# Bongo Nirman

# Presented by Group #7

#### **Group Members:**

■ S.K. MOSTOFA MASUD | 20-42790-1

■ MD. ABDUL HAMID | 20-42602-1

■ MD. MAHINUR RAHMAN | 20-43821-2

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Department: Computer Science and Engineering, American International University Bangladesh

#### Guided by,

MD. NAZMUL HOSSAIN

Lecturer, Computer Science and Engineering, American International University Bangladesh

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# 1. OBJECTIVES

20<sup>th</sup> century Bangladesh have improved in lots of sectors. But in rural area a lot of works are yet to be done. For improved and better life for the rural people, updated social infrastructures are needed. The country has problems such as draught in northern and eastern part, problems like hill collapse for heavy rain in western part and loss of life and property due to cyclone and many other natural disasters in northern part. Also, this country has higher population density compared to other countries. A report published in World Population Overview (2020) that in every square mile the number of people is living in is 2,889. For such problem we need better architecture to stop future problems. Also, the rural region is being developed in a unmonitored way after the remittance has started entering from the labor force working in abroad.

There are many models of social infrastructure and rural architecture which other society can follow. But all will not be appropriate for the society of the rural area depending on the landscape and lifestyle of the habitants. So, for a perfect plan all advantages and disadvantages needed to be considered by introducing a collaboration between habitants, Architects, Engineer and Authority.

Our software will accommodate models of suitable infrastructure and plans. Varieties of architectural idea for different rural landscape can be presented on this platform. Expert personal and renowned architect can give opinion or concern on it. People can have query about those design or plan. When the plan is chosen, by the rural people authority they can buy the blueprints, also they can hire experts and engineers for doing their required work.

# 1.2 Scope

- Varieties of ideas on architecture for different rural landscape.
- Expert plan for developing social infrastructure.
- Improve the existing model according to the people needs.
- Architects' opinion on this platform for short time problem.
- Give jobs to the people who are involved with the planning.
- Regularly monitoring for future problem and find solution by collaboration in a healthy community.

### 2. PROPOSED SYSTEM

We are introducing a software as a solution to bring collaboration between those who are used to in solving such problems and those who are habitants and wants to implement an idea. This is an open platform in which a user can provide their ideas and a user can also implement that idea. Using this open platform where a user can also hire architects to implement their project. With the carefully planned policy of this platform, it will offer specialist in this field who are well fit for the job. Those who have implemented the idea from this platform they can share their experience (how much sensible the idea was to implement in real life, how long it took to implement the idea, how much cost it took to implement the idea) regarding the idea. That will help those habitants who are searching for an idea and also help those who are new in this this architecture field. The software is going to be so convenient and easy to use that finding an architect and getting architectural ideas can be done less than a minute.

# 3. SOFTWARE REQUIREMENT SPECIFICATION

# 3.1 Functional Requirements and Specifications

This software consists of several specifications and features to serve the prepose. This software will be developed while considering the variants of the user. This software will be easy to use, light weight, user friendly for the people who are even, hardly introduced with technologies.

#### 3.1.1 Newsfeed

- The program has a Newsfeed that can be accessed by only users.
- Users (Architects, Engineers) will share their proposed projects and experiences.
- Users (Habitants, Contractors, UP chairpersons and so on) may share their sites, real life implementation of projects and experiences.
- Written Post, Image files and other design related files can be displayed on the Newsfeed.
- Users can like, comment, and share any post.
- A special post can be displayed on the newsfeed which will be designated as questions and only users with specialist badge (Architects, Engineer, person with authority in UP) can reply.
- Any post can be deleted by the user who posted it.

#### 3.1.2 Profile

- Profile will be as simple as it can be.
- As people with various background will have profile page minimum amount of personal data will be stored.
- Only specialists (Architects, Engineer) will have their portfolio page and professional information.
- Login feature will be used to access this profile page.
- Users can log in using their phone number or email address and password.
- OTP will be sent in mobile number or email to reset password in a case when user forgets his or her password.
- Name or personal id number (if user want to hide name), age and district, mobile number will be stored and displayed in the Profile Page.

#### 3.1.3 Personal Portfolio

- This feature will store and showcase personal projects, blueprints related Image files and other file types.
- Only specialist user will be able to have this Personal Portfolio
- Specialist can upload, edit and remove the files any time they want.

#### 3.1.4 Documentation Library

- This section of the software will hold various information related to rural architecture.
- Only admins and editors of the program can add, edit and remove in Documentation Library.
- Any user can contribute to that library, but the editor will review the contribution before adding them.

#### 3.1.5 Market Place

- In this section of the software there will be a Market Place where architecture related services (design, architecture hiring) and building materials can be sold.
- Users can post advertisement to hire local labor force for projects.
- Any user can buy, sell and post advertisement in this Market place.
- To use the Confirm selling, buying or posting advertisement a user has to go through verification.
- Sharing personal contact will be strictly prohibited to prevent any unethical dealings in this Market place.

## 3.2 System Features

#### 3.2.1 Admin

- Admin can log in to the system.
- Admin can access both public and private information of customer.
- Admin can use user Id number to reveal his or her name.
- Admin can verify user in Market place.
- Admin can reset customer password.
- Admin can add or delete editor in the Documentation section.
- Admin can delete user account.
- Admin can edit or delete any post on the Newsfeed.
- Admin can verify specialist user account.
- Admin can delete advertisement, job or product post in the Market place.
- Admin can turn off comment option for any post on Newsfeed.
- Admin can delete comments of any posts or answer of any questions.
- Admin can manage database.
- Admin can response in help and support section.

#### 3.2.2 User

- User can register an account and create profile.
- User can log into his or her personal profile.
- User can change his or her name and age any time.
- User can see post and answers of questions.
- User can like, comment or share any post.
- General user cannot answer questions.
- User can post general post and questions on the Newsfeed.
- User can upload all available type of file on the Newsfeed.
- User can turn of comment option on his or her own post.

- User can delete any comment on his or her own post.
- User can access Documentation.
- User can contribute to the Documentation section.
- Contribution of a user will be reviewed before publishing.
- User can access Market place.

#### 3.2.3 Specialist user

- A specialist user can be and Architect, Engineer or Contractor by profession.
- Specialist can register his or her account in a separate way.
- Specialist must verify his or her profession.
- Specialist will have professional details on the profile.
- Specialist can log into the profile.
- Specialist can make general post or question on the Newsfeed.
- Specialist can like, comment or share on the post from Newsfeed.
- Specialist can answer to the questions on the Newsfeed.
- Specialist can access Market place.
- Specialist can post job in the Market Place without any verifications.
- Specialist can have Personal Portfolio section.
- Specialist can add, edit or delete files or documentation in his or her personal portfolio.
- Specialist can have a special permission to contribute in the Documentation directly without any review.

#### **3.2.4** Editor

- Editor can be added by Admins.
- Editor can login with the id and password given by the admin.
- Editor can review anything from the Documentation section and Market place