

Managing Union Parishad Monitoring System Effectively by Project Implementation Through Scheme Tracking

Md. Kamruzzaman
Student Id: 012191017

A Project
in
The Department
of
Computer Science and Engineering



Presented in Partial Fulfillment of the Requirements
For the Degree of Master of Science in Computer Science and Engineering

United International University

Dhaka, Bangladesh

October, 2021

©md.kamruzzaman, 2021

Approval Certificate

This project titled " **Managing Union Parishad Monitoring System Effectively in Project Implementation Through Scheme Tracking**" submitted by **Md. Kamruzzaman**, Student ID: **012191017**, has been accepted as Satisfactory in fulfillment of the requirement for the degree of Master of Science in Computer Science and Engineering on October 24, 2021.

Board of Examiners

1.

Suman Ahmmed
Asst. Professor and Director of CDIP
Department of Computer Science & Engineering
United International University
Dhaka -1212, Bangladesh

Supervisor

2.

Prof. Dr. Hasan Sarwar
Department of Computer Science & Engineering
United International University
Dhaka -1212, Bangladesh

Examiner

3.

Dr. Mohammad Nurul Huda
Professor and Director MSCSE Program
Department of Computer Science & Engineering
United International University
Dhaka -1212, Bangladesh

Ex-Officio

Declaration

This is to certify that the work entitled “**Managing Union Parishad Monitoring System Effectively in Project Implementation Through Scheme Tracking**” is the outcome of the project carried out by me under the supervision of Suman Ahmmed, Asst. Professor, Dept. of CSE.

Md. Kamruzzaman

Department of Computer Science and Engineering
MSCSE Program
Student ID: 012191017
United International University
Dhaka-1212, Bangladesh

In my capacity as supervisor of the candidate’s project, I certify that the above statements are true to the best of my knowledge.

Suman Ahmmed

Asst. Professor and Director of CDIP
Department of Computer Science & Engineering
United International University
Dhaka -1212, Bangladesh

Abstract

Over the previous decade, Bangladesh has had rapid growth in various development directories, ranging from the economy to human and social development. The designation of the 'Digital Bangladesh' strategy, which uses ICT (Information and Communication Technology) as a tool for growth and sustainability, was one of the major instruments for attaining Vision 2021. Keeping this in mind, this report attempted to identify the digitalization practice gap in Bangladesh local government authorities such as Union Porishod and its small words, as well as to find a possible solution for better project management through the implementation of digitalization practices. Country's internet connectivity, mobile phone usage, and access to public services have all increased exponentially as a result of increasing digitalization in the public and private sectors. However, government development initiatives in rural regions are not finished to a sufficient level due to a lack of efficient use of digitization.

Acknowledgement

I would like to convey my sincere gratitude to my Project Supervisor in particular Mr. Suman Ahmed as well as my Examiner Chief Prof. Dr. Hasan Sarwar who gave me the golden opportunity to do this wonderful project on the topic of “Managing Union Parishad Monitoring System Effectively by Project Implementation Through Scheme Tracking”. This opportunity also helped me in conducting extensive research and allowing me to learn about a series of different topics and I owe them a sense of gratitude.

I would also like to convey my gratefulness to my classmate, who assisted me much in completing this assignment within the deadlines.

Table of Contents

Chapter 1.....	1
1.1 Introduction.....	1
1.2 Present Situation of Bangladesh Local Administration Management.....	1
1.3 Scope of Improvisation.....	2
1.4 Goals and Motivation of The Project.....	3
Chapter 2.....	4
2.1 System Study and Literature Review	4
2.2 Detail Study of The Present Situation	4
2.3 Literature Review	4
2.4 Solution for Local Government in Bangladesh For Project Management	7
2.5 Study of Benchmark Products	10
Chapter 3.....	10
3.1 Requirement Analysis.....	10
3.1.1 Functional and Nonfunctional Requirements	10
3.2 System Design	12
3.2.1 Data Flow Diagram (DFD).....	12
3.2.2 Use-case Diagram.....	14
3.2.3 Class Diagram.....	15
3.2.4 Time Sequence Diagram.....	16
3.2.5 Database Design and Normalization	16
Chapter 4.....	18
4.1 Summery of Implementation	18
4.2 Technology	19
4.3 Software Architecture.....	19

4.4 Screen Shots with Features	19
4.4.1: Login Page	20
4.4.2: Dashboard.....	20
4.4.3: Approved Project Management	21
4.5 Document Storage Management.....	23
4.6 Scheme/Project Search	24
4.7 Send SMS	25
Chapter 5.....	26
Conclusion	26
References.....	28

List of Tables

2.4 Study of Benchmark Products.....	10
3.1.1 Scheme Tracker Functional Requiremen.....	12
3.1.2 Meeting Tracker Nonfunctional Requirement.....	13
4.1 Summery of Implementation.....	18

List of Figures

2.2.1 Overview of System Integrated Model.....	9
2.2.2 Construction Image with GEO Location.....	10
3.3.1 Data Flow Diagram (DFD).....	14
3.3.2 Use-Case Diagram.....	15
3.3.3 Class Diagram.....	16
3.3.4 Time Sequence Diagram.....	17
4.3 Software Architecture.....	19
4.1.1 Login Page where All Level of Users Will be Able to Login with Authentication..	20
4.2.2 Dashboard of Ward Level User.....	20
4.3.1 List of Scheme/Project.....	21
4.3.2 Add Scheme/Project.....	22
4.3.3 Edit Scheme/Project.....	22
4.3.4 Project Geolocation Management.....	23
4.3.5 Access Control List (ACL).....	24
4.5 Document Storage Management.....	25
4.6 Scheme/Project Search.....	26
4.7 Send SMS.....	26

Chapter 1

1.1 Introduction

In Bangladesh, over 80,000 meetings are held each year in the Union Parishads or local govt offices. After the meeting resolution, Bangladesh govt deploy different types of project to improve the infrastructure development in educational institutes, roads and culvert etc. in the Union Parishads area and its words. With the reference of earlier data, it has been found that almost 70-80 thousand of government projects were carried out all over Bangladesh which, approximate value is BDT 1000+ crore. It is difficult for the government to implement those projects effectively and ensure the quality of works and to proper monitoring to the Scheme's progress.

1.2 Present Situation of Bangladesh Local Administration Management

Though Bangladesh govt are aiming to implement the electronic system in every govt office to make things easier, but yet it is not that plain and simple. Most of govt office still operating their commutation system manually to updates their meeting resolutions as they still doing this reporting in the written form through hard copy document. For that, Ministry or audit department still facing difficulties to verify the progress quickly and effectively since the digital practices still missing in the local govt areas. As a result, very often we see that total projects funds were withdrawn or taken by the contractors without completion of the project.

In the real scenario, it is not possible to verify the progress of each project without visiting the construction location. So, without any verification there may have a high chance to approve the fund of the relevant project without being visiting or verifying the WIP. If we continue the existing practice, the dream of Digital Bangladesh cannot be established in a rural area and without proper implementation of the digitalization the infrastructural development will also remained corrupt.

The government of Bangladesh can overcome this situation if we can change the entire communication system with change of digital conversion. If we use our resources properly

to implement the digital system in every local govt offices then it is possible to manage all schemes with effectively.

1.3 Scope of Improvisation

There are enormous opportunities and scopes exist to reform the present situation through digital project/scheme tracking. It is essential to ensure each scheme monitoring to meet the deadline for completion of the project, the progress of scheme monitoring is very important. It is also important for effective fund management for the approve government project.

If we can collect all the necessary information digitally, there will a transparency to ensure the WIP for individual scheme or project. We can track down the progress and based on that necessary steps can be taken to improve the situation if any project are lagging behind from its target of completion date. By using the appropriate digitalization, we can make public awareness by informing the date & stretch of the project accomplishment through automated SMS which can be done very competently in this method. There are enormous opportunities and scopes exist to reform the present situation through digital project/scheme tracking. It is essential to ensure each scheme monitoring to meet the deadline for completion of the project, the progress of scheme monitoring is very important. It is also important for effective fund management for the approve government project.

