My Neighbors

BIA CAPSTONE PROJECT

MGMT-6134

PREPARED FOR: PROF. MARC BUENO

PREPARED BY:

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DATE

2022-04-21

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Project Introduction

Proponents of online social networking sites (OSNS) say that the online communities promote increased interaction with friends and family; offer teachers, librarians, and students' valuable access to educational support and materials; facilitate social and political change; and disseminate useful information rapidly. The main types of social media include big names like Facebook, Instagram, Facebook Messenger, and Twitter. These are the most popular social networking sites in the United States. Others include Pinterest, Tumblr, Snapchat, TikTok, and YouTube.

Nowadays social media plays the major role in providing the communication among the various users present in the various places. This is one of the OSNS belongs to the gated community for the better communication between the users. In OSNS, there is a lot of data is increasing such as profile images, texts, and various multimedia data is available. It is highly impossible to maintain huge data by OSNS. In OSNS, privacy is most widely used in many ways. Especially uploading images by every user is done in SNS. It is very important for every user to have access to the uploaded images that are done by the various types of users. Sharing of images between the users will take place based on their relationship with the users. Based on these, various tools and Software's are introduced to overcome various OSNS.

Most OSNS offer the basic features of online interaction, communication, and interest sharing, letting individuals create online profiles that other users can view. One of the most important issues we must immediately address in this context is the security and privacy of sensitive information, which is generally any data an adversary, could use to cause significant harm to users. Such data might include financial information, which an attacker could use to perpetrate identity theft, or medical information, such as health conditions, diagnoses, or treatment histories. Unfortunately, current trends in social networks indirectly require users to become system and policy administrators to protect their online contents. Further complicating this issue is social networks' rapid growth as well as their continual adoption of new services.

The use of personal information in social networks raises new privacy concerns and requires insights into security problems. OSNS have recently emerged as a challenging research area with a vast reach and application space. Several studies and recent news reports have highlighted the increased risk to personal data processed by online social networking applications, as well as the user population's lack of awareness.

In general, the privacy issue in social networking is coupled with the identifiability and linkability of the information available in this social setting, its possible recipients, and its potential uses. Protecting information's identifiability and linkability is quite challenging given that even those sites that don't disclose users' personal information might provide enough data to identify and link a profile's owner. Possible recipients for such personally identifiable information include hosting servers for the OSNS, the network itself, and third parties that might abuse or misuse such critical and sensitive information.

OSNS has turned out to be an essential factor for people wherein from sharing relevant multimedia information to exchanging messages; everything is taken place via these OSNS. However, on social media, when a new user joins the group, (s) must not be given access to all the previous messages. Hence it is necessary to predict the relationship between the users. In today's world, every user uses multiple OSNS applications to connect with people. Every user is part of many groups on such applications. Sharing personal and multimedia data on such platforms makes his privacy vulnerable to other malicious users. An app that smartly recognizes the relationship between users will help users only to access the data to which they are privileged.

Project Status

Summary Project Status	
Project Start Date	2022-01-27
Estimated Completion	2022-04-21

Team Members and Their Roles

Team Members	
Name	**Role**
Vinod Kumar Jammula	Project Manager/Scrum Master
Vineeth Kumar Reddy Beeravelli	Developer/Product Owner
Pooja Priyanka Lanka	QA Analyst/Scrum Team
Swathi Reddy Alavala	Database Administrator/Scrum Team
Yashwanth Reddy Bollampally	Designer/Scrum Team

Stakeholders

Name	Role
Marc Bueno	Mentor
Ahmed Mukhlis	Sponsor/Subject Matter Expert

Milestones

Milestones	Dates	Status
Milestone 1	2022-02-02	Completed
Milestone 2	2022-03-03	Completed
Milestone 3	2022-03-23	Completed
Milestone 4	2022-04-13	Completed
Final Report & Review	2022-04-21	Completed
Oral Presentation	2022-04-21	Completed

SPONSOR ACCEPTANCE

Approved by the Project Sponsor:

_____ Date: _____

Ahmed Mukhlis

Requirements

Technical Requirements:

To develop this application the JAVA is the programming language with MySQL as the database. The system configuration should be 4 GB RAM and 1 TB hard disk for the installation of Apache Tomcat.

