PRINCIPLES OF SOFTWARE ENGINEERING

COURSE CODE: SWE1003

Blogging / Social-Media App



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Objective

The purpose of our project is to provide a medium for an enclosed group of members to communicate. But unlike other social platforms, it is a space provided for people only by your contacts creating a sense of serenity and privacy. As privacy is a major leading concern with the social media platforms, we went ahead to create an application with remarks this point and safeguard users' policies while giving him the relentless features provided by a conventional social networking application.

Customer's View

A customer at any point of time can access the following information:

- Posts of their friends
- Comments on the posts

Task List done in Lab

- 1. Requirements Analysis and Prepare SRS.
- 2. Analyze the SRS to the Proposed Project.
- 3. Design System Flow.
- 4. Draw UML diagrams for the project.
- 5. Develop any one module and test.
- 6. Design of Test cases based on requirements and design.
- 7. Post Implementation Review
- Future Enhancements.

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Project Profile

Project Name	Blogging/ Social Media App
Objective	The purpose of our project is to provide a medium for an enclosed group of members to communicate. But it is not an accomplishment like Facebook or Instagram. It is going to be a space provided for people only by your contacts creating a sense of serenity and privacy. As privacy is a major leading concern with the social media platforms, we went ahead to create an application with remarks this point and safeguard users' policies while giving him the relentless features provided by a conventional social networking application.
Platform	Mobile Application
Frontend	Android Studio
Backend	Firebase
Other Tools	Glide, Junit, Runner, espresso-core
Project Duration	172 days

Existing System

The current structure of social media relies on users sharing their personal data. The same data which is a manifestation of our digital self. And this data is used to build various business models which is handy not only for the company but also to various other employers and cybercriminals.

With the expanding acceptance of social networks by users and the massive amount of information being shared has encouraged the attackers to evolve their techniques on collecting and analyzing such information. As a result, maintaining the security and privacy of the users has become a major challenge in the recent years.

Need for New System

As a result to rule out these shortcomings, a definitive plan has been established where the users are given a sense of serenity and privacy. This application safeguard users' policies while giving him the relentless features provided by a conventional social networking application. Our software aims for creating a personalized platform where a group of people can share their day to day activities, memes and other fun frolic things in separate dedicated user spaces.

Functional Specifications

User

The end user can access the following information:

- Posts of various individuals
- Write comments for the posts
- Add your own posts
- Change personal settings

Hardware Requirement

Client side

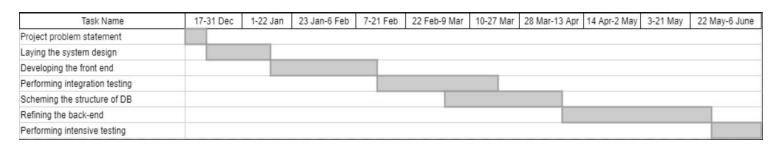
RAM	2GB- inf
HardDisk	>12 MB
Processor	>0.5 Ghz (single core)
Min. Android version	Android API 21

