Detailed Design Document

Project Name	**MinkahEnterprises-EVMT**
Client Name	**MinkahEnterprises**

Chetu Contacts

This section should list all Chetu team members.
Note: All Chetu emails are of the format: FirstnameLastnameinitial@chetu.com
Note: Chetu (US) team works normal hours EDT and can be reached at: 954-342-5676.
Note: Chetu (India) team works 5am-2pm EDT and can be reached at: 954-862-3901.

Name	Role	Location	Responsibility
Tushar Tyagi	Team Member	India	Application Development
Amit Kumar12	Team Lead	India	Architecture, design & development & guiding TM
Anand Kumar4	Shared QA	India	Quality Analyst (Shared resource)
Jeetendra Keshri	Project Manager	US	Managing overall project & Main point of contact

Client Contacts

This section should list all customer contacts including project champion and business users.

Name	Email	Entity	Responsibility
Dom Senior	domsr1234@gmail.com		Owner
Dom Senior	minkahenterprises@gmail.com		

Revision Chart

A new record should be added in this section every time a user updates this document.

Ver. #	Date	Author	Change
v.04152022	04/15/2022	Amit Kumar12	INITIAL DRAFT

Document Conventions

- Sections highlighted in **yellow** shall be provided by Client.
- Sections highlighted in **grey** are questions or open items that need to be discussed further.

CONTENTS

1.0 INTRODUCTION

1.1 Overview

MinkahEnterprises is a start-up company creating a solution for Church-based communities to use. Client wants to build a hybrid mobile application for Church community and end users associated with church. There would also be web application for manage backend of mobile app

1.2 Project Objectives

MinkahEnterprises wants to build a Cloud-based SaaS solution where Church-based communities can register and use their system. The objective of this project is to develop a mobile application and web application for this solution.

A church community will have members, so the backend admin should have a Membership management module. Client has shared his ideas as a set of mobile app screens. Church community will follow subscription module where they have to take subscription/membership to use this app and for this MinkahEnterprises will accept subscription charge internally and approve Church.

We have started with mobile app screens (in Xamarin) and backed/API and web application would use MS SQL database for data management.

1.3 Approach Summary

We have to build a mobile and Web application. Our approarch is to review the initial scope and work on mobile app requirements first. We will work step by step for development.

UI Interface wise we will first work on

- App icon
- Splash screen
- Login screen
- Signup screen
- Landing page – list of post
- Chat screen
- User follow and unfollow screen
- Watch screen
- Listen

- Lectures
- Giving – donation to church
- Share on social media app
- About Us
- Suport
- Setting

There will be additional screens we will be working per the workflow and will add in our list as we move forward.

We will follow best practices for coding and some of the standard technical details are as mentioned below for the mobile app development and Web & API development

Mobile Development-

- Visual Studio 2019
- Xamarin Forms
- API
- SQLite Mobile Database

Mobile Development-

- Visual Studio 2019
- .Net Core 5.0
- SQL Server 2019

2.0 FUDs [Fears, Uncertainties and Doubts]

List all assumptions and unknowns

3.0 ENVIRONMENT

3.1 Overview

DEV

- Mobile
  - Language – C#, Xamarin forms
  - IDE- visual studio
  - Mobile will consume Web API

- Web and API
  - IDE- visual studio
  - Language – C#,Dot Net Core MVC
  - MS Sql server for database

3.2 Development Environment

Development and QA environment will be done in Chetu side.

3.2.1.1 DEVICES ONLY IF PROVIDED BY CLIENT. SIMULATOR OTHERWISE

Please specify targeted Mobile devices OS and versions

- iPhone latest, Android Latest
- Web Browsers (Safari, Firefox,Chrome)

3.3 Staging Environment

Client will provide Staging Enviornment.

3.4 Production Environment

Client will provide Staging Enviornment.