If we can collect all the necessary information digitally, there will a transparency to ensure the WIP for individual scheme or project. We can track down the progress and based on that necessary steps can be taken to improve the situation if any project is lagging behind from its target of completion date. By using the appropriate digitalization, we can make public awareness by informing the date & stretch of the project accomplishment through automated SMS which can be done very competently in this method.

List of objectives for Scheme Tracker Projects

- To work on approved ward meeting information. Required information will be kept including the scheme name, financial year, date, etc. into the database.
- Keep the safeguard information into the database. It will help to ensure whether safeguard information has been updated in the database.

- To keep the accomplishment of project in the registry. So that the authority can maintain the procurement process of this scheme.
- To collect the recent pictures with geolocation before the project is started. So that we can see the pre-adoption position of the scheme.
- To collect time to time updated pictures with geolocation during project implementation time. So that the authority can verify the progress of the scheme.
- To gather recent pictures with geolocation after completion of the project. So that we can see the complete position of the scheme.

1.4 Goals and Motivation of The Project

The goal of this project is to ensure the information to the persons who are involved with the development phases in different projects/schemes so that they can easily access the information to make the decision in every phases of the project implementation. As soon as we can introduce scheme management through digital systems all over the Bangladesh, the success of each development projects will be ensured automatically because of effective monitoring system. By doing so, govt will be able to reduce the corruption of project implementation and project delay will be minimized and people will get the benefit of this transparency.

Large of the population of Bangladesh still living in the rural area of each Union Porishads and its small words. One of the significant features of the development in the rural areas will be ensured through the practice of digitalization of the local govt offices. The tremendous challenge is to ensure the practice of digitalization in those govt office in order to ensure the infrastructural development of those areas.

Chapter 2

2.1 System Study and Literature Review

Large of the population of Bangladesh still living in the rural area of each Union Parishads and its small words. One of the significant features of the development in the rural areas will be ensured through the practice of digitalization of the local govt offices. The tremendous challenge is to ensure the practice of digitalization in those govt office in order to ensure the infrastructural development of those areas.

2.2 Detail Study of The Present Situation

The Union Parishod still keeping all scheme records and its detail in hard copy. So, for any investigation, concern persons need to invest lot of time to complete their investigation which to some extent is waste of money and time. As a result, govt struggle to reduce the corruption due to the lack of effective communication system.

2.3 Literature Review

This Study is conducted to find out a possible solution to in order to improve the digital communication and practice for better Governance in Bangladesh Upozila and its small words. In order to do that, a large number of literatures were review to justify the proposed solutions.

District Council, Upazila (sub-district) Parishad, and Union Parishad are the three levels of rural local administration in Bangladesh. Bangladesh is attempting to convert its highly centralized management structure through digitalization to enhance local government institutions, based on the provisions of effective communication system. In this vein, the functions of the Upazila Parishad, a middle-tier LGI with a suitable territory and population for planning and development initiatives, have lightly improved in recent years. The UNDP-funded Upazila Governance Project (UZGP) demonstrates the successful implementation of enhanced ADP in a number of pilots Upazilas, begins overall capacity development for Upazila Parishad chairs and key line department (NBD) staff, and begins to promote Upazila long-term development planning. However, numerous obstacles remain in the way of decentralization and improved governance at the Upazila level.

Bangladesh local government functioned based on Upazila, it has been established within two other covering, Union and District. Each Upazila is different from the other one by its size and number of existing infrastructures. Govt allocate its fund considering the requirement of development schemes. Though the local administration as of now not well-established and it has many confrontations. In this regard, we have an obligation to monitor an extensive and integrated project to strengthen local governance emphasizing remarkably on Upazila as an indispensable association to realize distributed and effective supply shipment to the local districts all over the country.

Through regional governance, for each project there are large amount of standard project management actions is taken into consideration. In better Project management there are three significant foundations: time, quality, and budget. The proposal and the awarded project which is successfully completed within the scheduled period, within finances, and presenting the aspect standards.

A part of project success is depending on how well the four key conditions are aligned with the circumstantial dynamics that always affecting the project; these are the four P's as follow;

- Plan: Preliminary and estimated action plan of the project
- Process: The overall approximate to all exercise and project governance.
- People: Including changes in how they participate and connect.
- Power: Lines of government, decision-makers, policies for the application of the project.

there is hardly any well-defined research has been done on the local administration scheme/project management in Bangladesh. To handle Project management local government has the administration system to achieve specific objectives of the development projects. In this place, project management in local government and a further section are bounded by a number of distinctions. To make a proper local government administration, proper research is need to be done. In that case, three factors need to be considered which are time, resources, and money. These are the inevitable factors of any project. On the other hand, there is also some other aspect for successful project management in the local government. For each project some safeguards are needed, and by digitalization its can be ensured. This is the main objective of project management is to

works on the project successfully within time frame by utilizing the existing resources. The principal of any project management the scope, time, condition, and funds (PMI, 2013) are the key indicators to be achieved. In this regard, we have to determine the plan for developing the scheme/project in local government. Every single project of local government has some procedure such as how we should start its launching phase

- Preparation phase
- Executing phase
- Regulating phase
- Actualizing phase

Through effective project management we can see a graphical presentation of the entire project life cycle from the inception stage to the conclusion. Each and every stage is very stressful as there are many obstacles that may be emerged at any moment. Bangladesh local government faces many problems how project management can be maintaining smoothly from the initiating stage to the closing stage because of many factors. But there are some basic activities can be performed before beginning the work that is essential for a project. The architecture of any project is depending on its directions, management proposition and proper planning(Phillips,2004). In Bangladesh perspective, there are lot problem arise from the different stakeholders during the successful implementation of project management. Whenever any good initiatives are taken to improve the present situation of project management it hampers by the corrupt system which has been developed from long back. . This corrupt system hampers during any schemes/projects implementation time.

The current situation of any project mainframe is not workable for local government of Bangladesh. There are lot of issue behind the present scenario as well as the analogue system which is given below;

- Scarcity of resource
- Political interference and instability
- Bureaucratic complexities
- Lack of skilled manpower
- Ineffective examination

- Absenteeism of permissible responsibility
- Absenteeism of outlining between the political commissioner and civil servant
- Point in time shortage
- Deficiency of people's involvement
- Absenteeism of emergency outline for emergency situation

2.4 Solution for Local Government in Bangladesh For Project Management

Ensure the Participation of Different Local forum

Apart from political representatives, there must have some citizen's regulatory forum where local people will participate in the decision-making process. During the entire project implementation phase all the local forums and other related stakeholders will be connected and will be accountable for their actions.

Liability and Clarity

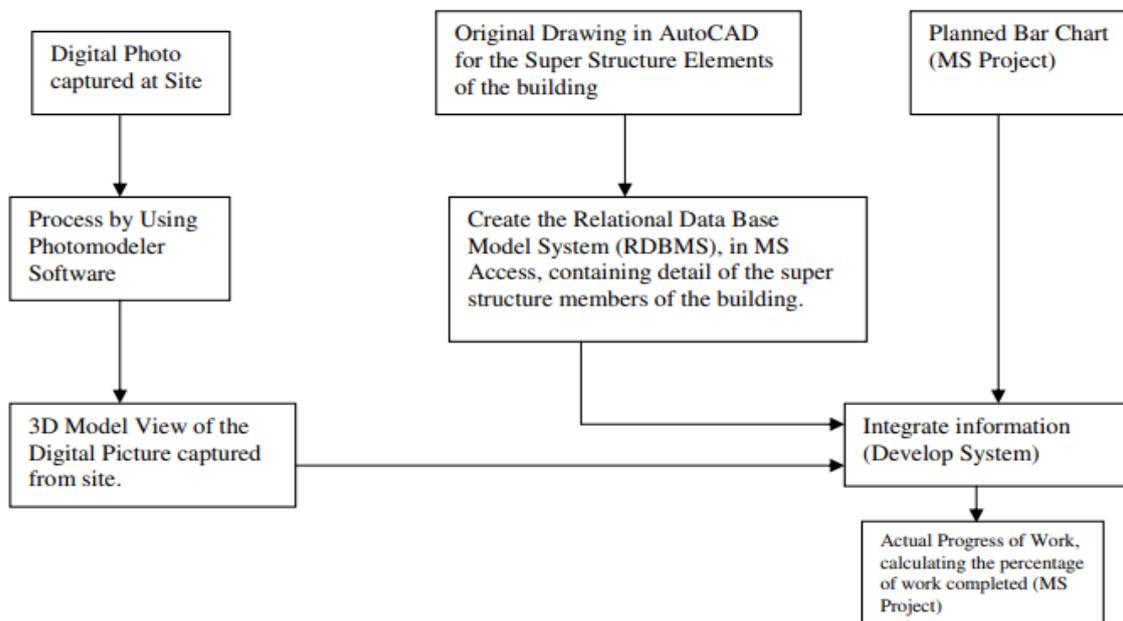
If we can ensure the liability and clarity in every stage by the local administration which also be justified by a detectable approach and the transparency of budget allocation also need to be published for the local people. (Islam, 2015). The present liability and clarity approach also need to be improved where all the local government office and related bodies will be accountable for their actions.

