

# Social Media App Using Flutter

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**Abstract-** Social media influence grows exponentially, and businesses wonder how to make a social media app that helps make big fortunes. A new-age tech entrepreneur cannot miss the opportunity to become a part of the increasingly growing market with the social media application market, which booms with opportunities. In recent years, the new social media app development has shaped amazing ideas and prospects. The best way to leverage the market right now is to create your social network with the latest technology by hiring top social media app developers for Android and iOS. In early 2010, smartphones accounted for around 22 % of the overall mobile market. Although, Apple was still behind on smartphone sales with iPhone running its 3rd iteration. The now ancient BlackBerry was introduced as a beating Smartphone, and its elegant mini-keyboard won over most people who want to send and receive emails via their phones. The smartphone industry has grown ridiculously quickly over the last decade.

**Indexed Terms-** Flutter, Digitization, Innovation, Dynamic capabilities

## I. INTRODUCTION

Social media influence grows exponentially, and businesses wonder how to make a social media app that helps make big fortunes. A new-age tech entrepreneur cannot miss the opportunity to become a part of the increasingly growing market with the social media application market, which booms with opportunities. In recent years, the new social media app development has shaped amazing ideas and prospects. The best way to leverage the market right now is to create your social network with the latest technology by hiring top social media app developers for Android and iOS. In early 2010, smartphones accounted for around 22 % of the overall mobile market. Although, Apple was still behind on smartphone sales with iPhone running its 3rd iteration. The now ancient BlackBerry was introduced as a

beating Smartphone, and its elegant mini-keyboard won over most people who want to send and receive emails via their phones.

## II. THEORETICAL BACKGROUND

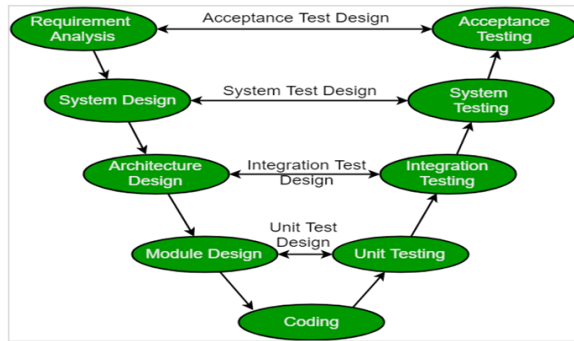
### 1. PURPOSE

This document describes in substantial detail, the software requirements of SocialClub, an online instant messaging application where people can follow friends, share videos and share photos, send and receive messages and keep in touch with friends, family and colleagues.. The purpose of this document is to give complete reference about how SocialClub is developed. In this document user profiles often have a section dedicated to comments from friends and other users. To protect user privacy, social networks usually have controls that allow users to choose who can view the This document will describe the problems this app intends to address, the functional requirements and non-functional requirements of the proposed system.

### 2. PROCESS MODEL

As our project is based on flutter, so,since it is software genre there might happen that any phase may get wrong and entire project may fail. So, to cater, this issue we might have to focus on the proper functioning of each and every prospect of the project by testing them, along with the development itself. And the process model that completely fits here is the V-Model.

The V-model is a type of SDLC model where process executes in a sequential manner in V-shape. It is also known as Verification and Validation model. It is based on the association of a testing phase for each corresponding development stage. And it is preferably used when the requirements are clearly defined and fixed.