4.0 REQUIREMENTS RECAP

4.1 Overview

Initially they want to build a hybrid mobile app (IOS & Android) and business layer for services. Client wants to build MVP (minimum viable product) first to start the business then they will keep adding features to it such as (receipts reader from pdf, integration with loyalty providers etc). They want to extend the scope for loyalty manage (insurance, groceries, streaming, travel, etc).

4.2 Details

MinkahEnterprises wants to build a Cloud-based SaaS solution where Church-based communities can register and use their system. The objective of this project is to develop a mobile application and web application for this solution.

A church community will have members, so the backend admin would have a Membership management module. Client has shared his ideas as a set of mobile app screens. Church community will follow subscription module where they have to take subscription/membership to use this app and for this MinkahEnterprises will accept subscription charge internally and approve Church.

We will build a mobile application in Xamarin using MySQL database for backed/API and web application. App would be built for Android and iOS platform.

Mobile app would need API to communicate with database for real data. We can also start API in parallel based on client decision.

API: - An API layer that communicates to the database. Then the mobile app will use that API to access the database. So all information would be stored in database server, and API layer to communicate with database through mobile app.

Core requirements are:

- Super Admin users should be able to Approve Church community after accepting subscription fees.
- Church Admin can update information about Church, Events, News, and Pastors, etc...
- Church Members will use all the features like to know about church, News flash, events, Pastors, and can Check In whenever they want to visit church or mark their present through mobile app. Member can make donation for Church and add some contribution.

There could some modules based on requirements for mobile app as below-

- User Module
- Role Permission
- Member Check In
- Dashboard
- Donation/Payment gateway Integration
- Manage Group/Member Chat Grouping with in church community
- Share Your truth/Message across church community members