When any political govt changed in the country, at the same time elected political party reform and reschedule all the development initiatives that has been taken by the earlier political govt. This is a present scenario of the country. But the local government system is stable and work according to their own. . Considering this scenario if we can implement the proper digitalization in local govt office then all the development projects can be successfully completed.

With the support of the digitalization, Steering Committee, project operational team, domain knowledge based specialized team, Field coordination team, Monitoring team, and admin/finance support team, each of them will be able to complete their job effectively., . If the monitor cell can perform smoothly, even though in every Union Parishad many

schemes/projects run in a single period of time therefore, each project can be completed properly. Without effective digitalization practice, none of the project can be completed successfully on due time. In this regards a digital monitoring system can make an opportunity to review all schemes with proper justification. [7]

Some study report focused on information flow throughout construction projects, and a number of computer programs have been developed to help support this area. However, we have not found a thoroughly comprehensive treatment for monitoring and updating the physical progress of work and to develop the progress bar chart. A major detachment of the system is to develop the unified computer systems which can disciple 2D digital photo to 3D Model by using the photo-graphed technique, develop the database, and replicate the 3D coordinate values to develop the Actual progress bar chart. A simplified illustration of these values to develop the Actual progress bar chart. A simplified illustration of this Model is shown in the figure.



2.2.1: Overview of System Integrated Model

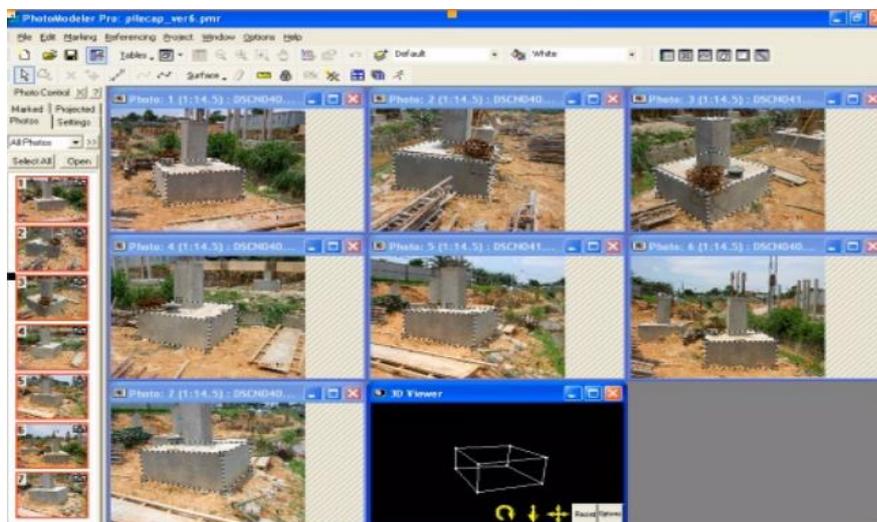
Digitalizing the construction phase is the recent demand of Malaysian Construction Production, the second-largest industry, to the instrument, the Tele-Construction approach in the development sector. This study is one part of this approach. The major object of developing this model is to develop the link between the existing methods of evaluating

and monitoring the real development of the structure scene with modern mechanization by the progress of Artificial Intelligence to echo the human brain.

The oncoming simulation is considered to be a manipulability bustle that is perspicuous to admittance by different project lineup associates. The fundamental aspiration and the extension of the system are as follows:

- To trim the volume of time spent copying, manufacturing, and advertisement reports;
- To advance the capture and control of the project and action status.

The incorporation of digital images will enable building managers to develop progress reports more consistently and accurately. And more correct as-built project schedule will be conveyed to the facility administrator so that the information can provide the corporate knowledge of the facility for the operation and maintenance, renovation, and demolition. The DCM model will enable the project managers to improve the decision-making process, productivity and reduce delays. [6]



2.2.2: Construction Image With GEO Location

2.5 Study of Benchmark Products

Products	Features
Institutional Strengthening of Gram Panchayats (ISGP) Program II Panchayats & Rural Development Department, Government of West Bengal https://www.mis.wbprd.gov.in/	<ul style="list-style-type: none"> • Tenders • Reports • Geographic Information System (GIS)
Kerala Local Government and Service Delivery http://lsgkerala.gov.in/en	<ul style="list-style-type: none"> • Waste Management • File Tracking • Plan Progress
Integrating project management across government operations https://www.pmi.org/learning/library/integrating-project-management-government-operations-6525	<ul style="list-style-type: none"> • Projects increasingly operate across boundaries. • Better stakeholder management.
Government Project Management Software from GovSense https://govsense.com/project-management/	<ul style="list-style-type: none"> • Project Management • Fund Management • Asset Management

Chapter 3

System Analysis and Design

3.1 Requirement Analysis

After obtaining literature review, we found this requirement analysis.

3.1.1 Functional and Nonfunctional Requirements

3.1.1 Scheme Tracker Functional Requirement

ACTORS	REQUIREMENT	DESCRIPTION
--------	-------------	-------------

Union Parishad User	<ul style="list-style-type: none"> • Approved Project/Scheme <ul style="list-style-type: none"> • View • Search <p>Status</p> <ul style="list-style-type: none"> • View Attendance • Update Project/Scheme <p>Login</p>	<ul style="list-style-type: none"> • Union Parishad users will be able to view and search schemes in every ward under respective Union Parishad.
Upazila User	<p>View</p> <ul style="list-style-type: none"> • View scheme <p>Search</p> <ul style="list-style-type: none"> • Search project/scheme <p>Status</p> <ul style="list-style-type: none"> • View Attendance • View Project/Scheme <p>Login</p>	<ul style="list-style-type: none"> • Upazila users will be able to view and search resolution in all wards under respective upazila.
District User	<p>View</p> <ul style="list-style-type: none"> • View scheme <p>Search</p> <ul style="list-style-type: none"> • Search project/scheme <p>Status</p> <ul style="list-style-type: none"> • View Attendance • View Project/Scheme <p>Login</p>	<ul style="list-style-type: none"> • District users will be able to view and search resolution in all wards under respective districts.
Administrative User	<p>View</p> <ul style="list-style-type: none"> • View scheme <p>Search</p> <ul style="list-style-type: none"> • Search project/scheme <p>Status</p> <ul style="list-style-type: none"> • View Attendance • View Project/Scheme <p>User</p> <ul style="list-style-type: none"> • Add user • Edit user • Delete user • View user <p>Login</p>	<ul style="list-style-type: none"> • Administrative users will be able to view all modules and also admin users will be able to create users.