About Java:

Initially the language was called as “oak” but it was renamed as “java” in 1995.The primary motivation of this language was the need for a platform-independent (i.e. architecture neutral) language that could be used to create software to be embedded in various consumer electronic devices.

- Java is a programmer’s language
- Java is cohesive and consistent
- Except for those constraint imposed by the Internet environment. Java gives the programmer, full control

Note: Finally, Java is to Internet Programming where c was to System Programming.

Importance of Java to the Internet:

Java has had a profound effect on the Internet. This is because; java expands the Universe of objects that can move about freely in Cyberspace. In a network, two categories of objects are transmitted between the server and the personal computer. They are passive information and Dynamic active programs. in the areas of Security and probability. But Java addresses these concerns and by doing so, has opened the door to an exciting new form of program called the Applet.

Compilation of Code:

When you compile the code, the Java compiler creates machine code (called byte code) for a hypothetical machine called Java Virtual Machine (JVM). The JVM is supposed t executed the byte code. The JVM is created for the overcoming the issue of probability. The code is written and compiled for one machine and interpreted on all machines. This machine is called Java Virtual Machine.

During run-time the Java interpreter tricks the byte code file into thinking that it is running on a Java Virtual Machine. This could be an Intel Pentium windows 95 or sun SPARCstation running Solaris or Apple Macintosh running system and all could receive code from any computer through internet.

SQL:

Basically, SQL is a programming known for structured query language which is used by databases. This Programming language allows us to handle using tables.

Here, for our project we will be using MYSQL to deal with database.

We do create tables and do include many functionalities related to SQL to our project.

The samples tables that we create here are,

- SIGNUP Table
- LOGIN Table
- Personal Information Table
- Category Table

And we will be getting into functionalities liken Joins, Union and Group By.

Tools Required:

Process	Tools
Development	Java 8, Java Script, HTML, CSS
Database	MySQL
Documentation	Microsoft Word, Microsoft Power Point, Draw.io, MS Project
Project Management Tool	Apache Tomcat
Code Management	Github.com

Functional Requirements:

The following are the functional requirements that are integrated to develop this project are given below.

Home Option:

Should see all the posts posted by other neighbors and should have option to post (images and short videos and Text)

NEIGHBORS:

- Search bar
- Filter option to restrict neighbors

IF we open the neighbor profile it should show his details, Button to send a message and add to community and his news feed. (Note: There is no need of any friend request option as every neighbor get to see other neighbor whose is with the radius).

(Note: Should have a sort option to sort depending on the distance, nearest to farthest or vice versa).

Chat:

- Demonstrates the search bar and the list of charts.
- If we open one chat it should have previous messages and text bar and attachment option to short videos and photos.

COMMUNITY:

Search community group (if open need to get an option to join the group or community) and the option to view community groups Joined (once opened should have an option to share it to neighbors, see the community description, add new post, see the posts and text) and option to create new community group (image and description of the community)

Profile:

Personal details, Profile picture and option to change the password and logout.

User Requirements:

The Exact definition of user requirements are exactly what end user expects.

Here our project itself demonstrates that it is making accessible and easier to communicate with neighbors.

Here, The User requirements are:

Making the user-friendly social media web application: Which includes the user can easily navigate through the application.

- Here, the requirement also includes to set the restriction to post in news feed.
- The effective chat interface that helps the user to interact with the Neighbors.
- The security to the user account that makes the user feel confident to use the Application.
- The User also expect the responsive interface to the changes he made to his account.
- The user also expects the search to navigate through the Application.
- The user should also be able to access application with low network bandwidth.

Problem Statement

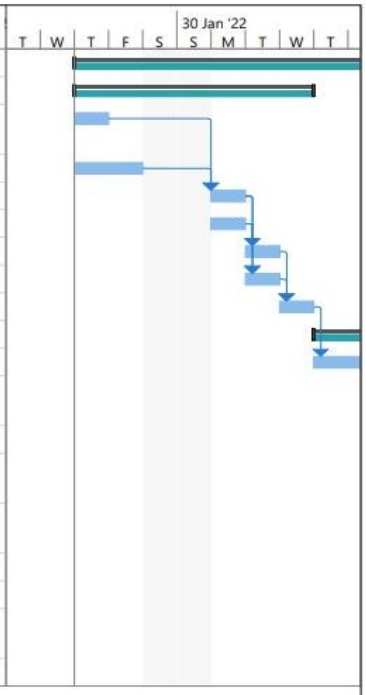
OSNS can have a big impact on the spread of misinformation, and it can spread like wildfire. This became increasingly prevalent after 2012. Information starts as rumors, which spread faster than facts. One study found that misinformation is 70% more likely to be shared than factual information on Twitter. Networking on social media can have just as much of a detrimental impact on companies. Criticism of a brand can spread very quickly on social media. This can create a virtual headache for a company's public relations (PR) department. So it is highly recommended to limit the features of OSNS to some extent.

