Project Plan

CS 01
(D-Enigma)

Contents

1 Introduction

1.1 Overview

The purpose of this document is to tentatively define what would be done in each phase of our project development and also the tentative time schedule for each of the processes. It will act as a guideline to the team which can be followed through the various phases of software development.

1.2 Project Deliverables

The deliverables will be:

- Feasibility Analysis
- Project Proposal
- Project Plan
- System Requirements and Specifications
- Software Development Life Cycle
- System Test Plan
- Low and High Level Design
- Software Configuration Management Plan
- Software Quality Assurance Plan
- Risk Management and Mitigation Plan
- Test Report
- User Manual
- Deployment Plan
- Design Documents
- Test Reports

1.3 Stakeholders

- Team Members
- Client
- Doctors
- Pharmacist
- Hospitals
- Consumers

1.4 Assumptions, Constraints and Risks

1.4.1 Assumptions

- We will be able to gather database of Government Verified Database.
- Pharmacy Sellers will have Computer/Mobile i.e a way to access the Internet and will have required skills to access the Platform.
- Pharmacy Sellers will be willing put effort in online inventory management.
- Pharmacy Sellers/Consumers will be able to understand written English.
- Pharmacy Sellers will manage the delivery of product.

1.4.2 Constraints

- Since we are very far away from our client, the only way of communication is through E-mail and as a result we are not able to interact frequently with the client.
- We as a team have the knowledge of the technologies on which we are working but we are not experts in these technologies.
- We as a team have very little experience of working on such a large scale project.
- Being Restricted to government policies regarding the pharmacies.

1.4.3 Risks

- Unable to find a suitable Databse/API of Government verified Medicines.
- Since we are not experts in the technologies, we don't exactly know how we are going to implement the solution, this may lead to delay in project.
- Not being able to make the client understand the User requirements.
- Use of website to perform illegal sales.
- Unethical/Wrong action/analysis by the Pharmacy Owner.

2 Goals and Scope

2.1 Goal

Our project supplies a solution to our client's problem regarding an E-commerce like platform for the interaction of Pharmacy owners and Consumers. The website will contain a User end, a Seller end and an Admin end. We do have existing solution in market (1mg etc.), however most of the system are commissioned based and require approval process from third party (platform provider). This is tedious task as customer are not directly connected with pharmacy. Additionally, this is commissioned based and that is why most of the pharmacy are still not connected with online service provider or they have their local solution. So, we will provide a solution where there is no third party commission, customer will be directly able to interact with the pharmacy.

2.2 Scope

This is a very wide-scoped project mainly because there are very few constraints. Any Pharmacy seller who has internet access, can register on our website and use it. Similarly any Consumer who wants to purchase a product can buy it through this. But we do have some area limitations as we have designed our project based on the legal rules of Government of India. So, this project can be extended to different countries based on their legal rules and regulation.

3 Organization

3.1 Task Division

The roles and responsibilities have been divided among the team members taking into consideration each team members skills, interest and capabilities to ensure a smooth and successful project completion. The project requires several new tools, technologies and programming languages to be learnt. The following is an elaborate distribution of work among the team members:

Project Roles and Responsibilities

Name	**Role**	**Activites**
Anil Kumar	Team Member	Surveying, Documentation, Back-end Development
Nikhil Thota	Team Member	Documentation, Surveying, Font-end Development
Mehak Piplani	Team Member	Project Design, Documentation, Database Design, Back-end Development
Sai Koushik	Team Member	Interviewing, Documentation, Front-end Development
Sudhanshu Bhardwaj	Team Member	Project Design, Documentation, Surveying, Database Design, Back-end Development
Vikas Rajput	Team Leader	Project Management, Project Design, UI/UX Design, Documentation, Surveying, Front-end Development

3.2 Schedule and Milestones

Serial no.	Milestones	Deliverables	Proposed Deadline
1.	Finalize Project Idea	Project Topic	27/08/2017
2.	Feasibility Analysis and Project Proposal	Feasibility Report and Project Proposal	03/09/2017
3.	Plan the work to be done in phases of software development	Project Plan	07/09/2017
4	Requirements collection through online surveys, interviews and discussions	SRS Document	29/09/2017
5	Designing of the system	System Design Documents	14/10/2017
6	Coding of modules and unit testing	Unit Tested Modules	28/10/2017
7	Integrate individual modules		31/10/2017
8	Testing and finalizing	System test report	5/11/2017

4 Cost Estimations

In software engineering, one of the most important factor is cost estimation. The cost is measured in Person hours. Cost of the project is due to the documentation and software to be delivered at the end of the project. As every software used is open source, so cost of these platforms are not taken into account.
We are using basic *Constructive Cost Model (COCOMO)* for Cost Estimation.
The total LOC in the project will be in the range of 8,000-12,000. By using these values in terms KLOC (Kilo Lines of Code) and as our team consists of a mix of experienced and inexperienced individuals, so it would be a *Semi-detatched* Project. By using these values, the range of the Eort and Development Time are calculated and are as follows:
$Effort = 30.80PM - 48.50PM$
$DevelopmentTime = 8.29Months - 9.78Months$

5 Communication and Reporting

5.1 Communication with the Client

The team will be in constant communication with the client (Mr Pankaj from the HCL company) in order to know his requirements and inputs under each increment. If there are any changes in the requirements, modifications will be made accordingly. We would be constantly taking his reviews on the various modules we develop and change accordingly. Although since client lives far away the only way we can contact him is via emails. So as a result sometimes communication takes a bit of time and verification by client also takes a bit more time than in the situation where client is relatively closer.

5.2 Communication within the Group

Type of Communication	Medium	Discussion	Participants
Project Meetings	Face to Face	Current Status Problems (if any), Documentation discussion, Application Discussion	Entire Team
Sharing Project Data	Google Docs, Google Group, Github	To keep track of current progress and completed work	Entire Team
Meeting with Teaching Assistants	SEN Lab	Guidance	Entire Team

5.3 External Communication and Reporting

External communication takes place in the form of meetings with the teaching assistant assigned to our group for guidance, assistance and to solve difficulties that we might face. We also talked to our prospective clients to know their requirements as well as build a target audience to showcase our product which might be used by them.
We took a survey of doctors, pharmacists and various patients to assess the existing problems which our product might improve upon and also to gauge their needs and issues with the existing model of assessment process in place.
Reporting is mainly done in the form of deadline submissions, weekly vivas and ensuring a finished product within the stipulated time.

6 Project Monitoring and Quality Control

Within the group, tasks are divided among team members are in subgroups. Regular meetings will be held to keep up with the progress of each sub-group. Mistakes and suggestions are then discussed and decided upon by majority and referencing the reading materials of the course.
To maintain the quality control, we try to review every requirement and deliverables of the project and see if it lives upto the standard we require as well as what the client requires. We'll also send periodic updates and reports to the client for his approval and suggestions.
During the coding phase, proper commenting with well indented code is something we always aim for so that the code can be understood by others easily and the mistakes can be rectified quickly.
During Testing phase, we will get the solution tested directly by the users.