

Project Plan

Project Title: Humble Abode

-have a comfortable home

1. Introduction:

Our project is a well-organized and dynamic system to find one's perfect and comfortable home which users can access through their mobile phone with no hassle. The goals of our project are to minimize time wastage of people, providing information correctly and help them to learn about 'HUMBLE ABODE'. To manage a project efficiently, we need to plan how the project will run under some constraints. The Project plan report is developed at the conclusion of the planning phase of the project. It contains all planning details of the project. It works a pathway for project manager to keep the project on track.

After doing feasibility study we get some feasible solution of this problem, and we offer some alternatives to the client. The client accepted our alternative 1 which was an android application. There was an agreement between our software firm and customer to solve this problem. We only have about two months and fifteen days to finish all documentation, software creation and enhancements. To develop and implement the HUMBLE ABODE, we will need funding to buy some tools and functionalities. The customer budget to finish this project is 200000Tk (Two lakh taka only).

Eight sections are included in this report. Introduction section contains a brief introduction the project. In the Project Organization section, organization of the development team is shown, with details of the team members and their roles in the project. In the Risk Analysis section, we have listed possible risks along with their danger level and also proposed some strategy to reduce the impact of the risks. The hardware and software required to run the project is described in the Hardware and Software Requirement section. In the Work Breakdown section, the total work is divided into smaller tasks and some milestones are put to measure the progress of the project. Project Schedule section describes the dependencies among the tasks and estimates a timeframe of each tasks and milestones and also lists the deliverables. In the Monitoring and Reporting Mechanism section, a system is showed to monitor and report the progress. The conclusion section contains summary of this report.

2. Project Organization:

The development team consists of five members. They will play different roles in the project according to their excellence and efficiency. The team is divided into some groups, each group performing specific tasks at different phases under the lead of group leader. The team details are given below:

Table I shows the details of the team members and their grouping according to roles.

Table I: Details of the team members.

Serial No.	Role	Name of members	Email
01	Project Manager	Nishat Sultana Chy	nishatsultana1998@gmail.com
02	Analyst	Fairooz Azim Saima Akter Afrin Nishat Sultana Chy	fairoozazim97@gmail.com afreenhossain01@gmail.com nishatsultana1998@gmail.com
03	Designer	Maharun Nessa Meem Sadiah Sharmin Saima Akter Afrin	maharunnessameem86@gmail.com sadiasharmin460280@gmail.com afreenhossain01@gmail.com
04	Database Administrator	Fairooz Azim Maharun Nessa Meem Sadiah Sharmin	fairoozazim97@gmail.com maharunnessameem86@gmail.com sadiasharmin460280@gmail.com
05	Programmer	Fairooz Azim Nishat Sultana Chy	fairoozazim97@gmail.com nishatsultana1998@gmail.com
06	Tester	Sadiah Sharmin Saima Akter Afrin Maharun Nessa Meem	sadiasharmin460280@gmail.com afreenhossain01@gmail.com maharunnessameem86@gmail.com

The organization hierarchy of the development team is shown in the figure 1.