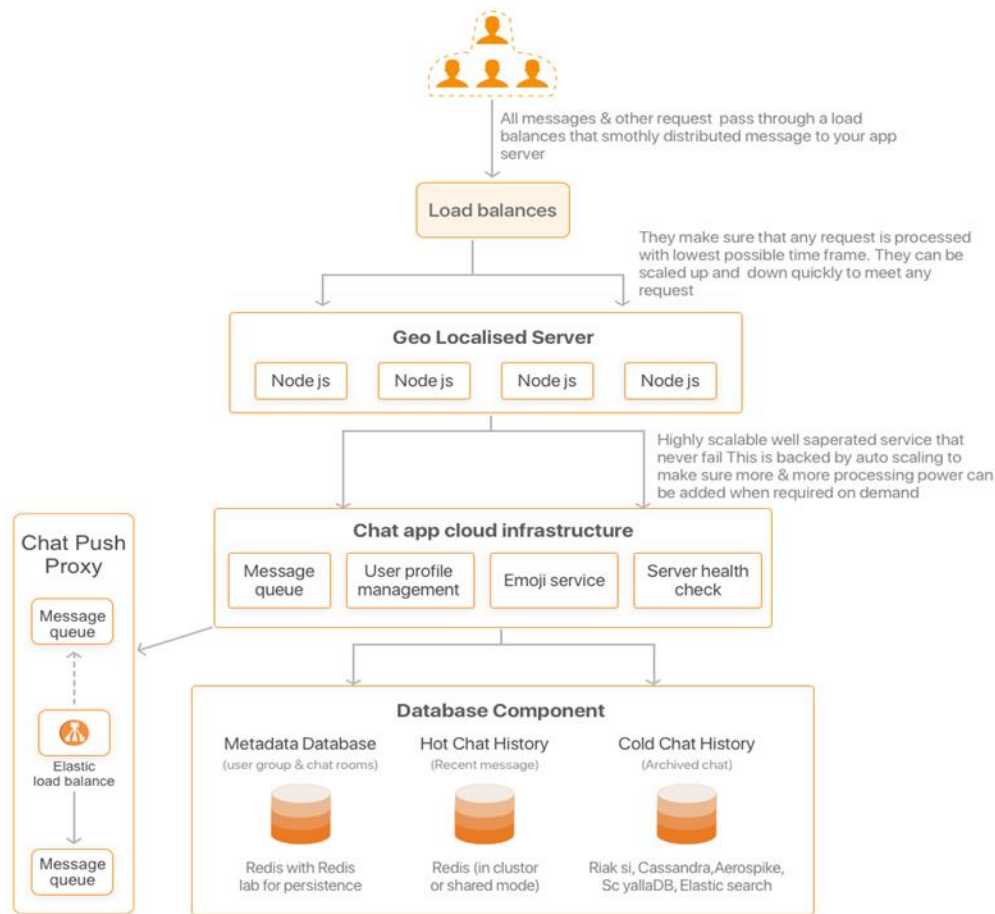


Architecture at this stage:

- Future growth – evolution of app
- Able handle 10k concurrent users
- Real time communication
- Get it built in 3-6 months
- Chat rooms should have enough size and capacity
- Searching across several channels simultaneously
- Scale when load is suddenly increased
- Faster retrieval of message history
- Be able to share messages with multimedia support

### 3. SYSTEM ARCHITECTURE

## Chat Architecture



### III. METHODOLOGY AND OVERALL DESCRIPTION

#### 1. PRODUCT PERSPECTIVE

SocialClub does not work independently. It works together with the internal servers and sending and receiving application on either end devices.

*Communication interface:* SocialClub communicates with the internal servers via a communication network.

*Software interface:* The messages sent via the communication network are specific to the target recipient. At any point, two known users will participate in the application. *Hardware interface:* The

software will run on any device running on iOS, Android, Symbian, BlackBerry operating systems.

*User interfaces:* The GUI of the Application is user friendly and need no external assistance to understand the application.

*Customer:* The customer user interface should be intuitive, such that 99.9% of all new SocialClub users are able to use the Application without any assistance.

*Message Processing:* Every message send through the application is processed by the internal servers and sent to the recipient. Message processing is done at very high processing rates so as to avoid delay in the conversations between the users. A maximum of 27 billion messages are processed in a single day by SocialClub internal servers.

#### *Account*

A User must have a device on which he can run the Application. Device can either run on Android, IOS, Blackberry, Windows or Symbian. User Account is linked to the contact information he provided during the initialisation of the application. User can be contact only with that information.

#### *Last Seen, Profile Picture, Status, Receipts*

User can put up a profile picture to indicate his appearance. Last seen of a user indicates the last point in time when the user used the application. Status indicates the written statement about himself or his state or mood depending in the usage to all his recipients. Receipts indicate the status the message sent to any recipient. Single receipt indicates that the message has been sent from the user' end. Double receipt indicates that the message has been received by the other party. Blue coloured receipt indicates that the recipient has read the message.

#### *Network*

Usage In order to enjoy seamless benefit of SocialClub, User is supposed to be connected to Internet at any given point of time. SocialClub uses considerably lesser network resources than any other chatting application available in the market. SocialClub also provides the user with the option to limit resources to incoming media.

#### *Recipient*

SocialClub can be used to converse with more than a single user at any given point of time. The recipient must also use the application on the other end of the conversation. The Contact information to which the SocialClub Account is linked is to be saved in the user contacts in order to start a new conversation with the recipient.

#### *Group*

A Group of users ranging from 1-256 can be added into a group and can be conversed with at the same time. Any group user can add new members into the group not exceeding 150. Only the Group Admin has the executive permissions to remove a member of the group. Group admin can also provide other members of the group with Admin permissions. Broadcast Messages A user can broadcast same message to 1-150 user at the same time with the broadcast option. Users with his contact information can only receive the message

## 2. PRODUCT FEATURES

- A complete Chat App using Flutter, Node Js and Socket IO
- AppBar and TabBar with TabView (Fragment in Flutter)
- Drop Down Menu and Pop-up Menu
- Adding Custom Fonts
- ListView and ListTile in Flutter
- Use of SVG icons
- Adding custom Emoji Picker
- Working on the Camera Tab (Flash and Flip camera Button)
- Connecting our chat app to SocketIo Server (Backend)
- Implementing One-One chat functionality
- Working on Status Page
- Work on the call tab of SocialClub.

## IV. DEVELOPMENT TOOLS AND TECHNOLOGIES

### *Hardware Requirements (Recommended):*

60 GB HD

Android Phone

2 GB RAM

*Software Requirements:*

Operating System: Windows XP or above, LINUX

Software: Mobile IDE Plugins

*Development Tools:*

Android

SDK Database: SQLite

Minimum requirement API-13

2. TECHNOLOGIES

*Software:*

Android studio FrontEnd – Flutter

*Backend:*

socket.io and node js, MongoDB (DataBase)

V. PROJECT SCOPE

SocialClub is a proprietary, cross -platform, encrypted instant messaging client for smartphones. It uses the Internet to send text messages, documents, images, video, user location and audio messages to other users using standard cellular mobile numbers.

CONCLUSION

Social media influence grows exponentially, and businesses wonder how to make a social media app that helps make big fortunes. A new-age tech entrepreneur cannot miss the opportunity to become a part of the increasingly growing market with the social media application market, which booms with opportunities. In recent years, the new social media app development has shaped amazing ideas and prospects. The best way to leverage the market right now is to create your social network with the latest technology by hiring top social media app developers for Android and iOS. In early 2010, smartphones accounted for around 22 % of the overall mobile

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