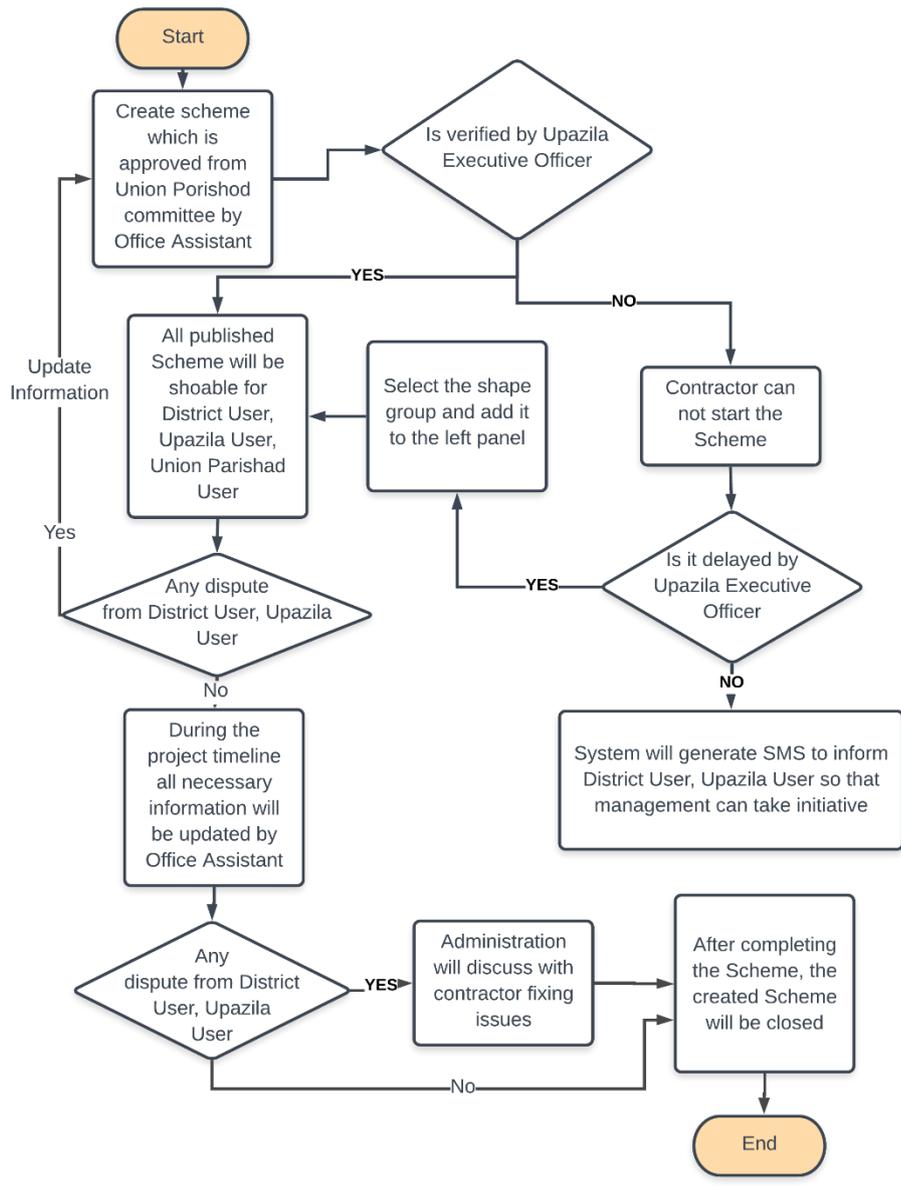
3.1.2 Meeting Tracker Nonfunctional Requirement

REQUIREMENT	DESCRIPTION
Operability	<ul style="list-style-type: none">• The system will be developed under web-based system.• The system will run on any device browser.
Maintainability	<ul style="list-style-type: none">• This application is specially for web based
Security	<ul style="list-style-type: none">• This system will provide only registered user to login.
Performance	<ul style="list-style-type: none">• As soon as the data inserted every registered user will be able to see the data.

3.2 System Design

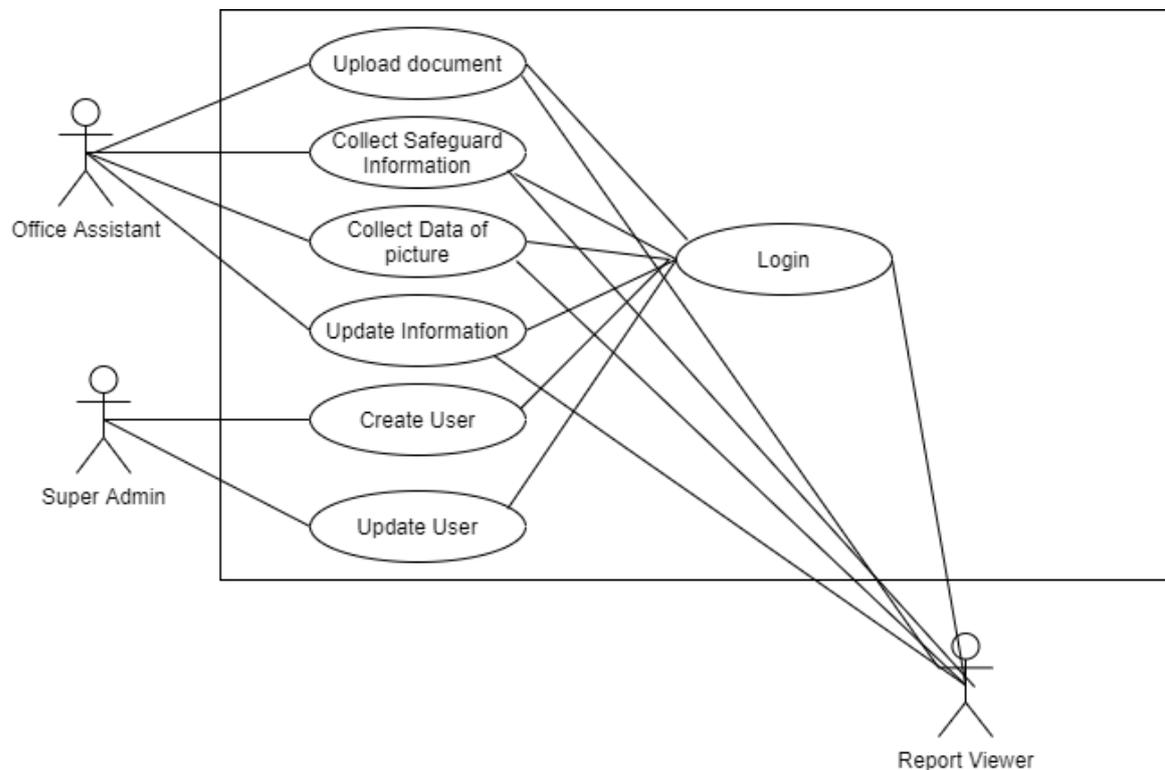
List of Figures

3.2.1 Data Flow Diagram (DFD)



3.2.1: Data Flow Diagram

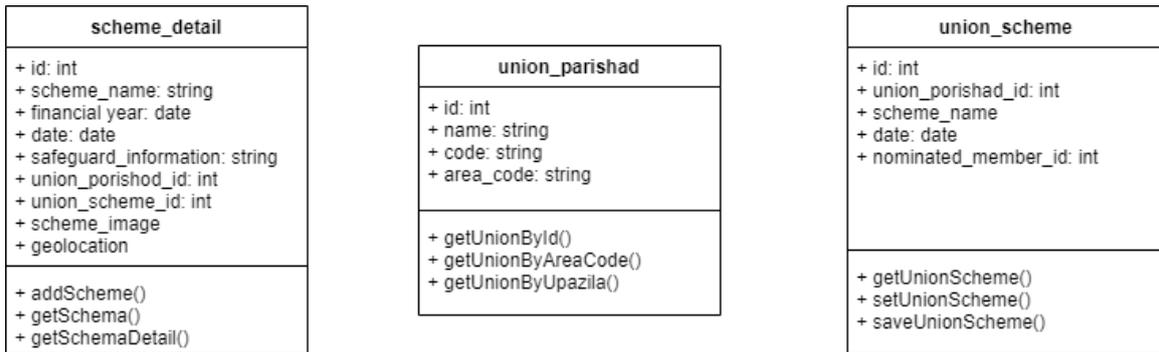
3.2.2 Use-case Diagram



3.2.2: Use Case Diagram

In this system, two types of users can give entry directly. All other users can view the report according to the user access level. Admin can create and update all user access levels. The user who is an office assistant, can add schemes and give input for the regular update. The update comes from the field investigation. To do all actions and view reports, the user must need to do login into the system.

