INTRODUCTION

1.1 BACKGROUND

Human beings have a natural tendency to express. They want to share how they feel, what they want to do and most obviously, what they have achieved in life. Social media plays an important role in our life as it provides a platform to express and get connected with the one with similar sets of interests. Unlike the old days, they provide the users a global exposure. Apart from that, it helps to build a good professional network. (Chaffey)

A good profile on a social site has its own perks. Forbes (2018) mentions that information found on social media can set job candidates apart in a positive way. Some believe that a lack of online presence could indicate that a candidate has something to hide, or that they fail to keep up with technology and business trends.

1.2 PROBLEM STATEMENT

There are a lot of social networking sites. However, most of them don't focus on a specific domain and thus, may fail to provide what the user intends to look for. Pahichaan focuses on framing the identity of a person based on their achievements, accomplishments and honors allowing the users with similar interests and goals to be connected with each other.

1.3 OBJECTIVES

The aim and objectives of this project are:

- 1. To provide an innovative social platform which enables individuals:
 - a. To communicate with the connections via text messaging.
 - b. To post pictures of honors, achievements, and certificates allowing the users to showcase their recognition.
 - c. To notify the users if events like reaction on posts, new connections as well as suspension and deletion of accounts for inappropriate behavior on the network.
- 2. Add IP address tracking and blocking mechanism to make the system more secure. If someone makes multiple attempts to log into the admin panel with false inputs, then their IP address gets blocked.

1.4 IMPLICATIONS

The traditional method of exposing own recognition status was a bit tedious and couldn't get broad recognition in a short period of time. Our very project is the solution to this problem. *Pahichaan* helps in building relationships and communicating with potential connections. Our webapplication will provide the platform to connect people of similar thoughts and react to their posts.

LITERATURE REVIEW

There are a lot of social networking sites. The figure below helps to compare some of the popular ones with *Pahichaan* based on their common and unique features.

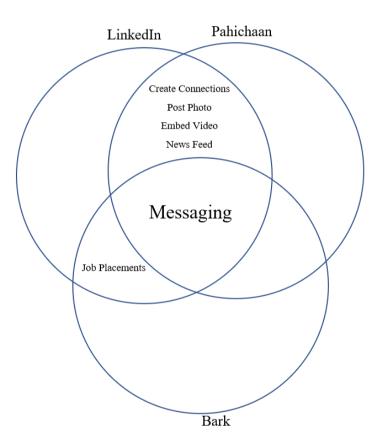


Figure 2.1: Comparison Diagram

Chapter 3 TOOLS AND METHODOLOGY

3.1 REQUIRED TOOLS

For the development of this project, we require the following tools:

- Sublime Text Editor: for basic code editing
- XAMPP Server: For local server and Database
- Adobe Photoshop: For generating assets
- Google Docs, MS-Word: For preparing report
- Lucid Chart, graph.io For UML diagrams
- MS-Excel For Gantt Chart, Timeline Chart
- MS-PowerPoint For Presentation Slides
- Adobe XD For Prototyping
- Git Version Controlling
- PHP, MySQL, JavaScript, CSS and HTML For programming

3.2 APPROACH USED

For our project, we will be using the iterative model of software development. The whole project will be divided into different components. The higher risk components will be developed in earlier iterations. And earlier developed prototypes will be used as a baseline for the next iterations.

3.2.1 USE CASE DIAGRAM

The overall process of our system can be easily depicted in the use case diagram below.

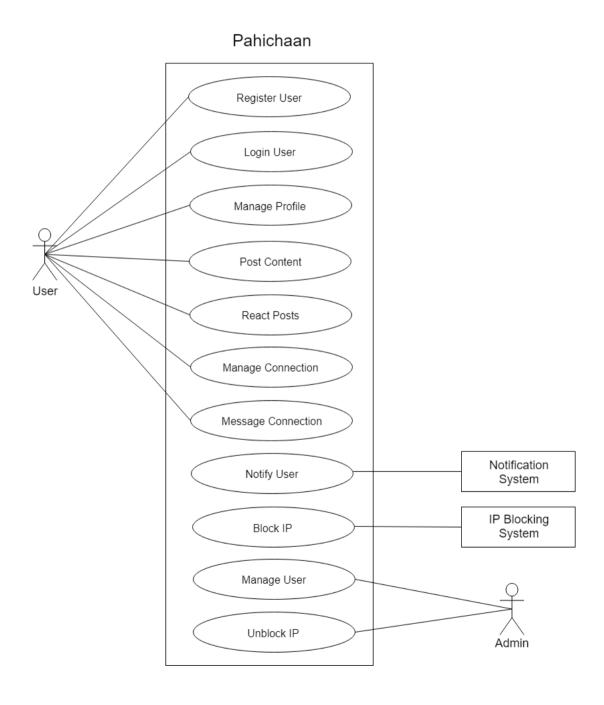


Figure 3.2.1.1: Use Case Diagram

3.2.2 ENTITY RELATIONSHIP DIAGRAM (ERD)

The ER diagram below shows the relationship among the various entities of our proposed system. Users can post images and text status, make connections, react on posts and communicate with each other via text message.