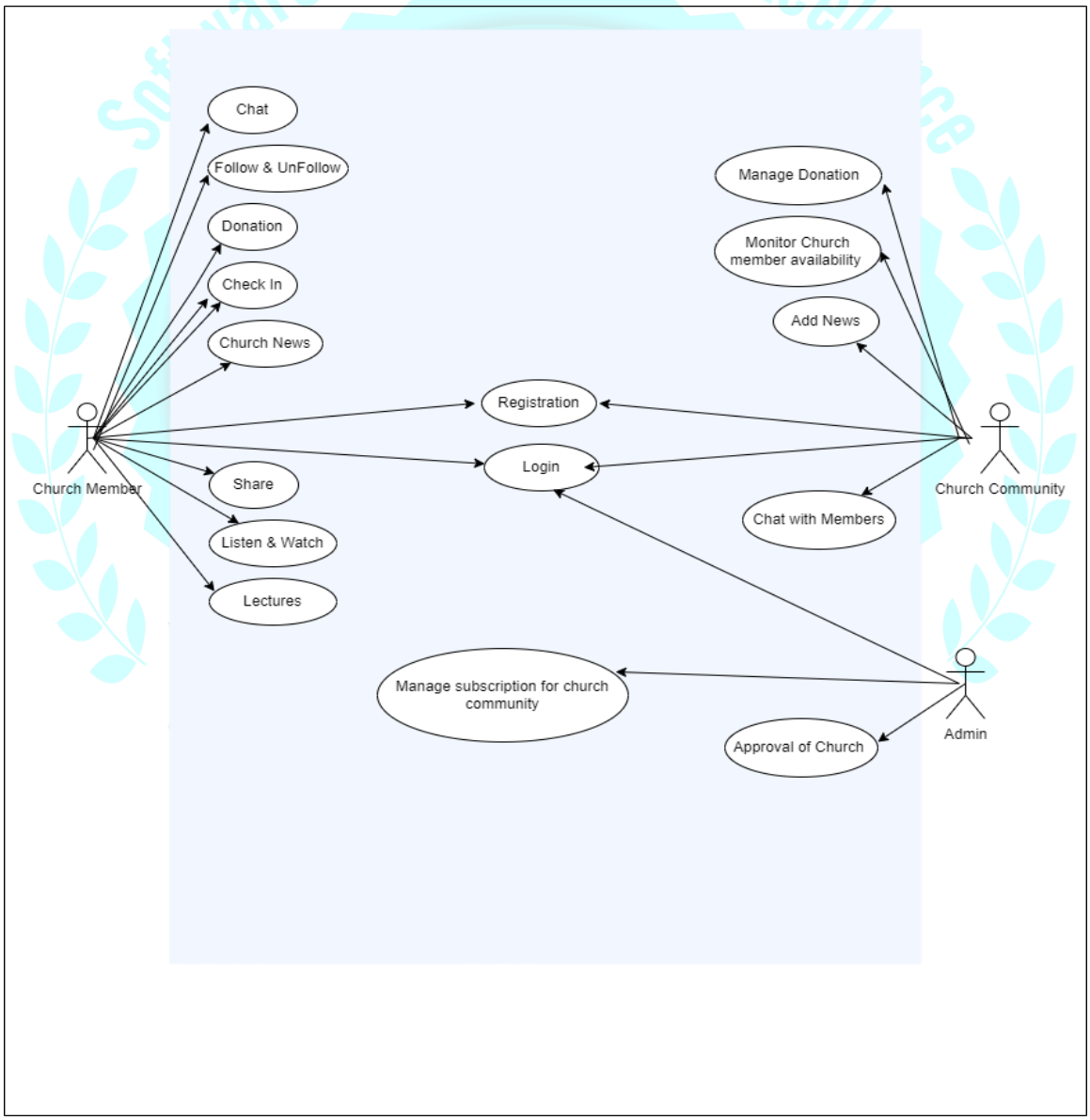
5.0 DESIGN DETAILS

Diagrams

UML diagram of Use Case, Activity and Class.

5.1 Use Case Diagram

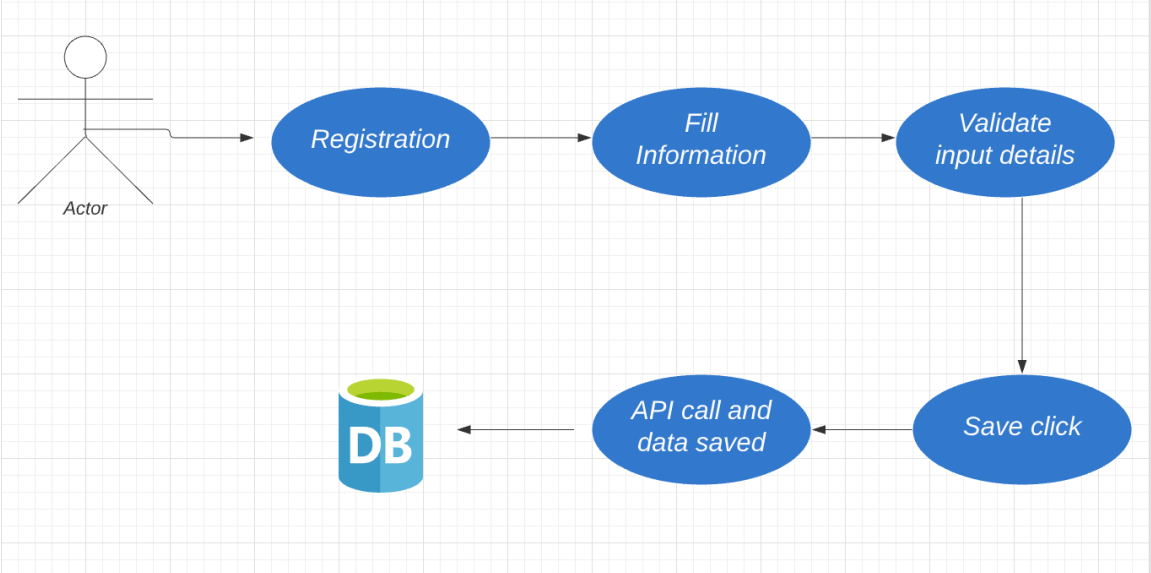
This is sample Use Case diagram, remove this with actual Use Case diagram based on project requirement