3.2.3 Class Diagram



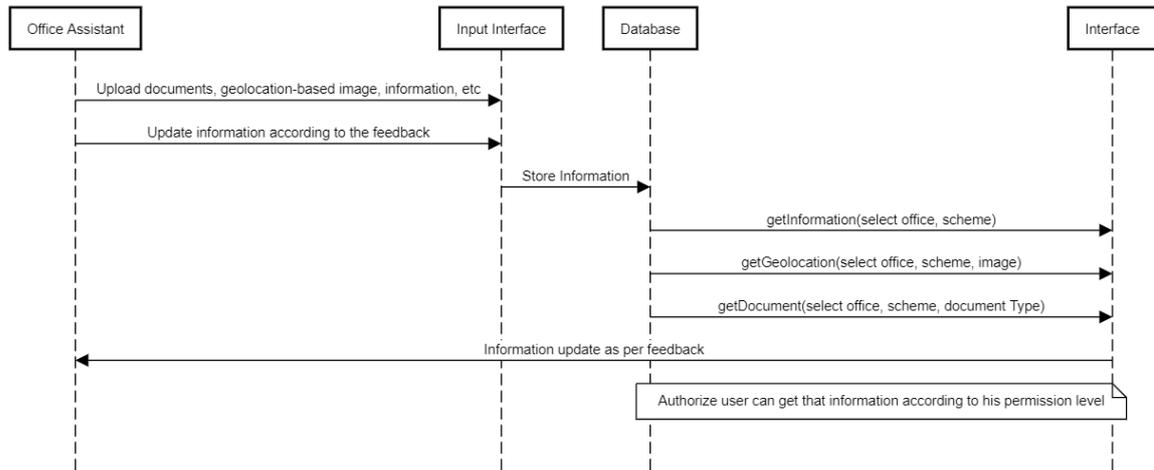
3.2.3: Class Diagram

In the class diagram, only the basic entity has been shown. Every scheme needs to enter into the system. Here scheme name, start date, end date, geolocation, and others information are being listed in this entity.

Every scheme belongs to any union porishod. So, union porishod is also an entity in the class diagram.

Union porishod and scheme are one-to-many relations. so that I have given another entity named 'union scheme' for relation union porishod and schemes.

3.2.4 Time Sequence Diagram



3.2.4: Time Sequence Diagram

After field level audit, responsible person will submit the information regarding the scheme like, picture with geolocation, last expense in the project, safeguard update, etc.

Office assistant will keep that information in the system against the scheme history. Authorize user will check and they can evaluate according the update of the scheme. If there is any inconsistent input, office assistant can update information which providing by management of audit user according the official rule.

3.2.5 Database Design and Normalization

Normalization is the technique of database design. Normalization has been used for designing a relational database table up to a higher normal form. The higher level of database normalization cannot be developed unless the previous levels have been completed.

First Normal Form (1NF):

- Rows in table uniquely identified with primary key
- Stored data in individual columns

- No repeating group

Second Normal Form (2NF):

- Derived all from 1NF
- Primary key is stored in each table related to data

Third Normal Form (3NF):

- Derived all from 2NF
- No dependencies between the columns in each table

Chapter 4

Proposed System

4.1 Summery of Implementation

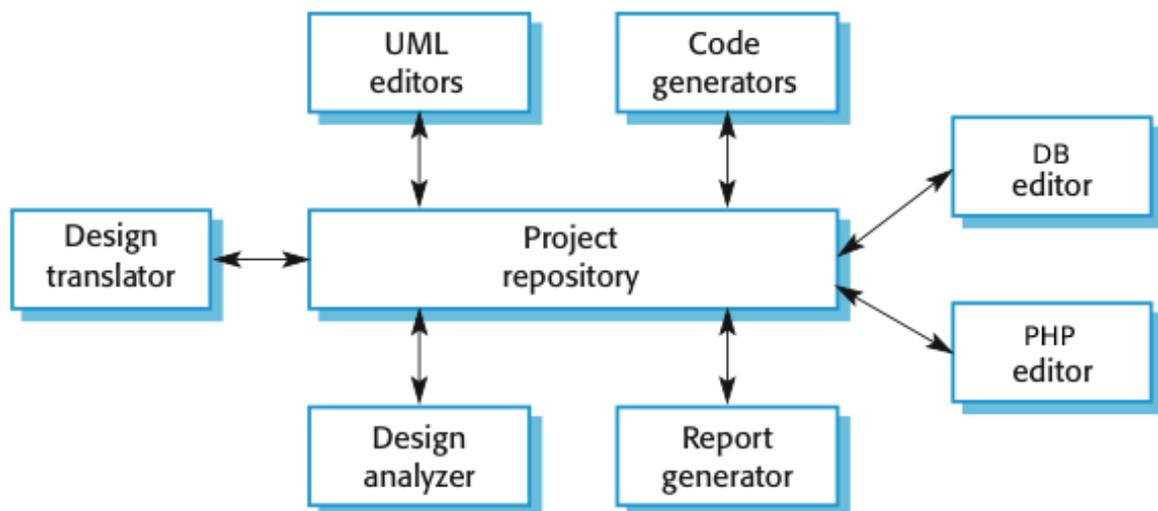
Requirement Description	Completed	Remarks
User Management <ul style="list-style-type: none">• Create user• View user• Search user• Delete user	Yes	
User Access Management <ul style="list-style-type: none">• Grant user permission	Yes	
Settings <ul style="list-style-type: none">• All division data (view, edit, delete)• All district data (view, edit, delete)• All upazila data (view, edit, delete)• All union parishad data (view, edit, delete)	Yes	
Scheme Management <ul style="list-style-type: none">• Create Scheme• Upload GEO based picture• View location update• Search scheme	Yes	Digital mobile, camera is needed to collect exact data
Document Management <ul style="list-style-type: none">• Store scheme document• View scheme document• Search scheme document	Yes	
Meeting Management integration	Yes	

<ul style="list-style-type: none"> • Collect all info through API • Search all info through API 		
Scheme Search <ul style="list-style-type: none"> • Search Scheme 	Yes	
Send SMS	Yes	Send SMS using API

4.2 Technology

- Cloud Hosting Server
- Attendance machine
- GPS enable camera
- PHP language
- Apache Server
- jQuery
- Bootstrap
- MariaDB

