Software Development Project Management
Section: B
Group:04

Title: Software Development ProjectManagement Plan for Quick Cash a mobile financial service system.

Submitted by:

Name	ID
MD. Iftekhar Jahan	19-39496-1
Syeda Fariha Sultana	19-39718-1
Pulok, Niloy Ahmed	19-39755-1
Prisila Saha	19-39759-1

1. Introduction:

Quick Cash is a mobile financial service in Bangladesh operating under the authority of the Bangladesh Bank. It is the fastest and safest medium of financial transaction, Quick Cash makes our life simple with Send Money, Add Money, Pay Bill, Mobile Recharge, Payment, and many more services. The user is the audience of this document. The app offers many features and qualityof life enhancements that make it easy to use. As you makepayments, you'll see notifications for all transactions, including when you load money into your account.

2. Project Title:

Software Development Project ManagementPlan for Quick Cash a mobile financial service system.

3. **Objectives:**

- By the help of this software we can make payments.
- We can send money with this software.
- We can add money with this software.
- We can cash out with this software.
- We can buy air, bus, movie and train tickets withthis software.
- We can also do mobile recharge with this software.

4. **Justification:**

Our target audience is all youngsters, aged above 18, and all adult persons. With the help of this software, people can pay bills, buy tickets, can do mobile recharge, can cash out, can add money, etc. We want to make this software to make people's busy lives easier. People will be beneficial if they use our Quick Cash app.

5. Systems Overview:

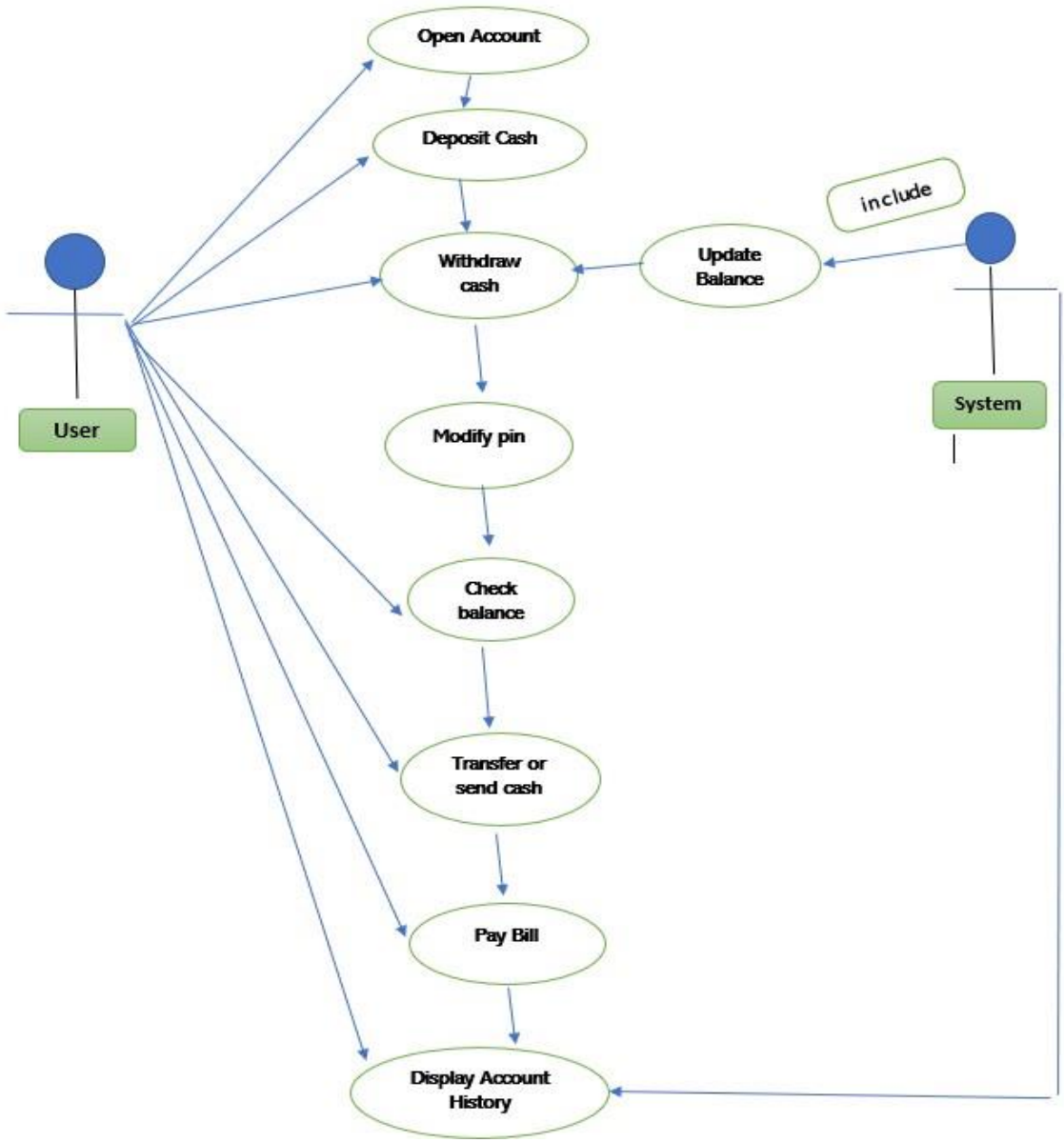
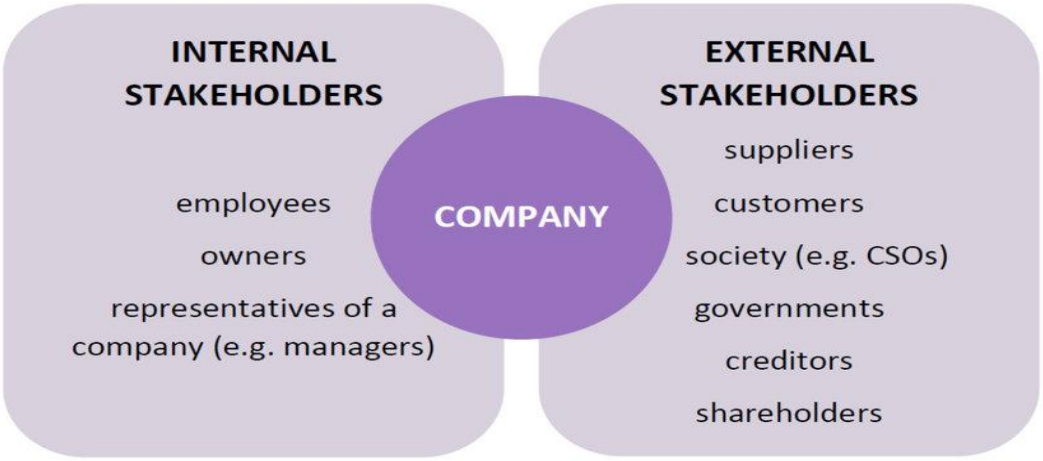