5.1.1 Use Case Detail Description

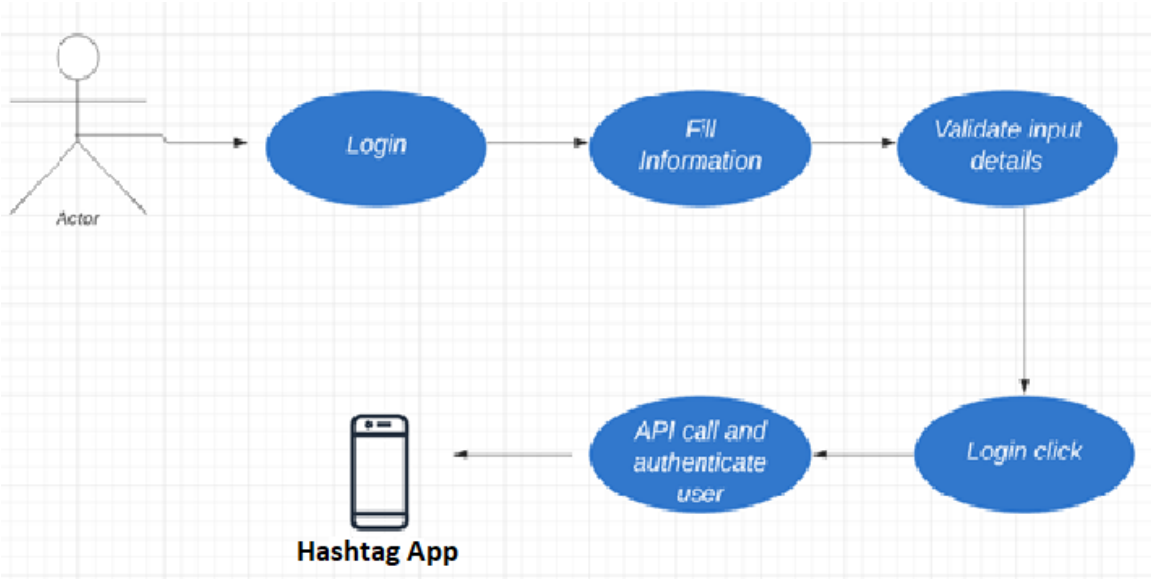
[**Description**: A use case diagram is a graphical depiction of a user's possible interactions with a system. A use case diagram shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses.