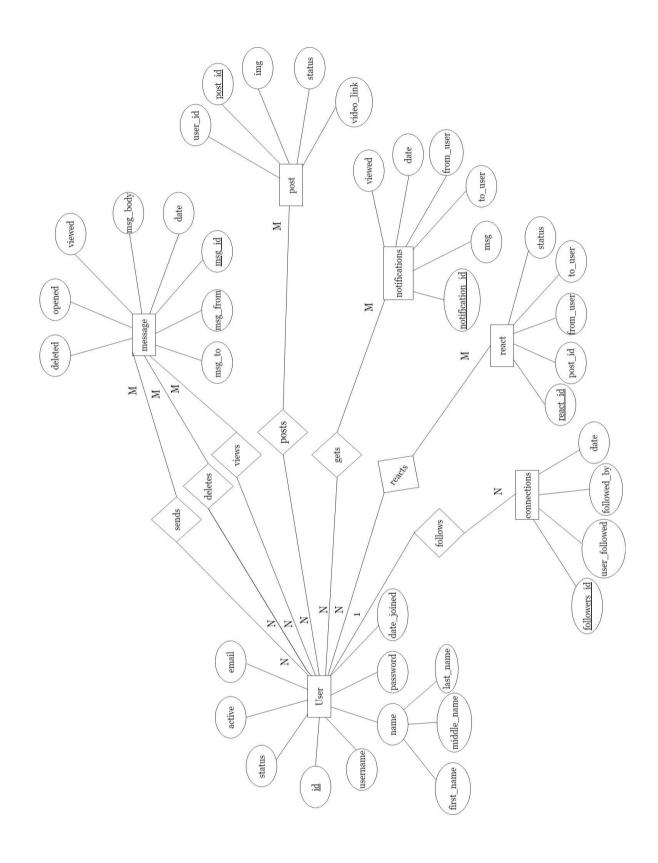


Figure 3.2.2.1: Entity Relationship Diagram

3.2.3 SYSTEM SEQUENCE DIAGRAM (SSD)

Below is a visual summary of interaction between the system and the user in the form of system sequence diagram.