Fig 1: System user case diagram.

A use case diagram is a visible illustration of how a user would possibly interact with a system program. Also, a use case format depictsthe system's several use cases and distinct kinds of users. The circles or ellipses are used to depict the use instances. Use case diagram of this system represents the UML illustration of use cases in the project. The use case in this project shows the major ways on Quick cash a mobile financial service system. After that, it will be broken or sectioned on a specific use case. Basically, use case diagram tools of creating, present, and understanding the functional requirement for a system. Also, the usecase diagram describes the main context in which the system is too used.On this system, the use case basically shows the communication between user and system, and how to use the system to cash transactions on mobile on this project.

6. Stakeholders analysis:

In software development, the stakeholder is an important term in the project. Basically, the stakeholder is a person or group or company, or organization who may affect, be affected by itself, or be affected by a decision or interest of outcome of a project. Stakeholders are also affected negatively or positively in a project. A project is successful when it achieves its objective and meets or exceeds the expectations of the stakeholders. To participate in the project, strong stakeholder engagement and ongoing communication are required. As a result, stakeholders play a critical role in the project. In our project, there are two types of stakeholders. The first type of stakeholder is an internal stakeholder, while the second type of stakeholder is an external stakeholder.



Internal stakeholder: Those who are worked internally in a company are considered an internal stakeholders. Employees, owners, managers, and developers are examples of internal stakeholders.