5.1.2 <Use-case 1: SignUp>



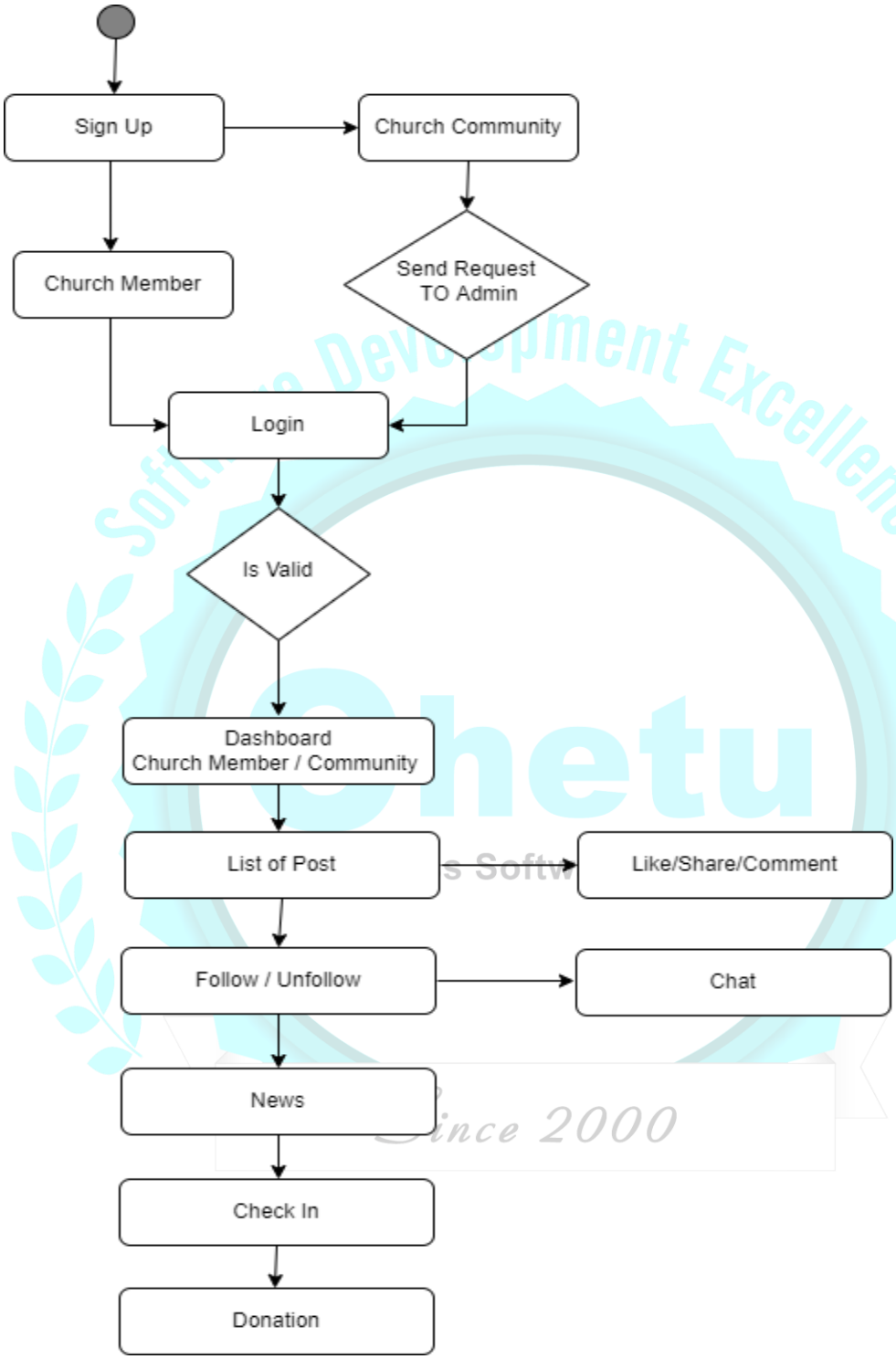
Description	Users register as church member or church community
Scenario identifier	
Date	*15 April 2022*
Revised	
Actors	*Church Member / Church Community*
Pre-conditions	Should require filed content in database.
Actions	Step1:Select create an account option Step2: Fill user information Step3: Application validate the data like name, email, mobile number and password Step4: Call API to store user details in database Step5:click on submit button Step6:access dashboard screen to connect umbrella and events
Post-conditions	After successful register user can login
Uses	Church Member / Church Community Login
Extends	

5.1.3 <Use-case 2: Login >



Description	User login in app
Scenario identifier	User can login in application by email and password
Date	
Revised	
Actors	*Church Member / Church Community*
Pre-conditions	Should correct email and password
Actions	Step1:Open login page Step2: Type user name and password in login page Step3: Click on login button
Post-conditions	After successful login user can app and see all the information of church
Uses	
Extends	

