# **DESIGN DOCUMENTATION**

for

# SOCIAL NETWORKING SITE

Version 1.0

Prepared by:
1. Ria (190001051)
2.Mohit Kumar (190001038)
3.Manish Patel (190001034)
4.Ponugoti Sruthi (190001047)

Submitted to: Anup Kumar Gupta

May 12, 2021

# **Contents**

1		oductio	
			se
	1.2	Scope	
	1.3	Overvi	ew
2	Des	ign Spe	cifications
	2.1	Modul	ar design
	2.2	Systen	n Design
		2.2.1	Data Flow Diagrams
		2.2.2	Use Case Diagrams
		2.2.3	Sequence Diagrams
			Data Base
		2.2.5	Entity Relationship Diagram

# 1 Introduction

# 1.1 Purpose

This design document is intended to give the overview of implementation of the project (Vibez) at a high level. It also identifies the framework and technologies used for the development and tries to define the system architecture. This document will also be used for identifying contradictions, if any, prior to coding phase. The main goal of this document is to make design level information easily understandable

# 1.2 Scope

This design document is meant to provide an overview of the structure of the system. This document also includes the database architecture of Aloha along with database diagram for reference. This document also serves as a mandate for the design standards, data structures and design patterns to be implemented. UML diagrams are included to show how they different components interact with each other.

# 1.3 Overview

The remaining document has 2 more sections. The second section gives overall view design view of the project. It includes data flow diagram, use case diagram, sequence diagrams, data base explanation and entity relationship diagram. They give a deep understanding of the overall project design.

# 2 Design Specifications

# 2.1 Modular design

The application comprises the following major modules

### Register to be a member Module

This module provides functionalities for those people who wants to open an account. Applicants can post their views with personal and professional details. They can also update the profile as frequently as required. The member can also browse through the friends profile available. Members can also get message alerts when their friends message them.

#### **Profile Module**

This module provides functionalities related to members profile. Logged users can see their details and if they wish to change any of their information they can edit it.

#### Admin Module

This module provides administrator related functionalities. Administrator manages entire application and maintains the profiles of all the registered users and their activities.

# 2.2 System Design

#### 2.2.1 Data Flow Diagrams

Data flow diagrams model the flow of data into, through, and out of an information system:

- Show the processes that change or transform data
- Show the movement of data between processes
- Represent a system as a network of processes which transform data flowing between them

The user screen flow shows what a user of the community will see. After successfully logging on, the user will be given various links (such as search users, see posts, view messages, etc.), and be able to select options from there, or go back to their home.

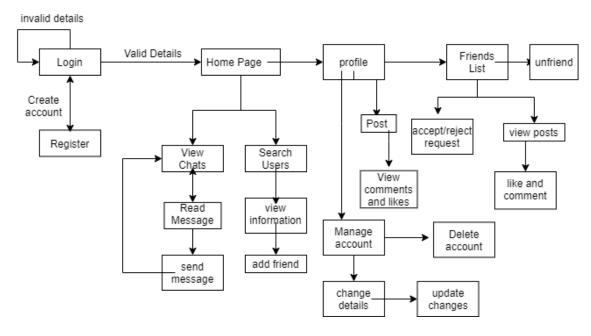


Figure 2.1: Data Flow Diagram

# 2.2.2 Use Case Diagrams

A use case diagram is a graphic depiction of the interactions among the elements of a system. A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. In this context, the term "system" refers to something being developed or operated, such as a mail-order product sales and service Web site. Use case diagrams are employed in UML (Unified Modeling Language), a standard notation for the modeling of real-world objects and systems.

A use case diagram contains four components. The boundary, which defines the system of interest in relation to the world around it.

- The actors, usually individuals involved with the system defined according to their roles.
- The use cases, which are the specific roles played by the actors within and around the system.
- The relationships between and among the actors and the use cases.