Significance

The significance of this project can help connect people and businesses and can help promote brand awareness. There are disadvantages related to social media, including the spread of misinformation and the high cost of using and maintaining social network profiles. These issues may overcome with several data filters. OSNS allows individuals to keep in contact with family and friends they would otherwise not be able to connect with because of distance or because they simply lost touch. People can also connect with other individuals who share the same interests and develop new relationships.

Gantt Chart

ID	Task Mode	WBS	Task Name	Duration	Start	Finish	WBS Predecessors
1		**1**	**My Neighbours**	**55 days?**	**Thu 27-01-22**	**Thu 21-04-22**	
2		**1.1**	**Milestone 1**	**5 days?**	**Thu 27-01-22**	**Wed 02-02-22**	
3		1.1.1	Introduction/Project Charter	1 day?	Thu 27-01-22	Thu 27-01-22	
4		1.1.2	Requirements Gatheri	2 days?	Thu 27-01-22	Fri 28-01-22	
5		1.1.3	Roles	1 day?	Mon 31-01-22	Mon 31-01-22	1.1.1,1.1.2
6		1.1.4	Problem Statement	1 day?	Mon 31-01-22	Mon 31-01-22	
7		1.1.5	Relevance/Significanc	1 day?	Tue 01-02-22	Tue 01-02-22	1.1.3,1.1.4
8		1.1.6	Resources/Gantt Char	1 day?	Tue 01-02-22	Tue 01-02-22	1.1.3,1.1.4
9		1.1.7	Client Sign-Off	1 day?	Wed 02-02-22	Wed 02-02-22	1.1.5,1.1.6
10		**1.2**	**Milestone 2**	**16 days?**	**Thu 03-02-22**	**Thu 03-03-22**	
11		1.2.1	Web Search	3 days?	Thu 03-02-22	Mon 07-02-22	1.1.7
12		1.2.2	Use Case Diagrams/Prototypes	4 days?	Tue 08-02-22	Fri 11-02-22	1.2.1
13		1.2.3	Class Diagrams	4 days?	Mon 14-02-22	Thu 17-02-22	1.2.2
14		1.2.4	Draft of System Architecture	2 days?	Fri 18-02-22	Mon 28-02-22	1.2.3
15		1.2.5	Draft of ER Diagram/Data	3 days?	Tue 01-03-22	Thu 03-03-22	1.2.4
16		**1.3**	**Milestone 3**	**14 days**	**Fri 04-03-22**	**Wed 23-03-22**	
17		1.3.1	System Architecture	3 days	Fri 04-03-22	Tue 08-03-22	1.2.5
18		1.3.2	ER Diagrams/Data Dictionary/UI	3 days	Wed 09-03-22	Fri 11-03-22	1.3.1
19		1.3.3	Draft of API	2 days	Mon 14-03-22	Tue 15-03-22	1.3.2



Project: Project1
Date: Thu 14-04-22

Task	Inactive Summary	External Tasks	
Split	Manual Task	External Milestone	
Milestone	Duration-only	Deadline	
Summary	Manual Summary Rollup	Progress	
Project Summary	Manual Summary	Manual Progress	
Inactive Task	Start-only		
Inactive Milestone	Finish-only		