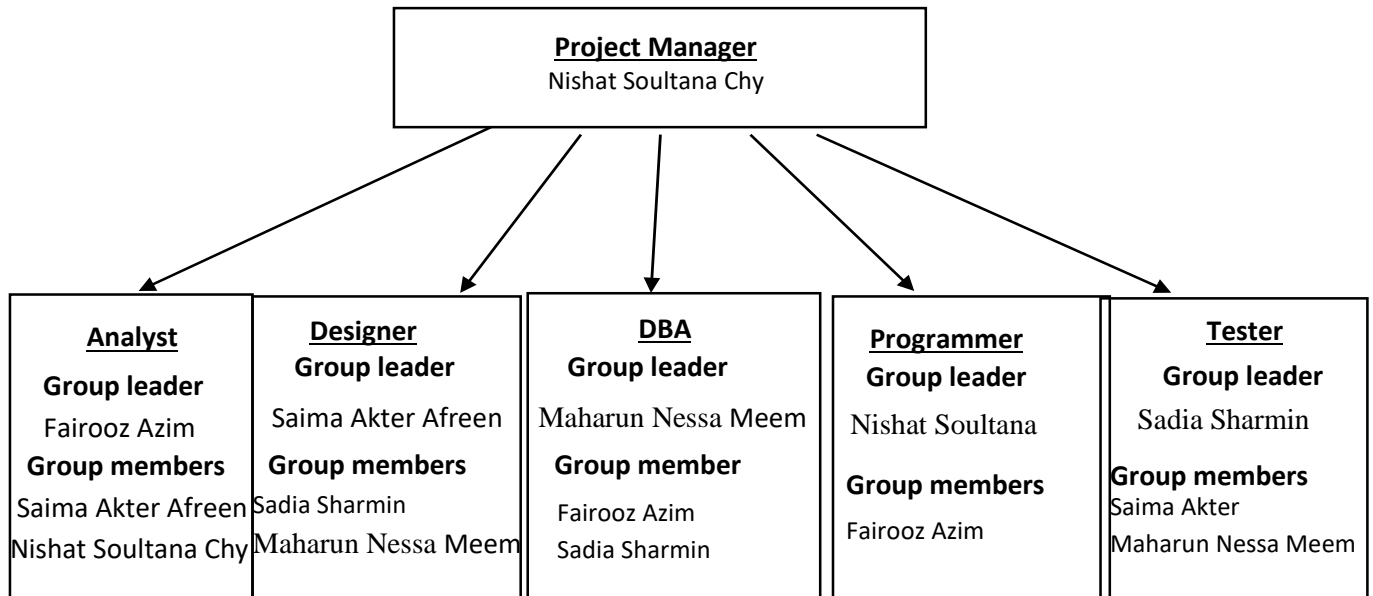


Figure 1: Organizational hierarchy of development team

3. Risk Management:

Risk management is the process of identifying, assessing and controlling threats to an organization's capital and earnings. These threats, or risks, could stem from a wide variety of sources, including financial uncertainty, legal liabilities, strategic management errors, accidents and natural disasters. IT security threats and data-related risks, and the risk management strategies to alleviate them, have become a top priority for digitized companies. As a result, a risk management plan increasingly includes companies' processes for identifying and controlling threats to its digital assets, including proprietary corporate data, a customer's personally identifiable information and intellectual property. Risk Management involves four process: identification of the risks that may affect the project, risk analysis, risk planning, risk monitoring to take action when problem arise.

a. Risk Identification and Analysis

Risk identification identifies all possible project, product and business risks and Risk analysis assess the likelihood and consequences of these risks. The risk management of the proposed app, “Humble Abode”, means the possible risks of the project, the likelihood of these risks & the reduction strategies of these risks are shown in the table II:

Table II: Risk Identification and Analysis

Risk no	Risk Name	Risk Type	Probability of the risk	Effect of the risk	Prevention/solution
01	Used hardware are of bad quality or damaged	Technology Risk	Moderate	Serious	Providing best quality hardware with guarantee
02	Database doesn't process as fast as expected	Technology Risk	Low	Tolerable	Providing professional database system software
03	Human errors	People Risk	Low	Catastrophic	By solving these errors
04	Failure in commitment	People Risk	Moderate	Serious	Trying to adhere to the commitment
05	Slow management cycle	People Risk	High	Tolerable	Increasing the motion of management cycle by all possible way
06	Lack of testing	People Risk	Moderate	Serious	By testing different sector
07	The software tools doesn't work well	Tools Risk	Moderate	Serious	Avoiding that tools
08	Lack of analysis for change of requirements	Requirement Risk	Moderate	Serious	Always get concerned about client's requirement
09	Inadequate of requirements	Requirement Risk	Very Low	Serious	Avoiding that types of requirements & try to replace these by better one
10	Lack of Good Estimation in projects	Estimation Risk	High	Serious	By studying enough about the project
11	Failure in total budget	Estimation Risk	Low	Tolerable	Successful budget management

b. Risk Monitoring

Risk monitoring is the process which tracks and evaluates the levels of risk in an organization. As well as monitoring the risk itself, the discipline tracks and evaluates the effectiveness of risk management strategies. The findings which are produced by risk monitoring processes can be used to help to create new strategies and update older strategies which may have proved to be ineffective.