5.2 Activity Diagram

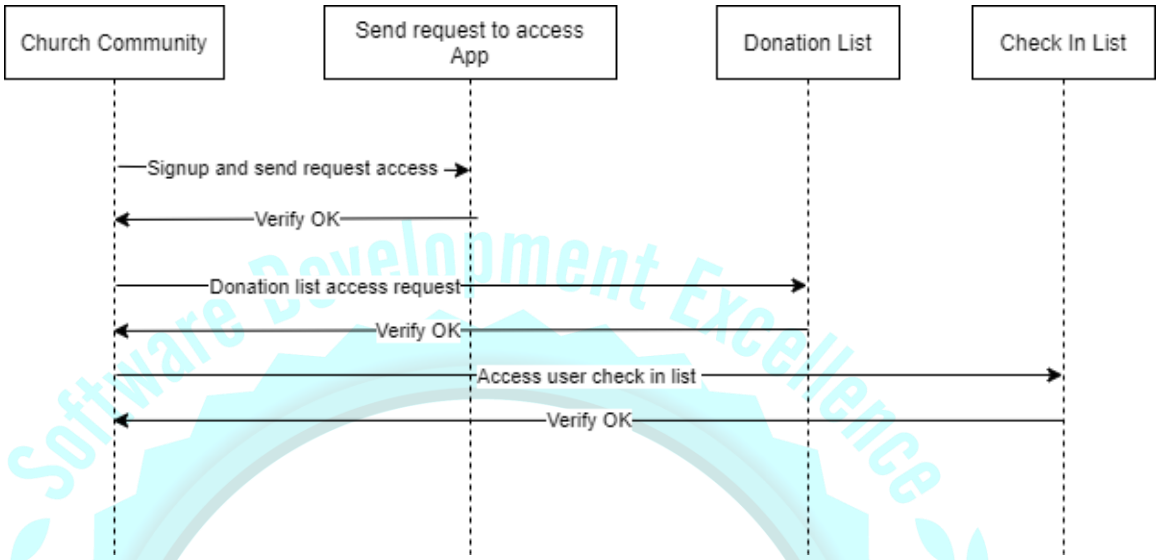


5.3 Class Diagram

Will be updated

5.4 Sequence Diagram

This is Sequence diagram that explained the Application flow.



6.0 User Interface

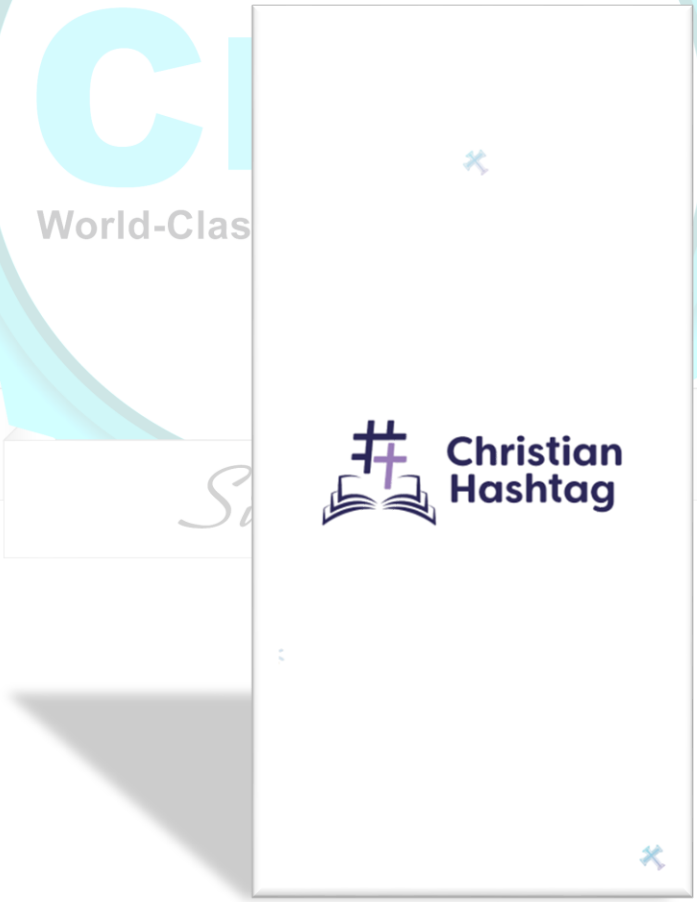
6.1 Overview

Application has master admin and multiple users. Application is using to create workorders as well. Admin has right to assign role and permissions to specific user.