Software Requirement

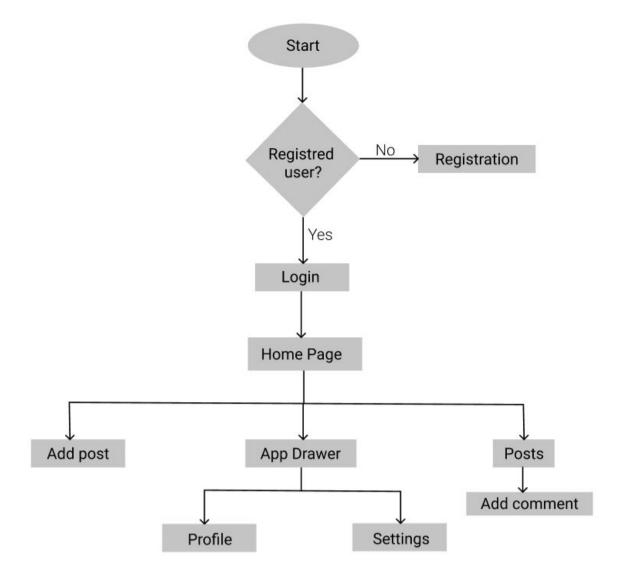
Client side

Min. Android version	Android API 21
iOS	iPhone 5s devices and later with iOS 11+

Timeline

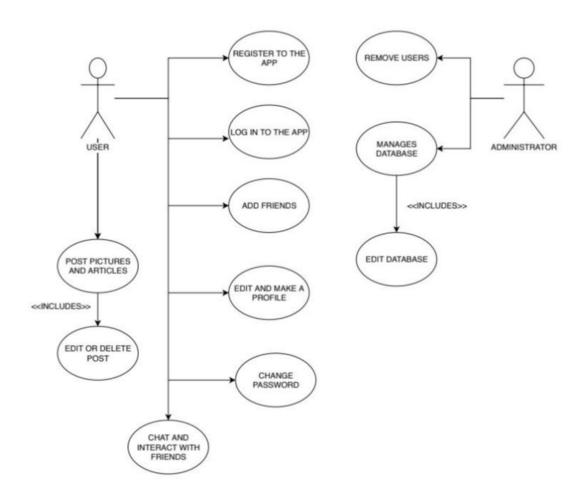


System Flowchart

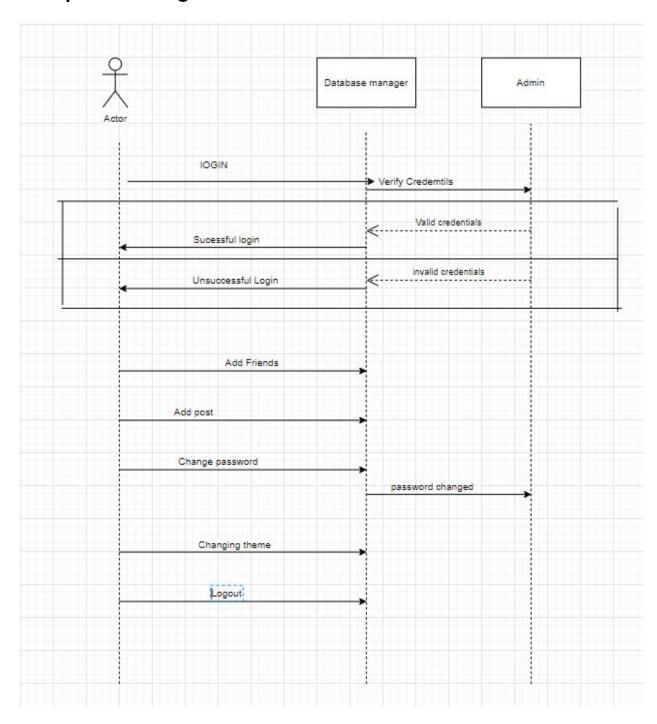


UML Diagrams

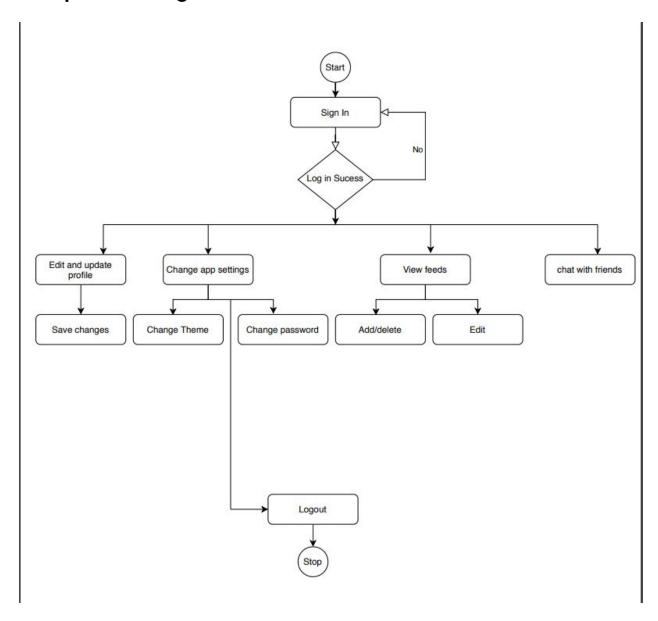
Use Case Diagram



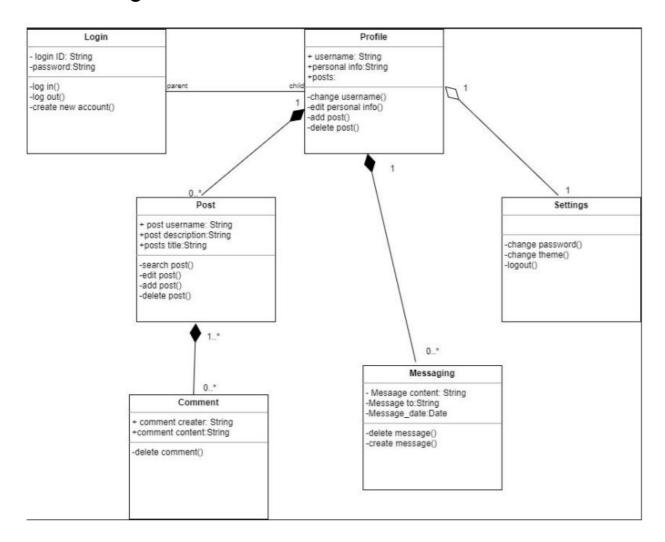
Sequence Diagram



Sequence Diagram



Class Diagram



Data Dictionary

Since the software has been implemented on a no SQL database, having a data dictionary according to its definition is not possible. The attributes for a few functions can be marked down in a table as given below.