4. Hardware and Software Resource Requirement:

Computer hardware and software applications are essential to develop a software project. Without appropriate hardware and software a project faces lots of problems which leads to project fail in the end. Good quality hardware ensures environment stability and good software helps rapid development process and reduces possibility of system crashes.

a. Hardware Resource Requirement

In order to implement this project, we needed hardware components are given in the table **III**:

Table III: Hardware Requirement

Serial no	Item	Quantity
01	Personal Computer (Intel Core i3, 4GB RAM)	5
02	Keyboard	5
03	Mouse	5
04	Local area network Connection	5
05	Android Device	5

b. Software Resource Requirement

Also the required software to develop the application is given in the table **IV**:

Table IV: Software Requirement

Serial no.	Software name
01	Windows 8\10 Operating System
02	Android Studio 2.2.2.0
03	Photo editor
04	Microsoft office
05	Firebase
06	JDK 8

Here, android studio and JDK 8 is open source and available for everyone.

5. Work Breakdown:

We can develop a complex system in a modular fashion. In modular fashion, a work is divided into some tasks and some milestones. Milestones are some specific portion of work done within a period of time. They are very helpful for measuring the percentage of tasks completed. The 'HUMBLE ABODE' is an android application with a large collection of data and various functions on the data. It will be done in modular fashion. The total work is divided into smaller tasks and the responsibility of completing the tasks is distributed among the team members. Here, total development work is divided into some tasks (T) and some milestones (M) to work efficiently and measure the progress. The breakdown of development work is shown in Table **V**:

Table V: Work breakdown of total development process

Serial No	Task or Milestones	Description
01	T1	Meeting with stakeholders on functions and constrains
02	T2	Finding & analyzing functions and constrains
03	T3	Meeting on validation functions and constrains
04	M1	Completion of requirement analysis
05	T4	Designing basic architecture of the system
06	T5	Designing activities and views
07	M2	Completion of application design phase
08	T6	Completion of application design phase
09	T7	Data collection and entry
10	M3	Completion of data entry process
11	T8	Implementing activities and views
12	T9	Establishing relation between data and views
13	M4	Completion of implementation of basic structure
14	T10	Implementing functions
15	T11	Integrating all parts
16	M5	Completion of development process
17	T12	Testing and debugging the system
18	T13	Deploying the system to the stakeholders
19	M6	Completion of the project

Some reports and documents will be generated during the project running time. The organization will kept all of them and some will be delivered to the client according to the deal. The *deliverables* are listed below:

1. Software Requirement Specification Document (SRS)
2. Detailed Design Document (DDD)
3. Final Report on the Project
4. Source Codes

6. Project Schedule:

In this section detailed description of time frames and the tasks associated with them and the people who will perform the task is given. Dependencies among the tasks are found out and tabulated, tasks, duration of them, effort for doing them and dependencies among them are tabulated in the table VI:

Table VI: Tasks, effort, duration and dependencies

Serial No	Task	Effort(person-days)	Duration(days)	Dependencies
01	T1	1	5	----
02	T2	2	8	T1
03	T3	3	3	T2
04	T4	2	10	T3(M1)
05	T5	2	8	T3(M1),T4
06	T6	3	8	T3(M1)
07	T7	3	14	T6
08	T8	2	8	T5(M2)
09	T9	3	8	T7(M3),T8
10	T10	3	50	T3(M1),T5(M2),T7
11	T11	3	7	T6,T8,T10
12	T12	3	15	T11(M5)
13	T13	2	6	T12

We have estimated the time required for each task and dependencies among them. Now we can make a time schedule of our project. This schedule can be represented by activity chart also called Gantt chart. The Gantt chart of our project is shown in figure 2:

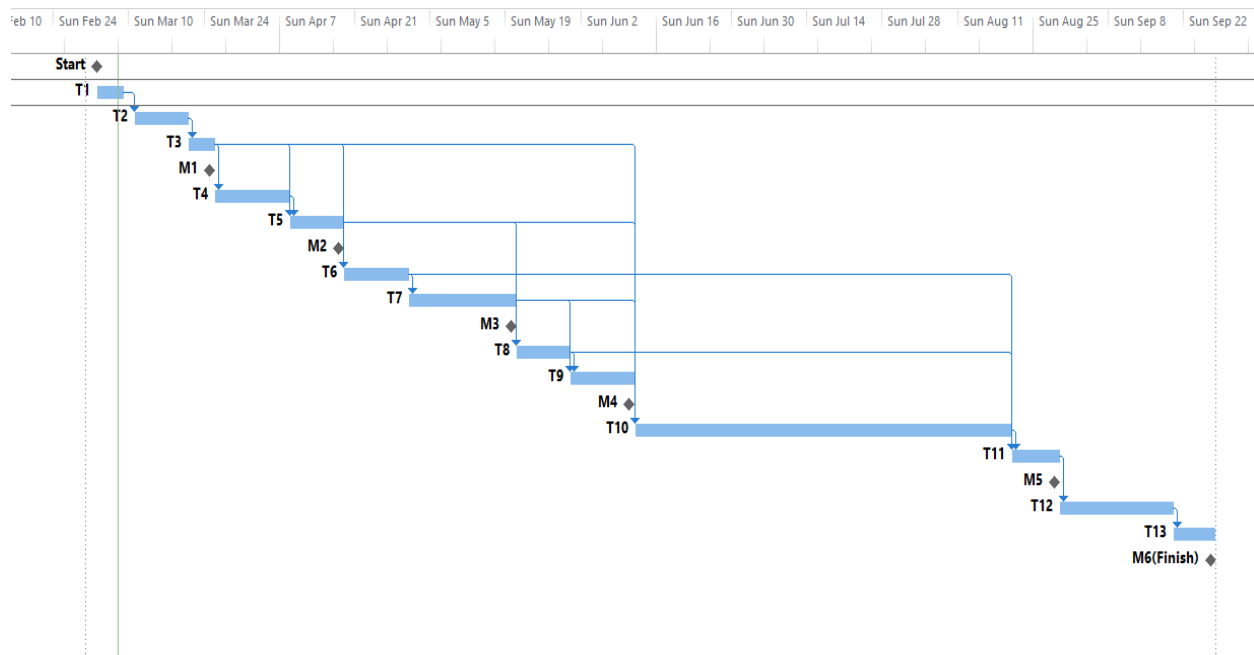


Figure 2: Activity chart of project schedule

We have presented a task allocation chart in the following. Here, each task is represented by the horizontal bar with. Each bar is expanded to its width with respect to the time duration. Here, team member Nishat is a project manager. Fairooz allocated to tasks T3, T6, T7, T9, T10, T11 & T13 respectively. Afrin is allocated to tasks T2, T3, T4, T5 & T12; Sadia is allocated to tasks T5, T6, T7, T8, T9, & T12 and Meem is allocated to tasks T3, T4, T5, T7 & T11.

The member allocation of our project is shown in the figure 3:

Date	4/3	25/3	15/4	6/5	27/5	17/6	8/7	29/7	19/8	9/9	30/9
Nishat Sultana Chy	T1 T2				T8 T9	T10			T11		T13
Fairooz Azim	T3		T6	T7	T9	T10			T11		T13
Saima Akter Afreen	T2 T3 T4 T5								T12		
Sadia Sharmin			T5 T6	T7 T8 T9					T12		
Maharun Nessa Meem	T3 T4 T5		T7						T11		

Figure 3: Member allocation chart

Activity network diagram for our project is shown in figure 4:

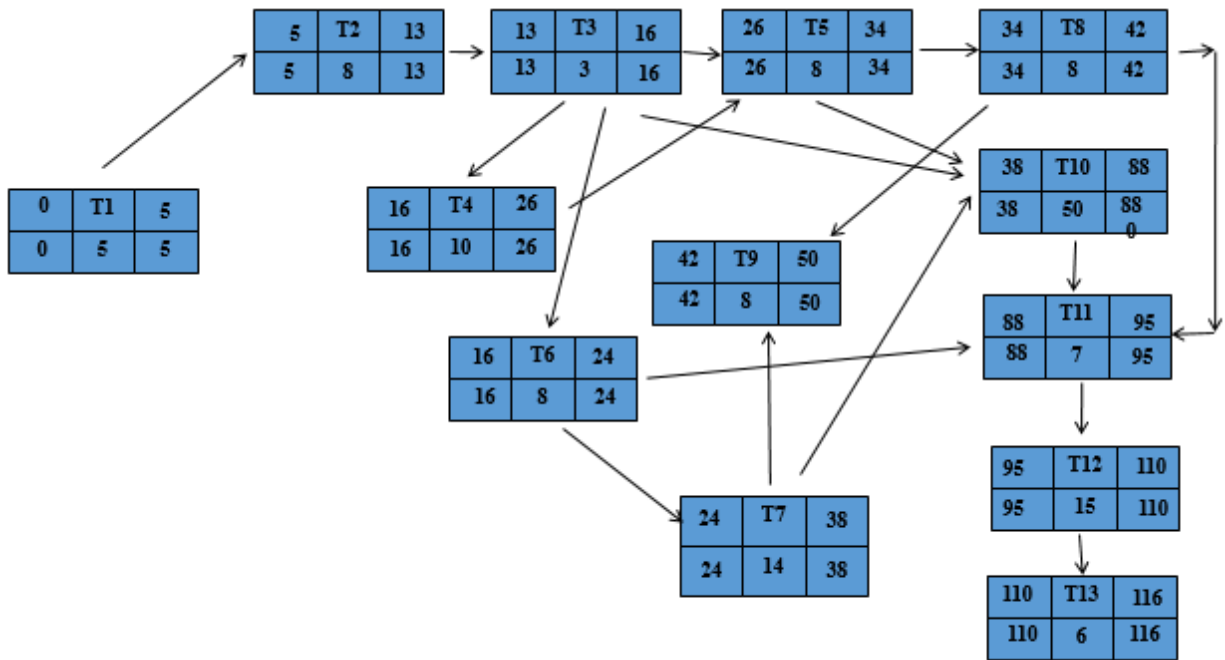


Figure 4: Activity Network Diagram

7. Monitoring and Reporting Mechanisms:

Monitoring is the regular observation and recording of activities taking place in a project. It is a process of routinely gathering information on all aspects of the project. To monitor is to check on how project activities are progressing. It is systematic and purposeful observation. Monitoring also involves giving feedback about the progress of the project to the donors, implementers and beneficiaries of the project. Monitoring is very important in project planning and implementation. Reporting enables the gathered information to be used in making decisions for improving project performance.

A project manager can monitor his project in various ways. The monitoring of our project will be done in time bases namely daily, weekly and monthly.

Daily Monitoring: The project manager will monitor the progress of the project daily by going desk to desk. He will gather information about progress, problems and difficulties. He will measures the impact of risks and also will try to find upcoming risks. He will change the probability of anticipated risks if necessary on the basis of his monitoring.

Weekly Monitoring: Project group meetings will usually take place weekly and monthly. Every member will show their progress in monitoring meeting. The meeting will take place on 4:00 pm at the Seminar room of CSE department. In this meeting every member will show their progress in individual part of project.

Monthly Monitoring: After a month a group meeting will held again at same place and progress of each member's section will be seen carefully. Their contributions will be measured and compared with standard. New task will assigned by project manager on every monitoring meeting.

Two types of reporting will be held in our project. They will be held when a task is completed and a milestone is achieved.

Task completion Reporting: Each member (Analyst, Designer and Coder) will submit their important documents after completing the assigned task. If any member is unable to submit their report and other deliverables in time, they need to formally inform the Project Manager about the reason and submit the delayed task with their next task completion report.

Milestone completion Reporting: When a milestone is completed a reporting by project manager will be held. Team members will be informed about the project goal and overall progress and completion date of the project in the meeting, so that they are aware about project schedule and complete their task in due time. Remuneration gifts will be given to one of team members for outstanding performance. This will motivate him and all other to do his job in time perfectly which help completion of the project in time and attaining goals of the project completely.

After the completion of each unit of tasks, the project managers will call a meeting to meet the other members, to discuss about the completed task and the next task.

The following management reports should be produced on the due date which is given in the table VII:

Table VII: Estimated project monitoring

Task	Effort(person)	Duration(Day)	Working State	Submission Date
Problem Definition Document(PDD)	5	7	Done	17.02.19
Feasibility Study Report	5	7	Done	24.02.19
Project Planning	5	14	Done	10.03.19
System Requirement Specifications	5	14	Not Yet Done	-
System design Document	5	-	Not Yet Done	-
Implementation	5	-	Not Yet Done	-

All of these tasks will be finally monitored by the honorable project supervisor Mr. Sajedul Haque. And by observing the above report, it is being assumed that all the tasks that are supposed to be provided will be completed within about 6 months.

8. Conclusion:

Planning is the first step to make a project successful. Project planning is very important for starting a project. A project planning report is the written form of project plan. It includes the high level planning components of a project. It lays the foundation of the project. It acts as an anchor, holding you to the project objectives and guides as a navigator, guiding through the milestones.