4.3 Software Architecture

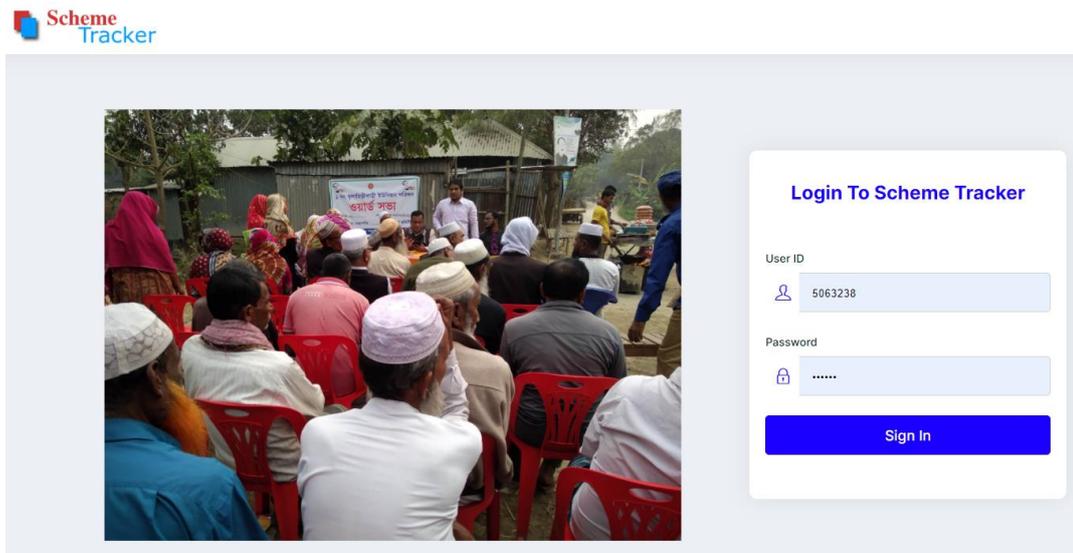


4.3: Software Architectural Diagram

4.4 Screen Shots with Features

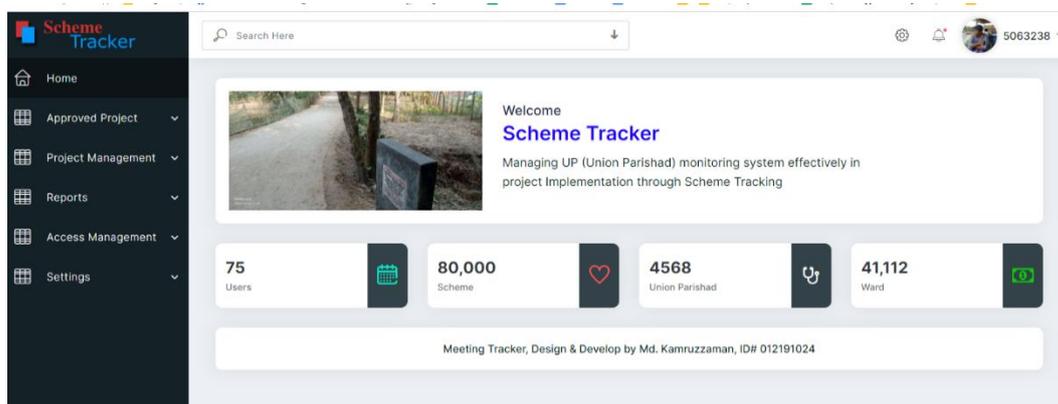
4.4.1: Login Page

This page is used for authenticate users who can login in the system. To login in this system every authenticate user must have their User ID and Password to delve into the system. There are total five types (Administrative, District, Upazila, Union and Ward) of user level and each level of user will get login this same login system. Based on their user role they will get option in their dashboard.



4.1.1 Login Page where all level of users will be able to login with authentication

4.4.2: Dashboard



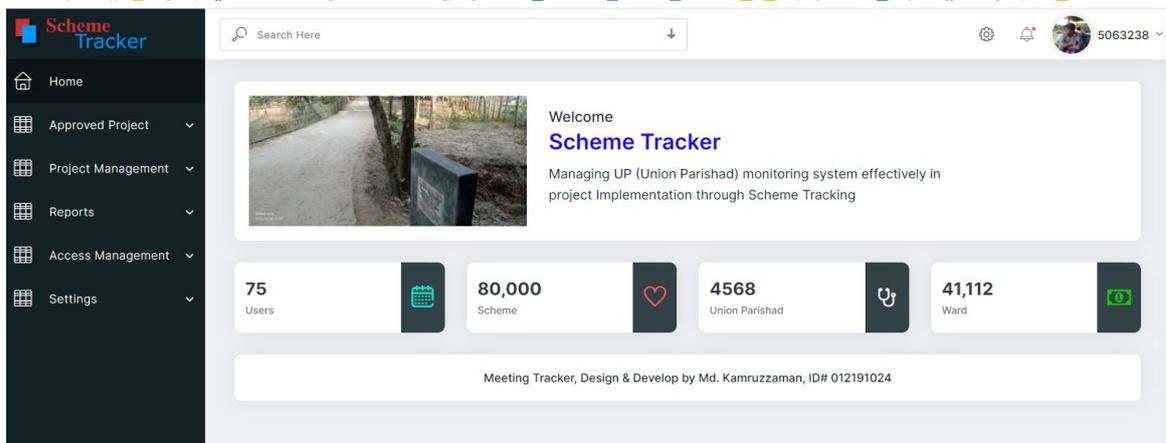
4.2.2 Dashboard of Ward Level User

After successfully login into the system every user will be redirected to their dashboard based on their permission given by the administrator. On the left side of the dashboard, user can navigate their menu based on permission.

4.4.3: Approved Project Management

4.4.3.1: List of Scheme/Project

All approved project will be viewed in this panel. Authenticated user can perform his task according his permission. Here the project option are navigated.



4.3.1: List of Scheme/Project

4.4.3.2: Add Scheme/Project

From this interface authorize user can add the project latest progress information from here.

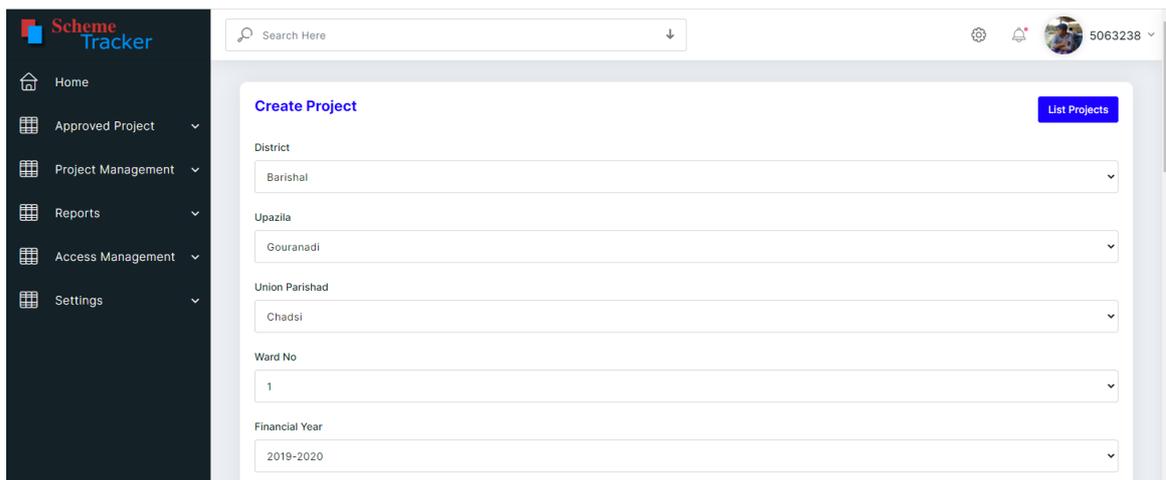


Figure 4.3.2: Add Scheme/Project

4.4.3.3: Edit Scheme/Project

From this interface authorize user can update the project progress information from here.

