

**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY**

**VADODARA**

**IT-301 SOFTWARE ENGINEERING**

Team IT - 03

Mentor: Dr. Asim Banerjee

**Web Development**

Project Plan

Version 1.0

**Team Members:**

|  |  |
| --- | --- |
| Name | E-mail |
| Pratiti Jain | [201652017@iiitvadodara.ac.in](mailto:201652017@iiitvadodara.ac.in) |
| Priyanshu Verma | [201652019@iiitvadodara.ac.in](mailto:201652019@iiitvadodara.ac.in) |
| Kaustubh Dwivedi | [201652008@iiitvadodara.ac.in](mailto:201652008@iiitvadodara.ac.in) |
| Sankalp Gaur | [201652024@iiitvadodara.ac.in](mailto:201652024@iiitvadodara.ac.in) |
| Harsh Dwivedi | [201652007@iiitvadodara.ac.in](mailto:201652007@iiitvadodara.ac.in) |

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# **0. Purpose of this document:**

The purpose of the Project Plan is to present the detail required to successfully execute and control the project, facilitate communication among project stakeholders, and document approved schedule baselines. It defines the approach to be used by the project team to deliver the intended project management scope. It addresses value proposition of the project and defines the work to be done on the project. It aims at the deliverables of the project. This document will define the tasks and responsibilities of the team members and it also creates a timeline. The project plan is a living document and is expected to change over time as more information about the project becomes available.

# **1. Introduction**

## 1.1 Project Objective

We are building a website for Training and Placement Cell of our institute i.e. IIIT Vadodara. It is a client-requested project. The main motive of this project is to help our institute handle the training and placement activities with ease. Our project will help with the communication and organization problem that our institute is facing. The features introduced in the software are going to ease things for our institute, students and the recruiters.

## 1.2 Project Deliverables

The following documents will be delivered at the end of the project :

* Project Proposal
* Feasibility report
* System Requirement Specification
* Use case Diagram
* User manual
* Test report
* Final tested System

## 1.3 Evolution of Project Plan

This document will be updated as the project progresses. A new revision will be released after each modification. Every modification has to be logged in the Document Revision History. Each log entry must include date, a revision identifier, author’s name and a brief description of the modification. The author of the modifications is responsible for updating the Document Revision History.

## 1.4 Reference Materials

1. <http://mihai.christodorescu.org/my_work/projects/webshell/webshell_spmp_010.html>
2. <http://www.utdallas.edu/~chung/CS6354/CS6354_U07_source/Team_2/SoftwareProjectManagement_Plan_v1.1_Team2.doc>
3. <http://www.utdallas.edu/~chung/RE/Project1.pdf>
4. <https://www.techopedia.com/definition/24775/project-plan>

## 1.5 Definitions and Acronyms

### **1.5.1 Definitions​:**

* **Software Development Life Cycle Model :** ​A life cycle for a system generally consists of a series of stages regulated by a set of management decisions which confirm that the system is mature enough to leave one stage and enter another.

* **Risk Management ​**: The forecasting and evaluation of financial risks together with the identification of procedures to avoid or minimize their impact.

* **System Requirement Specification ​**: Software requirements specification is a description of a software system ​to be developed. It lays out functional and nonfunctional requirements and may include a set of use cases that describe user interactions that the software must provide.

* **Software Quality Assurance :** It ​is a process that ensures that developed software meets and complies with defined or standardized quality specifications. SQA is an ongoing process within the software development life cycle that routinely checks the developed software to ensure it meets desired quality measures.

### **1.5.2 Abbreviations:**

|  |  |
| --- | --- |
| **Acronyms** | **Abbreviations** |
| HTML | Hyper Text Markup Language |
| CSS | Cascading Style Sheets |
| UI | User Interface |
| HI | Hardware Interface |
| SI | Software Interface |
| CI | Communication Interface |
| SQL | Structured Query Language |
| AJAX | Asynchronous javascript and xml |

# **2. Project Organization**

## 2.1 Life Cycle Model

The process model to be used for the earlier phase of the project is the Iterative Waterfall models with the ability to correct the mistake happen in previous phase; i.e., we would be able to change whatever mistake we have done in previous phase. It’s straightforward process that proceeds step by step with one back step chance to revised possibilities or mistakes.

## 2.2 Project Organizational Structure

The Project team consists of 5 members and it is again divided into sub-teams in accordance with phases we follow for the project, as the work can be finished efficiently on time and hence complete the project.

## 2.3 Project Organizational Boundaries and interfaces

The team leader will be responsible for the communication between each team member for a particular phase and meetings will also be conducted by the leader for proper interaction. The documentation will be done by an individual who has been assigned with their respective task.