- Employee: The primary internal stakeholder will be the employee. Employees have significant financial and time investments in the organization, and they play a key role in the organization's strategy, tactics, and operations.
- Owners: Owners are one of the internal stakeholders of a system. They can easily manage their organization and play an important role in their own company or organization.
- Manager: Managers are also internal stakeholders of a project. Managers manage the full team of a project. He also manages employees for the company's performance in order to keep employees' jobs and be paid.
- Developer: Developers have the technological know-how to advise executives on which features are feasible and how long they will take to implement.

External stakeholder: People who are not internal working for a company or system, but are impacted by its action and outcome in some way. Suppliers, government, customers, society, creditors, and shareholders are examples of external stakeholders.

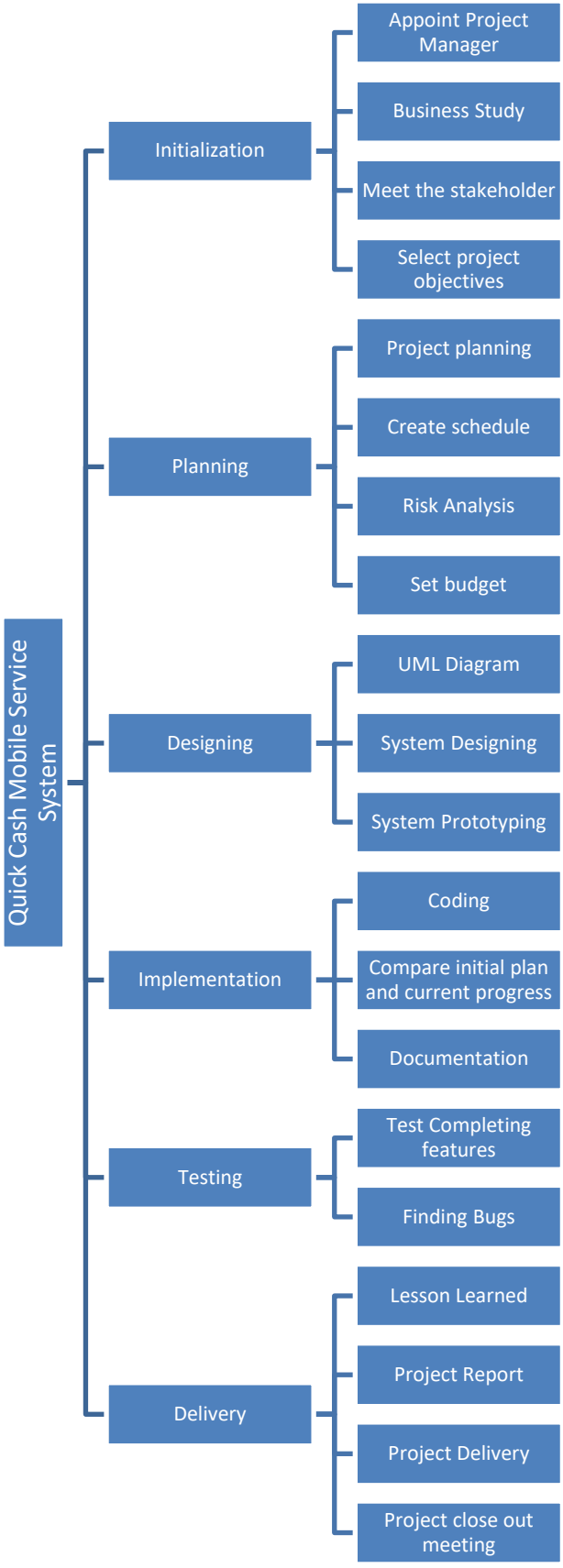
- Suppliers: Suppliers provide a company with the raw materials or components it needs to make its products. A business may rely on a single supplier who produces a superior or rare, good, in which case the supplier is given special consideration.
- Government: In all businesses, the government is an external stakeholder. It is, in fact, one of the most important stakeholders because it collects taxes from these businesses in the form of corporate income tax and employee income tax.
- Customers: Customers are the most significant external stakeholders. These are the people who will consume the company's final products or use its services. They thus determine whether a business succeeds or fails, despite not being involved in its day-to-day operations.
- Shareholders: They are linked to your company because they own stock. As a result, projects that affect stock prices directly affect them.