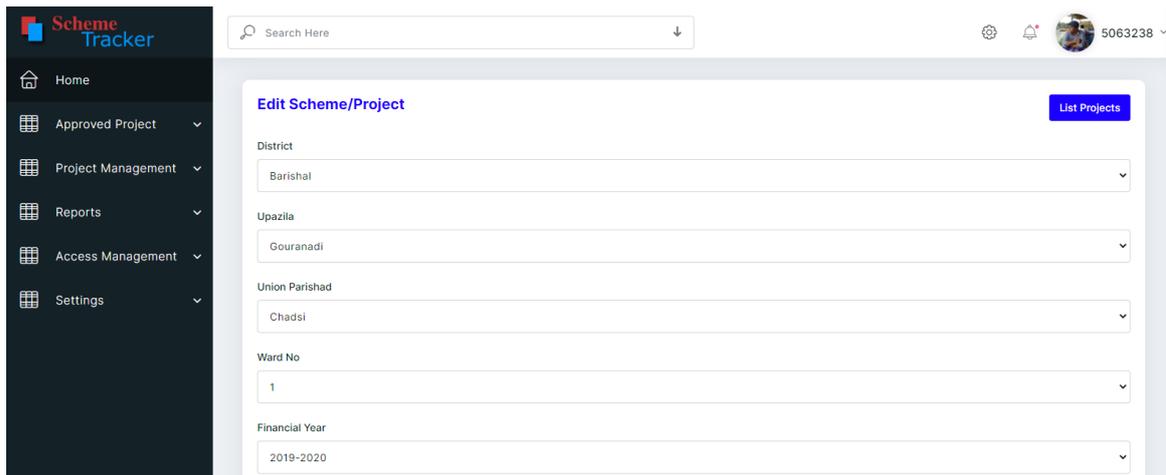
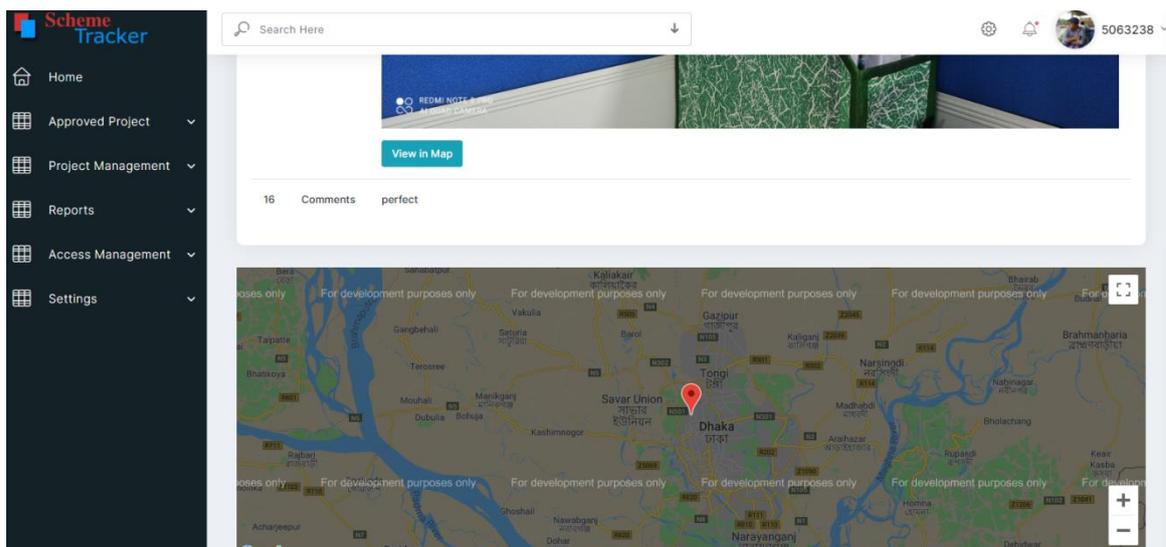


Figure 4.3.3: Edit Scheme/Project

4.4.3.4 Project Geolocation Management

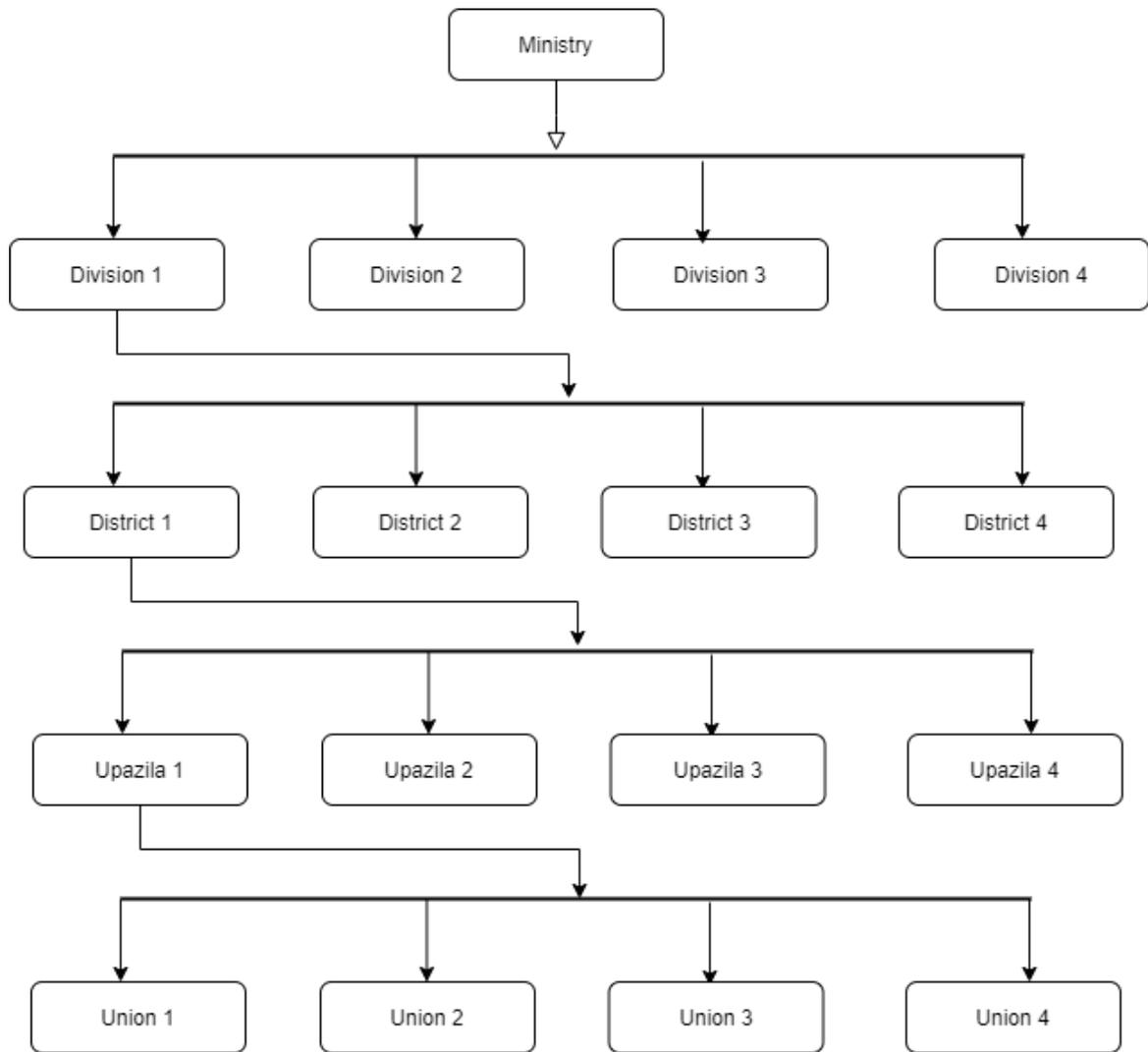
Uploaded project picture geolocation can be viewed through google.



4.3.4: Project Geolocation Management

4.4.3.5: Access Control List (ACL)

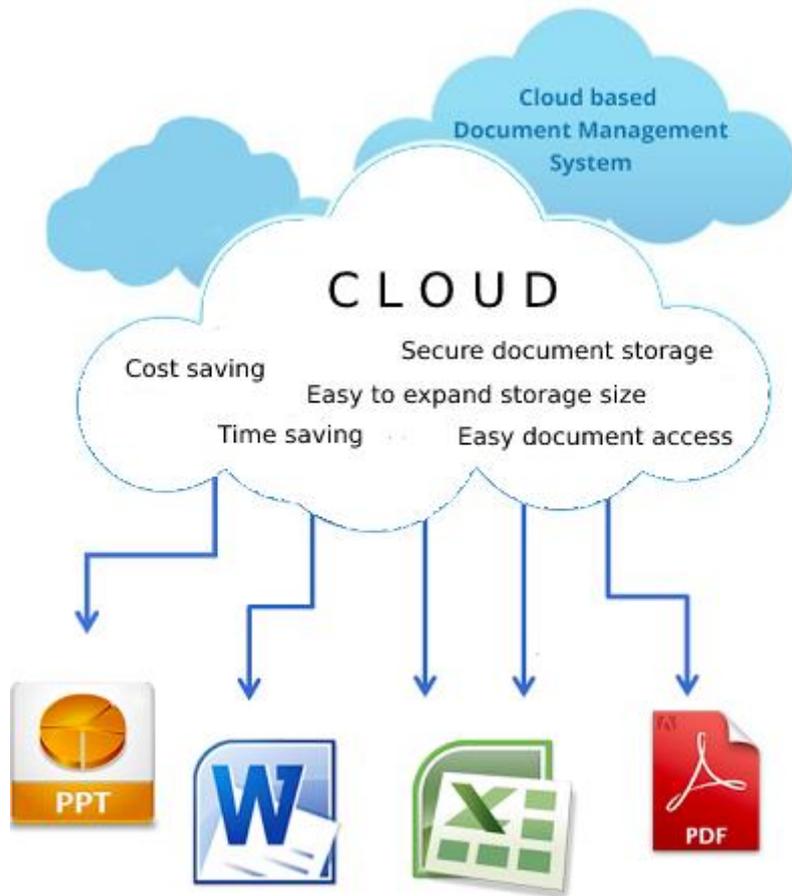
In this picture I am showing the access wise view and edit permission information.