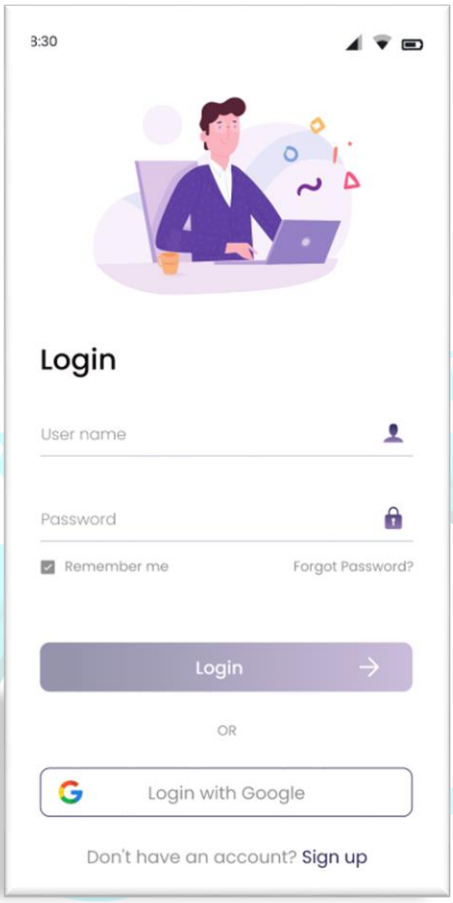
6.2 App icon

This section should contain the proposed UI.

