01-2013
v 2.0	Vipul Garg	Second version of project plan for incorporating Incremental model	Ayush Jain	13-02-2013

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Purpose of Project Plan:

The project plan clarifies and defines the project mandate. It establishes the direction of the project and provides a basis for measuring project progress and performance. It defines project context, criteria for success, purpose, objective, scope, assumptions, constraints, risks, etc. The project plan identifies the involved members, their level of commitment in terms of resources, time and work processes.

The project plan is critical for project success. It provides us with a tool to ensure that the project is well-defined and likely to succeed, and clients and users know in advance what they can expect from the project. The plan establishes a foundation for measuring project performance, progress, and the quality of project results and defines the criteria for success in terms of required work products, quality of results, and target dates for delivery of work products. It also minimizes surprises events so that late deliveries or cost overruns can be minimized.

It can be used by the project leader as to plan the project schedule, resource needs, and to track progress against the schedule. And the team members can use it to understand what they need to do, and what other activities they are dependent upon.

Purpose of Project:

With the exponentially growing dependency of the academic institutes on the internet, accessibility and manageability of the resources on both the student's and the faculty's end is the need of the hour. Many a times user has to wander from one application to other for different kinds of information which is time consuming and it also increases the work load on the administration too which has to manage all these applications. Instead of carrying a separate basket for each egg, putting them all together in a single one seems to be a much better way out.

And that is what the purpose of the project is. It is all about getting the important pieces of the academic picture on one canvas in an eye soothing way. 'INTEGRATED CAMPUS' as the name suggests, integrates all the essential requirements of an academic institutes from both the student's and the faculty's perspective on one platform whether it is related to academics, interaction , student attendance and so on.

Assumptions and Constraints:

We assume that user should have internet connection to access the website, and he/she should be part of DA-IICT to avail the facilities provided by the product. The user is assumed to have basic knowledge about websites, and should know how to surf internet. The GUI is aimed to be user friendly so that person who have less or no experience, will also be able to understand and use the features provided by the product.

Project Deliverables:

The deliverables will include:

- Project Proposal
- Feasibility Report
- Project Plan
- Software Requirement Specifications
- User Manual
- Software Design Specifications
- Software Development Life Cycle
- Quality Assurance
- Risk Management
- Design Documents
- Test Cases
- Test Reports
- Test Plan
- Configuration Management Plan
- Deployment Plan
- Gantt Chart
- Termination Analysis
- Traceability Matrix
- Activity Diagram

Project Roles and Responsibilities:

Names	Roles	Responsibilities
Vipul Garg	Team Leader Project Manager	Project Management, Documentation, U I Design, Front End & Back End coding. Maintaining Project logs. Questionnaire for students.
Vidhan Agarwal	Team Member Front End Lead	Documentation, Designing and Front End & Back End coding. Survey from faculty. SRS Testing
Ayush Jain	Team Member Back End Lead	Documentation , Back End Coding, Database Design. Questionnaire for students. SRS Testing
Jayesh Hathila	Team Member	Documentation, Back End Coding. Database Design. Survey from faculty. Testing
Nalin Patidar	Team Member	Documentation, Front End and Back End Coding, Questionnaire for faculty. Risk Analysis
Ishita Agrawal	Team Member	Documentation, Back End coding, Database Design. Questionnaire for faculty. SRS User Manuals

Sushant Pritmani	Team Member	Documentation, Designing and Front End coding. Survey from students. Test Plan
Pinky J Meena	Team Member	Documentation, Designing and Front End coding. Questionnaire for faculty. Test Plan.
Anubhav Maity	Team Member	Documentation, Designing and Back End coding. Questionnaire for students. Risk Analysis User Manuals
Dishant Patel	Team Member	Documentation, Designing and Front End coding. Survey from students. User Manuals

Scheduling and Milestone:

Phases	Job	Estimated End Date	Phase Completion Procedure	Deliverables
Preliminary Study	Technical and Operational Feasibility	17-01-2013	Analysis Of Opportunities, Trends And Objectives	Feasibility Report, Project Proposal
Technical Proposal	Analysing project requirements, and capability to deliver the project	27-01-2013	Brainstorming Alternatives, Discussions	Project Plan
Requirement Analysis Increment-1	Client Requirement analysis, and specification	19-02-2013	Online Survey, Interviews, discussions with client	SRS, Test Plan, Draft User Manual, Traceability Matrix
Project Design Increment-1	Transform requirement specifications into a structure	25-02-2013	Analysing SRS and creating low level and high level system design	Design Documents
Implementation Increment-1	Coding of different modules	12-03-2013	Coding And Unit Testing	Implemented System
Testing And Bug Fixing Increment-1	Testing of each modules	17-03-2013	Integration, System	Working System with core functionalities
Requirement Analysis Increment-2	Client Requirement analysis, and specification	26-02-2013	Online Survey, Interviews, discussions with client	SRS, Test Plan, Draft User Manual, Traceability Matrix