In our project, the system owner, manager, and developers are the internal stakeholder, and the government, users or customers, and shareholders are the external stakeholder.

7. Feasibility study:

In this section, we will discuss the solution. As the globe tactics the top of technical success, our country is doing its pleasant to hold up with the rest of the arena by digitizing its traditional processes, and those choose to clear up their issues online rather than offline. Our approach is the handiest online-based strategy for the following hassle. Once this challenge is finished, all of us concerned will advantage. To complete this project, we need to use the online cash payment system method. The website contained sections for the admin panel, user panel, system panel, and management panel. Due to time constraints and lack of competence, the design changed into produced in large part. But the concept can be given a comprehensive, high-overall performance gadget with more time and effort. This gadget turned into designed to supervise, govern, and regulate the complete management machine. If this system was given to the professionals, they may use their understanding to put off whatever barriers the gadget may additionally have. It’s like how excessive user access can slow down the system and perhaps result in temporary blocking. Due to the missions of a consumer base, there may be still more work to be done in the future. In order to prevent multiple people trying to access the system from being stuck, it must be consumer-friendly and speedier for the customers. To prevent hacking or unauthorized management of the project's safety, it must be administered through a professional. The venture desires quite a few efforts to be one of the finest control internet tasks. However, if we set a cut-off date for completion, it could be high-priced. The value of hiring professionals, the timeline, and the amount of hard work positioned into this task will all rely on these elements. However, hiring experts like developers and programmers might enhance the tasks' performance and charge.

8. System Component:


Quick Cash Mobile Service System
Initialization
Appoint Project Manager
Business Study
Meet the stakeholder
Select project objectives
Planning
Project planning
Create schedule
Risk Analysis
Set budget
Designing
UML Diagram
System Designing
System Prototyping
Implementation
Coding
Compare initial plan and current progress
Documentation
Testing
Test Completing features
Finding Bugs
Delivery
Lesson Learned
Project Report
Project Delivery
Project close out meeting

9. Process Model:

The word ‘process’ emphasizes the idea of a system in action. In order to achieve an outcome, the system will have to execute one or more activities- this is its process. This applies to the development of computer-based applications. In our project, we would like to choose the waterfall model as our process model.
The waterfall model is a classical model of system development. It is also known as the ‘one-shot’ or ‘once through’ model. This model is suitable for a large project which has a limited scope of iteration. It is suitable for systems with well-defined requirements. Additionally, this model is not suitable for systems of high uncertainty and high complexity. Since our project is quite large but not so complex or not so uncertain in use, we can choose the waterfall model for its development.

10. Efforts estimation:

As our software provides financial services, we choose a small team, consisting of software developers and a team lead. Our team members have a minimal amount of experience with the problem and previous experience of working with a similar project. In order to estimate the effort, we have chosen the COCOMO model and after analyzing all the components we are assuming that the SLOC (Source Lines of Code) we need is =15000.

Since this app falls under the criteria of an organic type project, we have

- coefficient (c) = 2.4
- Project complexity (p) = 1.05,
- T = 0.38

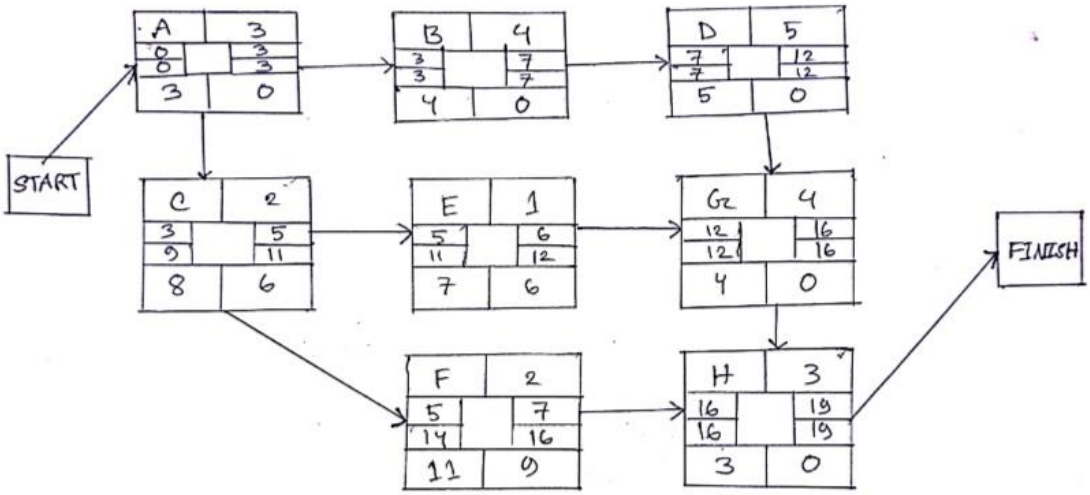
Effort =PM= Coefficient*(SLOC/1000)^p
=2.4*(15000/1000)^1.05
=41.2199