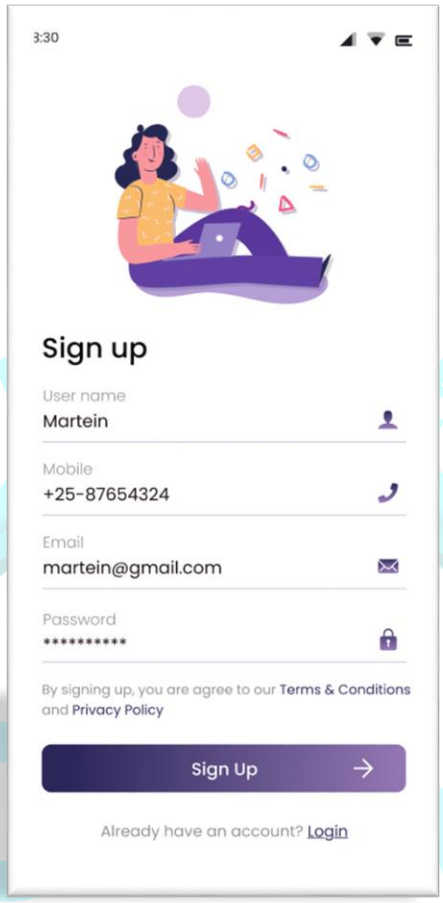
6.3 Splash screen



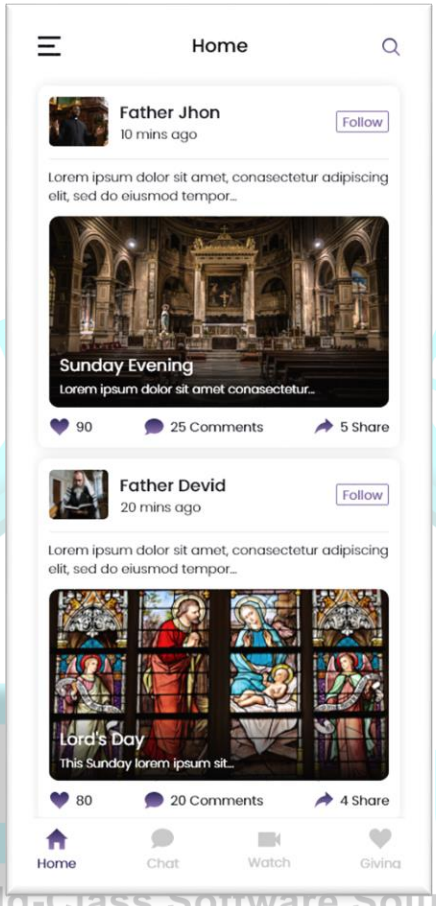
6.4 Login screen



6.5 Sign up screen



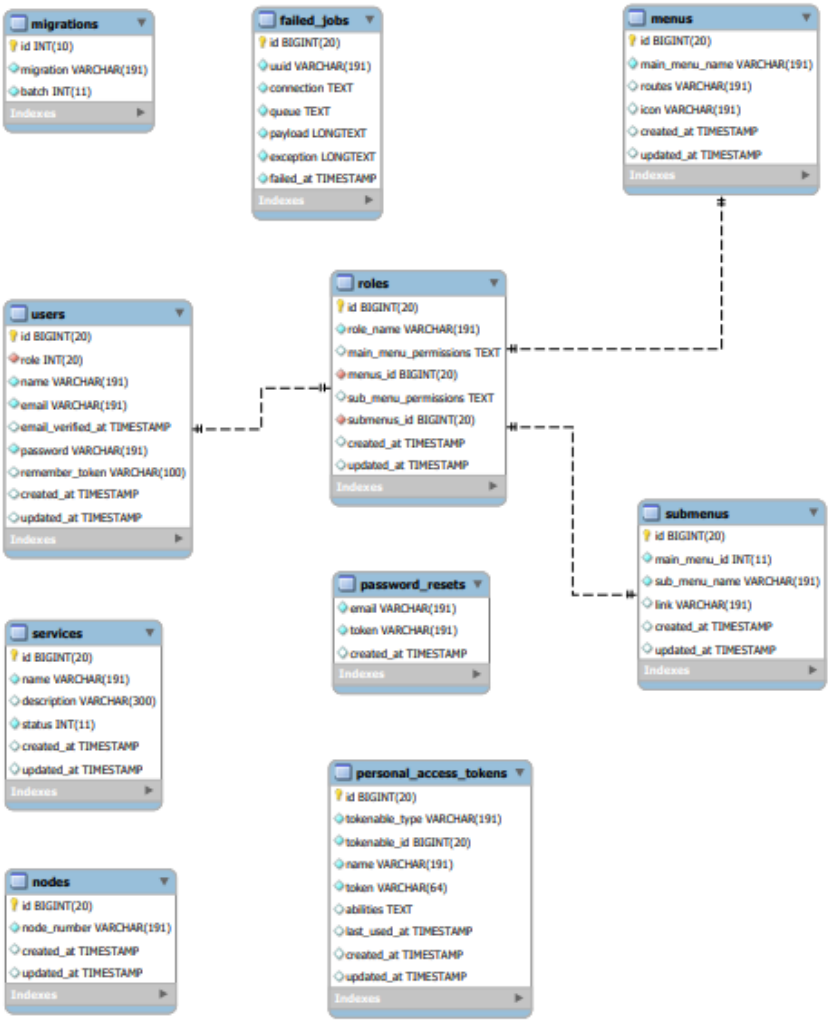
6.6 Dashboard screen



7.0 DATABASE

7.1 Overview

We are using MySQL database in this application. Follow are the database structure.



7.2 ER Diagram

- We are doing development bases on phases
- For now in Phase 1 we are creating basic functionality with Workorders and user roles.

8.0 FUTURE CONSIDERATIONS

- We are doing development bases on phases
- For now in Phase 1 we are creating basic functionality with Workorders and user roles.

9.0 CHANGE/UPDATE TRACK RECORD. (ACCORDING TO DATE)

N/A