The main actors of the social networking site in the below use case diagram are: users and admin. They perform various use cases like login, registration, manage account, post, chat etc

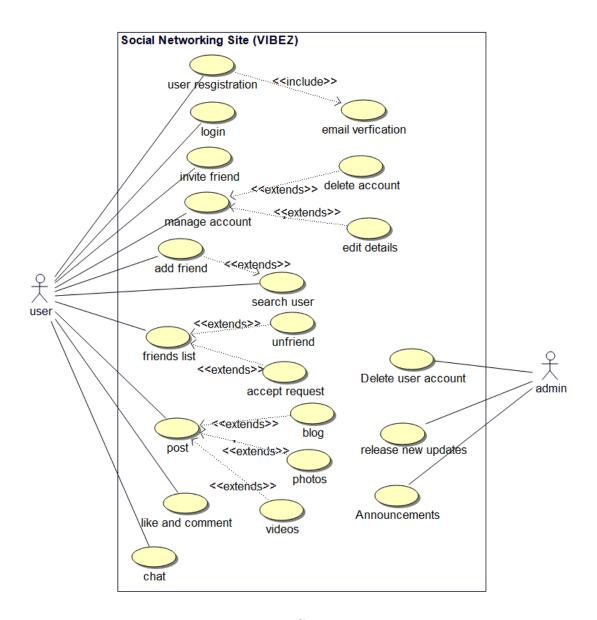


Figure 2.2: Use Case Diagram

# 2.2.3 Sequence Diagrams

# Registration

# Figure 2.3

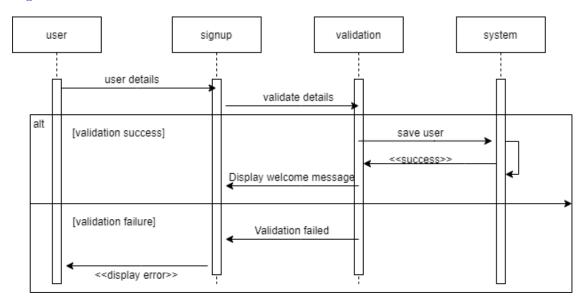


Figure 2.3: Sequence Diagram for user signup

# Login

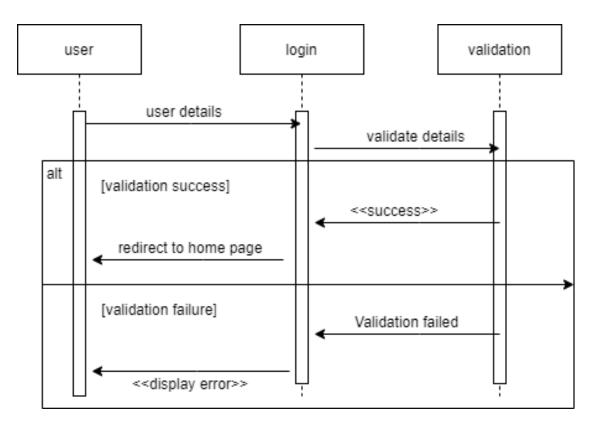


Figure 2.4: Sequence Diagram for user login

# Manage account

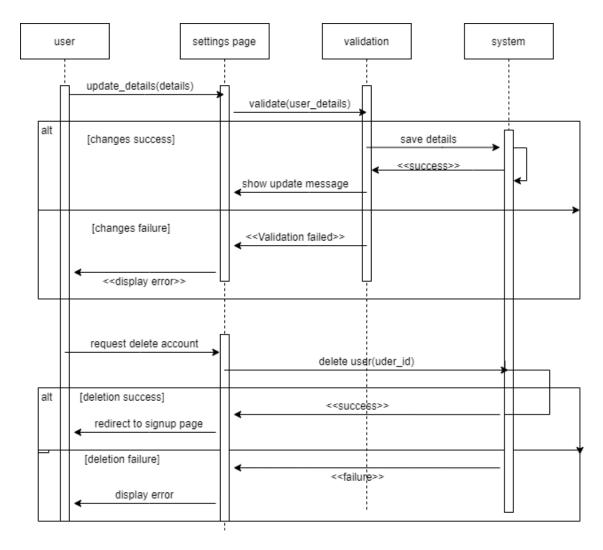


Figure 2.5: Sequence Diagram for account updating

# Search Friend and list

# Figure 2.6

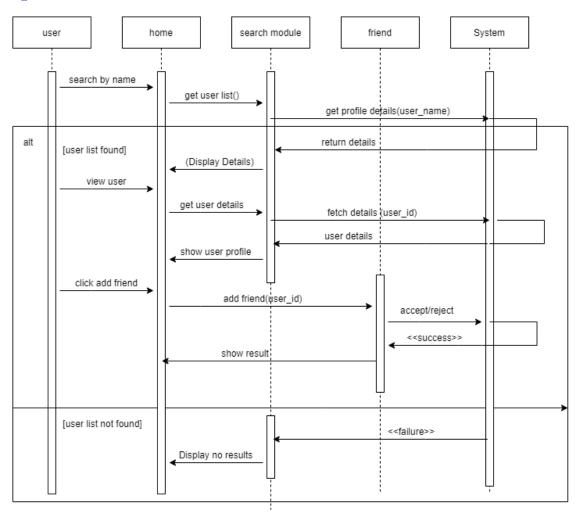


Figure 2.6: Sequence Diagram for searching and adding friends

## Post

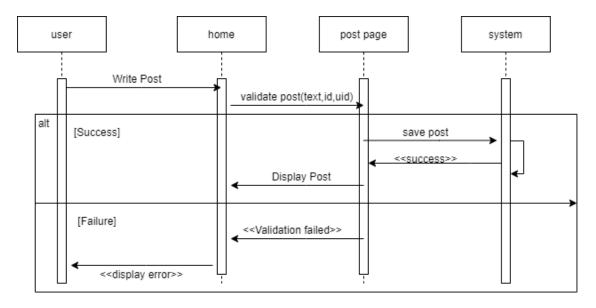


Figure 2.7: Sequence Diagram for post

## Comment

## Figure 2.10

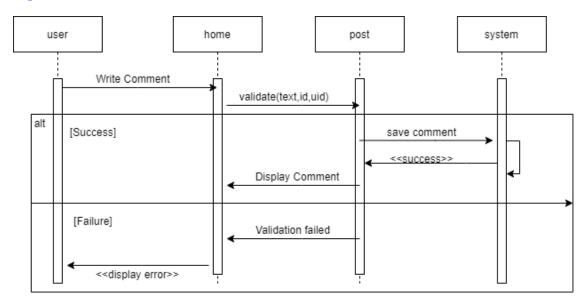


Figure 2.8: Sequence Diagram for comment

## Chat

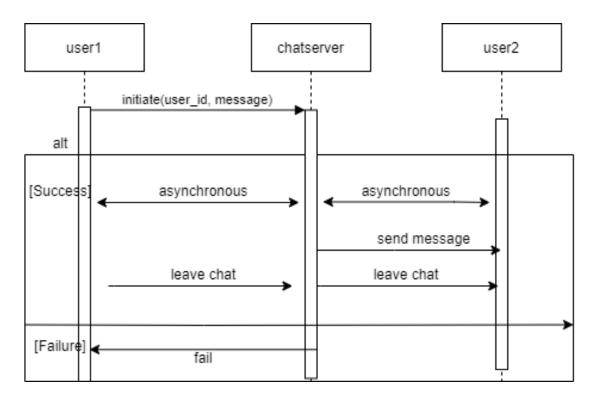


Figure 2.9: Sequence Diagram for chatting

## 2.2.4 Data Base

Database Data base is used to store the relevant information of the individuals. A database is a collection of rows and columns in which rows indicates the tuple and column indicates the domain of table. Database design is the process of producing a detailed data model of a database. The data base for this project contains following tables with the given attributes:

#### Users table

user_id	email	password	profile_id	timestamp
---------	-------	----------	------------	-----------

## Profile table

user_id	name	gender	about	dob	place	phoneNo.	interests

### Posts table

post_id user_id	caption	pic_id	video_id
-----------------	---------	--------	----------

### Likes table

like_id	post_id	user_id
---------	---------	---------

#### comments table

$comment\_id$	post_id	user_id	comment	reply_id
---------------	---------	---------	---------	----------

### comments replies table

comment_id   prevcomment_id   post_id   user_id   comment	t reply_id
---	------------

### friends table

user1_id   user2_id   timestamp
---------------------------------

### Requests table

user1_id user2_id	status	timestamp
-------------------	--------	-----------

### 2.2.5 Entity Relationship Diagram

ENTITY RELATIONSHIP DIAGRAM The entity relationship model is a high level data model. It is based on a perception of a real world that consists of a collection of basic objects, called entities, and of relationship among these objects. It was developed to facilitate database design by allowing specification of an enterprise schema, which represent the overall logical structure of a database.

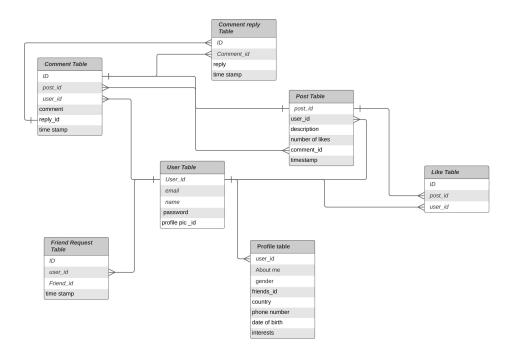


Figure 2.10: ER Diagram