4.3.5: Access Control List (ACL)

4.5 Document Storage Management

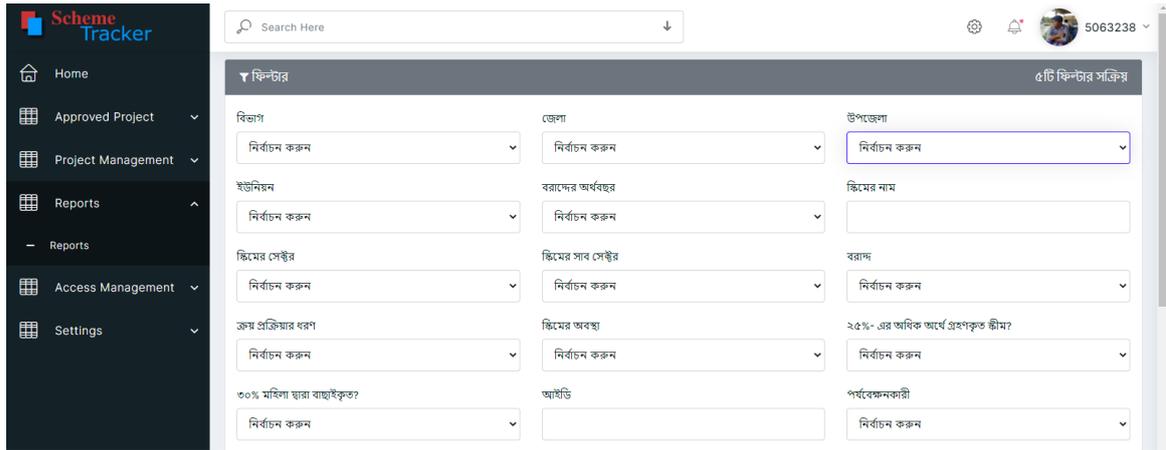
Here the storage concept is showing how it will be scalable storage.



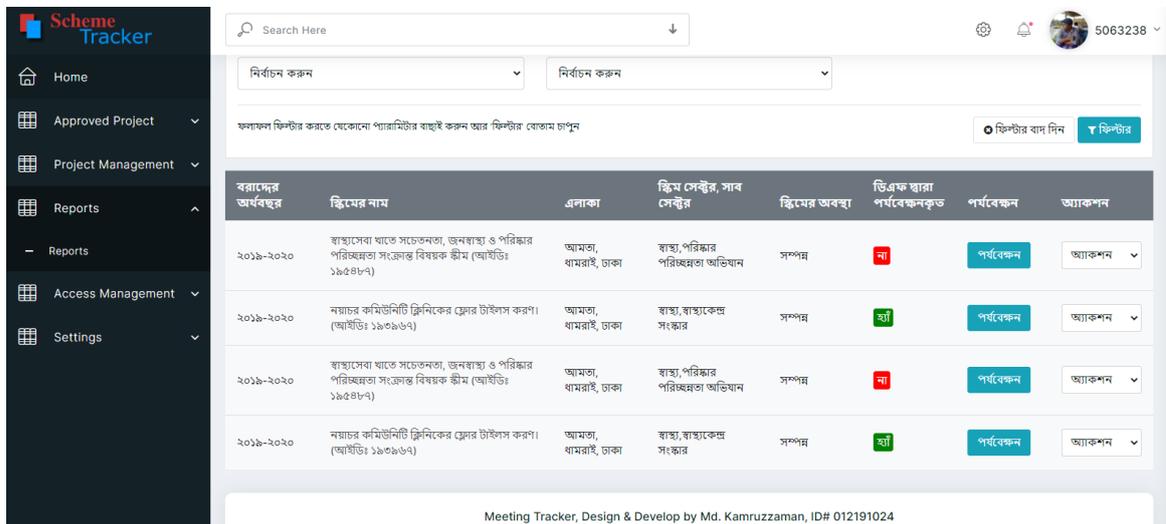
4.5 Document storage management

4.6 Scheme/Project Search

In this picture the Project/Scheme search criteria section is being shown.



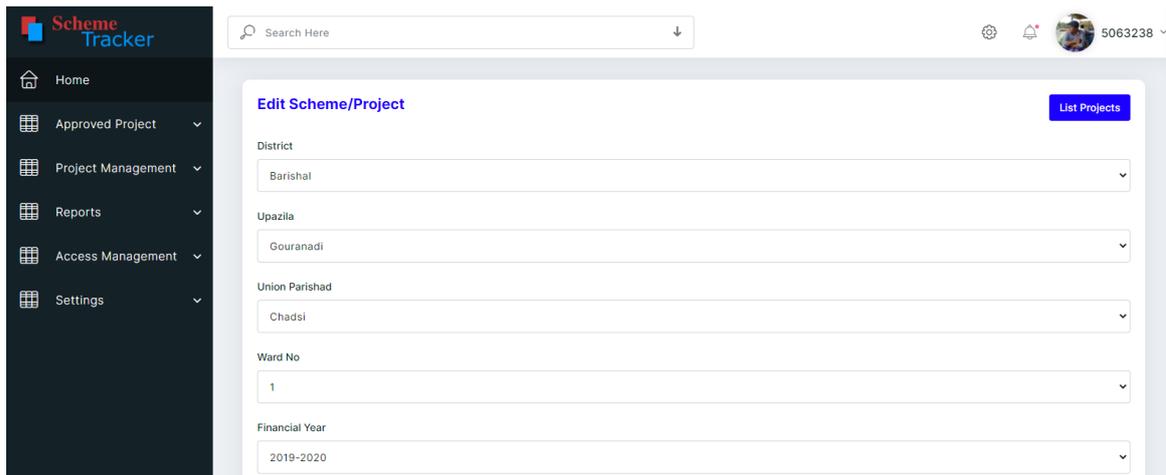
4.6 Scheme/Project Search (1)



4.6 Scheme/Project Search (2)

4.7 Send SMS

Single and bulk SMS can be sent to specific user or user group.



4.7 Send SMS

Chapter 5

Conclusion

We live in an information-based world where knowledge and information are the primary sources of resources. The terms "reduced distance and time," "increased productivity and diversity," and "change" are some of the most often used terms or phrases to characterize an information-based society. Bangladesh is a south Asian country with a slew of issues that have a significant impact on the country's socioeconomic situation. Without effective participation of local rural people, any country cannot reach its desired goals. To improve local development and to meet the current country mandate "DIGITAL BANGLADESH," the use of ICT for providing services at the local level, as well as the implementation of E-government in every local government office, are crucial.

Future Directions

Image geolocation system can be the future direction of this project as we know we can collect exact view of the location through geolocation, it is a more secure and faster technology than any other investigation for project/scheme management. Using the digitalized model, a responsible person does not need to go in the scheme/project location rather system will instinctively capture documents of the scheme/project's latest update. Image geolocation particularly will be very effective in this pandemic situation.

References

1. The Study of the Upazila Governance and Development Project in the People's Republic of Bangladesh;
2. An automatic project progress monitoring model by integrating auto cad and digital photos
3. Project Management of Local Government in Bangladesh: Challenges and Remedies
4. Programme Title: Union Parishad Governance Project (UPGP)
5. Institutional Strengthening of Gram Panchayats (ISGP) Program II Panchayats & Rural Development Department, Government of West Bengal
6. Kerala Local Government and Service Delivery
7. Integrating project management across government operations
8. Government Project Management Software from GovSense