Development Time = DM = 2.5*(PM)^T
=2.5*(41.2199)^0.38
= 10.2726 = 11 [In months]

Required number of people = ST
=PM/DM
= (41.2199/10.2726)
= 4.0126= 5

11. Activity Precedence Network Diagram:

A= Hardware Selection
B= Software Design
C= Install Hardware
D= Code and Test Software
E= Check All Hardware
F= User Requirements
G= User Training
H= Test System



12. Risk Analysis:

The dangers associated with this program depend on its capabilities. Some of the risks might be anticipated in the future. As many manual tasks that employees and workers commonly perform will be automated by the program. If the plan is put into action, several employees and people will lose their jobs. This app also raises numerous security issues. Since it involves the exchange of money and personal information, it would be a target for scammers, information thieves, and criminals. There will be a lot of private data exchanged through the app. If any security system is breached, hackers

will be able to get critical information, which would be a serious loss for any organization.
During an emergency, the app may run into a big number of users, which could make it difficult to handle and frequently prevent it from offering any services. This can leave a bad impression on users. Managing this app could be crucial, and any mistakes could result in significant losses for the bank. So mismanagement by the officials and authorities could be a risk to its performance.

Risk Check List:

- Product size (PS),
- Business Impact (BU),
- Customer characteristics (CU),
- Process definition (PR),
- Development Environment (DE),
- Technology to be built (TE),
- Staff size, and experience (ST).

S/N	Risks	Category	Probability	Impact	RMMM (Risk Mitigation, Monitoring, and Management)
1	Change in requirements later in cycle	PS	35%	2	Talk with users to determine the best course of action, and have team discussions before making changes.[1]
2	Inaccurate time estimate	PS	30%	2	Make several estimates
3	Surpassing budget	BU	25%	2	There should be some additional funding, and the budget should be expertly assessed.

4	Server failure	TE	20%	3	Ensure You're Equipped with the Right Server
5	Developers unable to solve critical problems.	DE	45%	2	Hiring quality developer of the related technology stack
6	Unmatched hardware and software requirement	DE	10%	4	Proper background research and select the best hardware or software components that are available.
7	Communication problem over system issue	CU	15%	3	Build better relations with users, improve customer services
8	Security failure	TE	40%	1	Ensure proper quality tests and conduct security risk assessment[2]

Impact values:

Catastrophic - 1
Critical - 2
Marginal - 3
Negligible - 4

13. Budget Estimation:

Duration in weeks = 9*4 = 36 weeks Office days

= 5 days

Working hours = 8 Hours

So, per week working hours is = (5*8) hours = 40 hours So Total Working

hours is = 40*36= 1440 hours.

Developer salary is = 1000 Taka/ Hour Total

developers Salary = (1000* 1440)

= 1440000 Taka

Expanse	Amount	Total Amount
Salary for 3 developers		1440000 Taka
9 months office of rent	9*20000	180000 Taka
Requirement analysis Cost for 3 weeks	15*8*700	84000 Taka
4 months' Maintenance cost	16*10*1200	192000 Taka
Travel Cost	9*2000	18000 Taka
Total Cost =		1914000 Taka
15% of total cost =		287000 Taka
Now the total cost is =		2201000 Taka

14. Conclusion:

The mobile financing industry is growing at an excellent pace. Our project aims to help people in their busy life. People will be beneficial if they use our Quick Cash app. They can send money, add money, and pay bills by using our Quick Cash app. To retain the market leader position Quick Cash will be introduced new services in the future. Our motive is not to make money, our motive is to help people in their daily busy life. We hope people will like our app and will use it in their daily life.