Project Design Increment-2	Transform requirement specifications into a structure	5-03-2013	Analysing SRS and creating low level and high level system design	Design Documents
Implementation Increment-2	Coding of different modules	18-03-2013	Coding And Unit Testing	Implemented System
Final Testing And Bug Fixing	Testing of each modules	28-03-2013	Integration, System	Final Working System
Final Installation and Maintenance	Deploying The software	03-04-2013		Final Deployed System

Cost Estimation:

In software engineering, time required for the development of the software is a key cost factor to be estimated. Each individual is spending at least 10 hours per week for the development of the software (including the time spent in the scheduled meetings). Estimating that the effective number of weeks available for the team to deliver the project would be around 10 weeks (accounting for holidays and the semester exam weeks) from 1st week of January till the 1st week of April of 2013, the total time spent by an individual on the software development would be 100 hours. By this model, the total person hours spent by the team of 10 would be $10 \times 100 = 1000$ person hours in all.

During the software development process, the team will be using tools and technologies (like XAMMP, Photoshop, etc.) which are available with us and team members are also familiar with these. The team will not need any hardware except PCs and the laptops which the team members have would be suffice. The system will be developed and tested on local machines and will be deployed to a particular server according to client's decision.

Quality Control:

The team believes that writing optimised code is the hallmark of any good software as it reduces the number of lines of codes and makes the program more readable and efficient. Following coding standards would also enable different programmers to produce codes that are in sync. Such kinds of practices would also help us in debugging and error handling.

Every document that is prepared, is done so after a large number of discussions and deliberations so that every criticism that the team can come up with is taken into account. The document is also discussed with the assigned TA and any improvement/addition suggested is duly taken into account.

Taking Quality Control under consideration we have divided our team into subgroups which will mainly focus on the following broad categories:

- 1) Front End,
- 2) Back End,
- 3) Designing Part and
- 4) Documentation.

To assign the group first we asked choice of every individual in which he/she is interested to work in, which will give strength to the sub-group and also retain interest of the individual in the group. Then if it was found that there was a huge preference for a particular category, some individuals were suggested to shift onto a different category so that each domain is given its due in terms of work hours and quality. This group assignment can be changed in later versions on analysing the performance of the team member in a particular domain.

To keep a track of the quality, we have decided to incorporate some breakpoints at which we would assess the project. As the development model is Incremental Evolutionary with two increments, so the core functionalities covered in the first Increment will be tested thoroughly twice and hence will be more robust.

Risk Management:

The following risk factors can affect the progress of the project:

- As all the Team members are also involved in other courses of the current semester which themselves have projects, exams, labs and assignments hence there may be delays due to these commitments. We will take care of this situation by giving sufficient amount of time to each phase incorporating other course load.
- Unavailability of team members due to personal reasons will be taken care of by closely monitoring each members' involvement and preparing the team members to be proficient in varied tasks.
- Loss of data or chances of data getting corrupted will be taken care by taking continuous backup of the work done.

Lack of training in a particular platform can also cause delays, so we plan to have learning task in which a particular member will be assigned to learn a new topic and prepare a learning log which can be used by others to learn in a faster way.

Monitoring:

Meetings are organized on a regular basis to track the progress of the project by checking if the deadlines are followed or not and to discuss doubts prevailing in the team regarding the project. Every role keeps a track of the work product that the role is responsible for. The progress of the project, which includes discussion of ideas and learning phases, are tracked in respective log files.

The logs and minutes of each meeting are maintained and are shared with the team so that each member can have a clear idea about the project progress. General discussions, doubts, sharing documents and ideas in the team are done through using Google products like Drive and Groups.

It often happens that the team needs to split in sub-groups during a particular phase for better execution. Sub groups are let free to hold their meetings at timings of their own convenience, the outcomes are required to be posted in the Google Drive. The tracking of these subgroups is done in the group meetings organized.