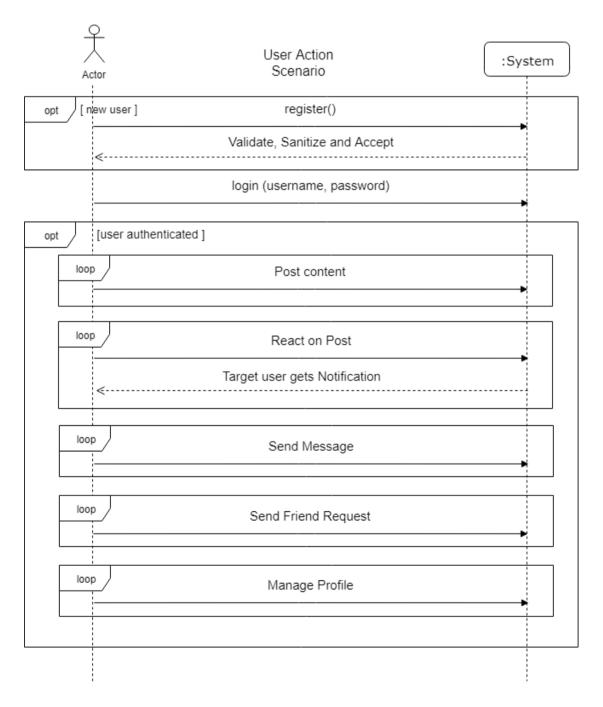


Figure 3.2.3.1: User Action Scenario SSD

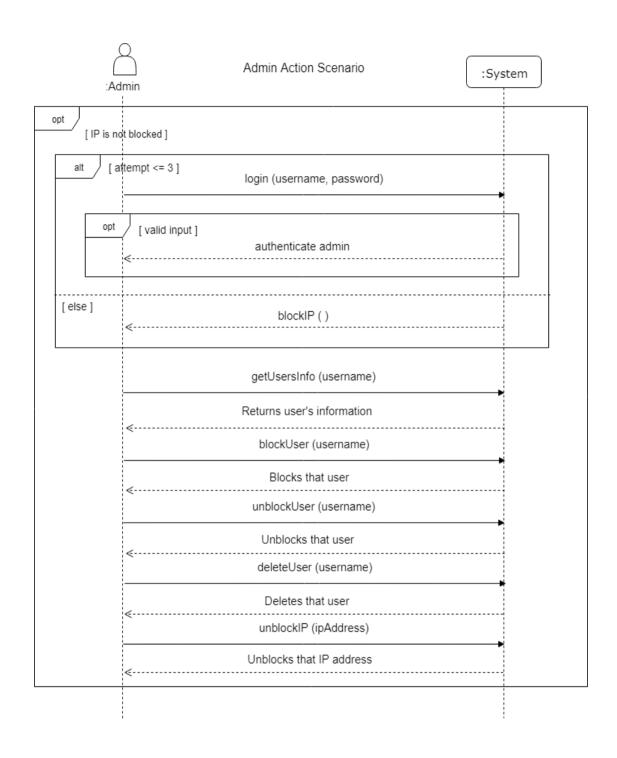


Figure 3.2.3.2: Admin Action Scenario SSD

3.2.4 CLASS DIAGRAM

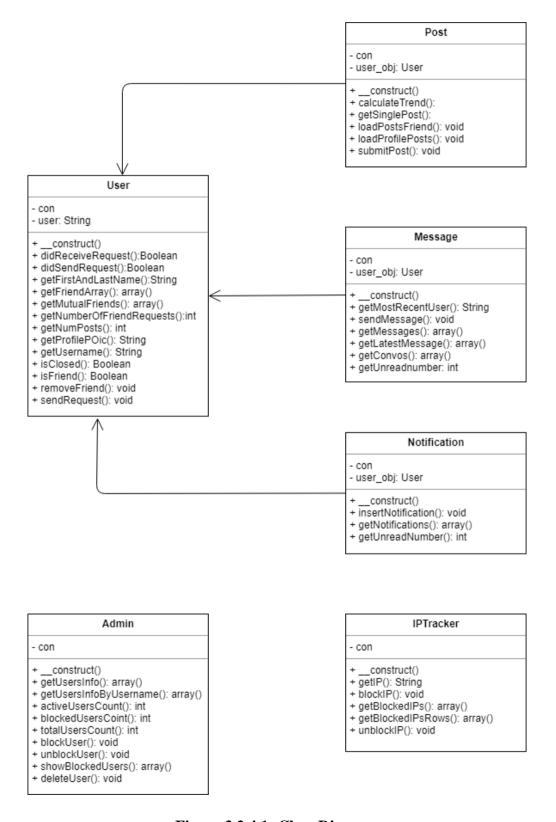


Figure 3.2.4.1: Class Diagram

TESTING

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and code generation.

4.1 OBJECTIVES OF TESTING

- Testing is a process of executing a program with the intent of finding an error.
- Verify that software requirements are complete and accurate.
- Perform detailed test planning.
- Identify testing standards and procedures that will be used on the project.
- Prepare and document test scenarios and test cases.
- Manage defect tracking process.
- Provide test metrics/testing summary reports.

4.2 TEST CASES

TEST	PURPOSE	TEST CASES	RESULT
CASE ID			
TC1	Registration with empty field	Empty Information Field	Filed cannot be left empty
TC2	Validation	Name Field	Should be alphabetic characters
TC3	Validation	Email Field	Should be in valid Email format
TC4	SQL Injection	Any Input Fields	Tags are stripped before performing any actions
TC 5	Brute Force	Admin Login	That IP address gets blocked

Table 4.2.1: Test cases

4.3 TESTING GOALS

The goal of testing this application includes validating the quality, usability, reliability and performance of the application. White box approach was used for testing.

Chapter 5 TIMELINE CHART

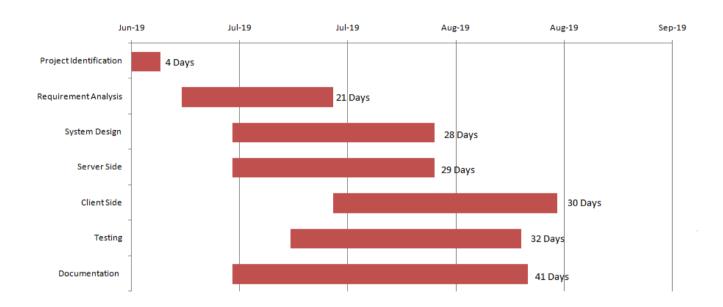


Figure 5.1: Gantt Chart

The chart below demonstrates the work plan of our project.

RESULTS AND DISCUSSION

Future Research and Recommendation:

We have planned to overcome the limitation and also include some additional features for the better access. To further enhance the capability of this application, we recommend the following features to be incorporated into the system.

- Allow users to perform audio as well as video chat.
- Allow users to send photos as messages.
- Add News Feed Algorithm for ranking and displaying content on user's News Feed based on their behaviors.
- Add Friend Recommending Algorithm.
- Add mechanism to report about inappropriate content.

Bibliography

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