Comment

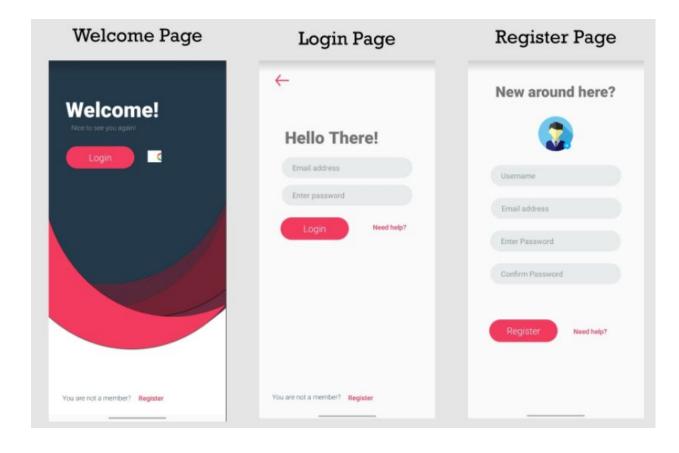
S. No	Field Name	Data type	Description
1	content	String	Stores the body of the comment
2	timestamp	timestamp	Stores the date stamp of the comment
3	uid	String	Stores the user ID
4	uimg	String	Stores the user image for the comment
5	uname	String	Stores the username

Posts

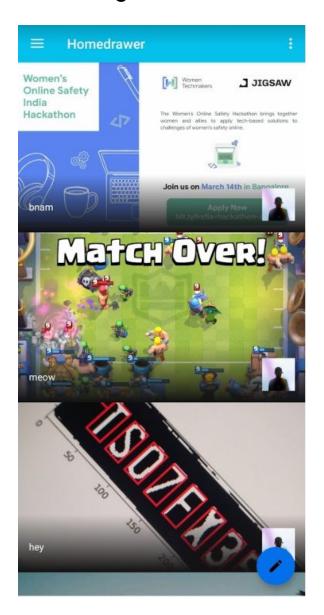
S.No.	Field Name	Data type	Description
1	description	String	Stores the body of the post
2	picture	String	Stores the picture of the post
3	postKey	String	Stores the key generated
4	timeStamp	timeStamp	Stores the timeStamp of the post
5	title	String	Stores the title of the post
6	userld	String	Stores the user ID
7	userPhoto	String	Stores the user photo

Output

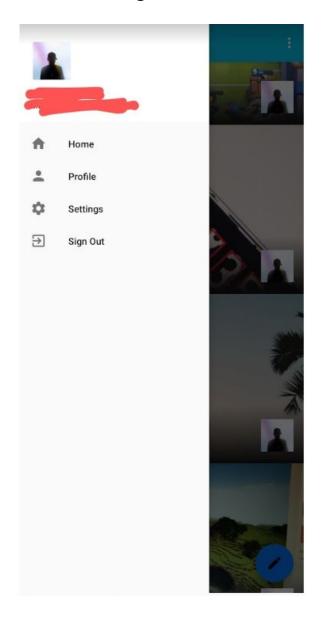
Login



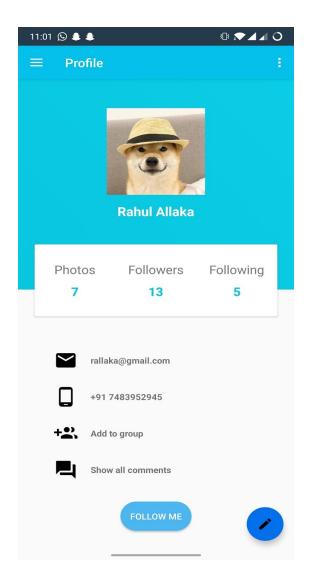
Home Page



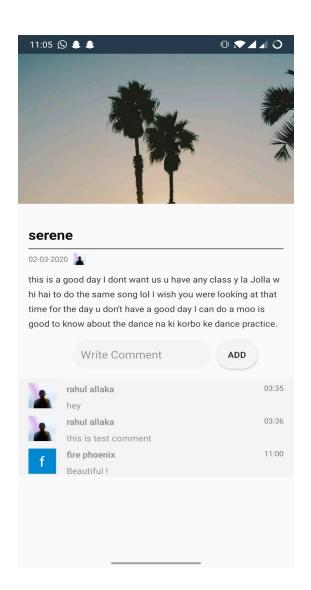
Navigation Bar



User Profile



Post details and Comments



DATABASE



Testing

S.No.	Data Input	Expected Output	Actual Output	Pass/Fail
1	All fields are empty	Error message: "Please fill all the fields"	Error message: "Please fill all the fields"	Pass
2	Email	Error message: "The email address is badly formatted"	Error message: "The email address is badly formatted"	Pass
3	Password and Confirm password	Error message: "Please fill all the fields"	Error message: "Please fill all the fields"	Pass
4	Login	Entered using correct credentials	Login is successful	Pass
		Entered with wrong credentials	Login failed with error message: "	Pass
5	Validation test cases	Enter data in compulsory fields in the new post activity	If unappropriate data is filled "Please verify all input fields and choose image" error message is displayed	Pass

Future Prospects

Our software aims for creating a personalized platform where a group of people can share their day to day activities, memes and other fun frolic things in separate dedicated user spaces.

- Syncing importing dates from messages
- Adding dates directly into the calendar application

Bibliography

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