## 2.4 Project Responsibilities

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **ID** | **ROLE** | **RESPONSIBILITY** |
| Priyanshu Verma | 201652019 | Team Leader | * Project management * Back End Development(Head) * Documentation and Review * Requirement Gathering and Analysis |
| Pratiti Jain | 201652017 | Team Member | * Documentation and Review(Head) * Back End Development * Requirement Gathering and Analysis |
| Kaustubh Dwivedi | 201652008 | Team Member | * Documentation and Review * Back End Development * Requirement Gathering and Analysis |
| Harsh Dwivedi | 201652007 | Team Member | * Documentation and Review * Front End Development (Head) * Requirement Gathering and Analysis |
| Sankalp Gaur | 201652024 | Team Member | * Documentation and Review * Front End Development * Requirement Gathering and Analysis |

# **3. Managerial Process**

## 3.1 Management Objectives and priorities

Management which comprises of the team leader is responsible for getting activities completed efficiently and effectively with and through their team members. The main objective of the management is to organize the meetings for discussions, check the status of the project, and submit the project on time.

The main objectives :

* Planning
* Organizing
* Directing
* Coordinating
* Reporting

## 3.2 Assumptions, Dependencies, and Constraints

Few assumptions made for this project are:

* Any difficulty with the task assigned will be reported to the lead immediately.
* The client is not going to make frequent changes in the requirements.
* Client will clarify the doubts.
* Possible Project constraints consist of the following elements:
* The possibility of team members not being able to attend the scheduled meetings because of the other academic activities.
* The possibility of lack of required technical skill set to complete the project in the required time.

## 3.3 Risk management

Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events. Any changes made in the organization which contradicts the assumptions made can be accommodated with minimal changes in the code.

Possible risks and mitigation or avoidance strategies:-

1. Disk failure – all project deliverables and documents will be stored in each of team member’s system.
2. Any team member leaves – his work will be reassigned among others.
3. Lack of skill – To avoid this, evaluate each team member skill before each phase and/or re-assign the team role.
4. Poor Quality – Time to time we will ensure that the project is doing the specified task properly and efficiently.
5. Project not completed in time – We have developed a plan to complete the project in time which will be followed strictly.

## 3.4 Monitoring and controlling mechanism

Weekly meetings will be set up to review key components at the current stage. The team leader is responsible to establishing a record to trace the modifications made during the meeting. Further discussions will be made between meetings through an online group. Documentation will also be updated after each meeting. The team leader can adjust the weekly goals by checking the progress of each subphase to ensure the subphase will meet the requirements and be deliverable on time.

# **4. Technical Process**

## 4.1 Methods, Tools and Techniques

The following tools are to be used for the development of documentation and code:

* The coding will be done in HTML, CSS, Javascript, DJango, MySQL, Bootstrap.
* Documentation will be done using Microsoft ​***Google Docs***.
* The Website will serve as a repository for the deliverables and minutes of a meeting.

## 4.2 Software Documentation plan

The following software documents will be developed:

* Feasibility Report
* Project Proposal
* Project Plan
* Norms
* Software Development Life Cycle
* System Requirement Specification
* System Test plan
* Traceability Matrix
* System Design Docs
* Cost estimation
* Configuration Management
* Risk monitoring, management and mitigation plan
* Test report
* Test cases
* Software Quality Assurance Plan
* Deployment Plan
* Termination Analysis
* Coding Conventions
* Training manual
* User manual

## 4.3 Project Support function

* Configuration Management :
* Change requests can be tracked and approved within team’s Google Groups website.
* Subversion or other version control system, for other aspects of configuration management.
* Quality Assurance
* Verification and Validation
* Training

# **5. External Interface Requirements**

## 5.1 User Interfaces

* Clean UI and great user experience will be assured.
* User can navigate throughout the application using mouse.
* Each page will consist of help link to show how to use that page.
* User will be provided with visual feedback if an event has occurred.

## 5.2 Hardware Interfaces

* The system should be capable of making an internet connection.
* The system should be able to run a web browser.

## 5.​3 Software Interfaces

* Server which is at some remote place.
* The backend of the software will interact with SQL to receive the Data.SI-1: The application should be connected through the internet to the
* Others third parties interface may be used which would be specified in a later version of the document.

## 5.4 Communications Interfaces

* The pages will be loaded using HTTP protocol.
* Client server communication will be through internet.
* Password will be secured through encryption.
* Application will have proper synchronization so that user remains up to date.

# **6. Work Elements, Schedule and Budget**

This project is scheduled to be completed by mid November, 2017 for the final demo.

The project is economically feasible as developer team will be working free of cost and the domain name and host will be provided by the institute. Hence the project would be covered in minimal cost for both the parties.