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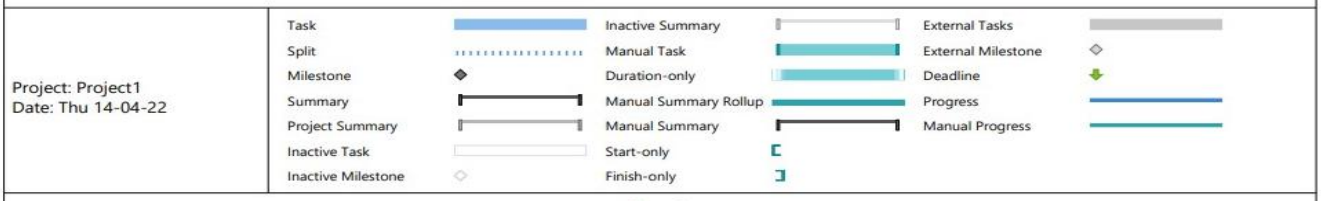
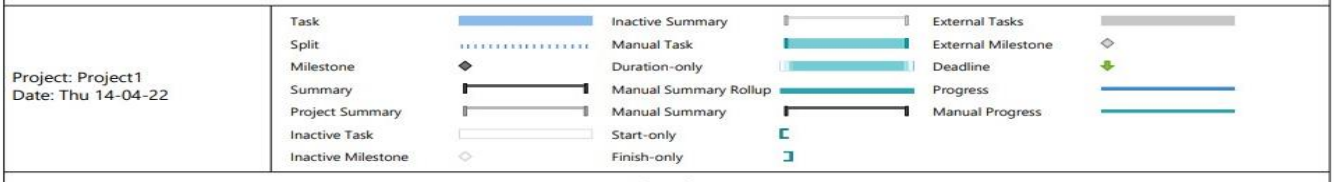
ID	Task Mode	WBS	Task Name	Duration	Start	Finish	WBS Predecessors
20		1.3.4	Updated Prototypes	2 days	Wed 16-03-22	Thu 17-03-22	1.3.3
21		1.3.5	Draft of Test Cases	3 days	Fri 18-03-22	Tue 22-03-22	1.3.4
22		1.3.6	Draft of Deployment Diagram	1 day	Wed 23-03-22	Wed 23-03-22	1.3.5
23		**1.4**	**Milestone 4**	**15 days?**	**Thu 24-03-22**	**Wed 13-04-22**	
24		1.4.1	Deployment Diagrams	3 days	Thu 24-03-22	Mon 28-03-22	1.3.6
25		1.4.2	API Test Cases	3 days	Tue 29-03-22	Thu 31-03-22	1.4.1
26		1.4.3	Coding Standards	3 days	Fri 01-04-22	Tue 05-04-22	1.4.2
27		1.4.4	Initial demo for the advisor	3 days	Wed 06-04-22	Fri 08-04-22	1.4.3
28		1.4.5	Recommendations	2 days?	Mon 11-04-22	Tue 12-04-22	1.4.4
29		1.4.6	Summary, References	1 day	Wed 13-04-22	Wed 13-04-22	1.4.5
30		**1.5**	**Final Report & Review**	**4 days?**	**Thu 14-04-22**	**Wed 20-04-22**	
31		1.5.1	Written Final Report	1 day?	Thu 14-04-22	Thu 14-04-22	1.4.6
32		1.5.2	Project Completed file	2 days	Thu 14-04-22	Mon 18-04-22	1.4.6
33		1.5.3	Deployment Guide	1 day	Tue 19-04-22	Tue 19-04-22	1.5.2
34		1.5.4	Group Peer Review, Evaluation Forms & Individual Form	1 day?	Wed 20-04-22	Wed 20-04-22	1.5.3
35		**1.6**	**Oral Presentation**	**1 day?**	**Thu 21-04-22**	**Thu 21-04-22**	**1.5**
36		1.6.1	Presentation Slides	1 day?	Thu 21-04-22	Thu 21-04-22	1.5
37		1.6.2	Discussion of Proposa	1 day?	Thu 21-04-22	Thu 21-04-22	1.5



ID	Task Mode	WBS	Task Name	Duration	Start	Finish	WBS Predecessors
38		1.6.3	Overview of key research identified by literature review	1 day?	Thu 21-04-22	Thu 21-04-22	1.5
39		1.6.4	Overview of Methodo	1 day?	Thu 21-04-22	Thu 21-04-22	1.5
40		1.6.5	Overview of Key Findi	1 day?	Thu 21-04-22	Thu 21-04-22	1.5
41		1.6.6	Conclusions	1 day?	Thu 21-04-22	Thu 21-04-22	1.5
42		1.6.7	Questions & Answer	1 day?	Thu 21-04-22	Thu 21-04-22	1.5



Web Search

OSNS is an internet social network service designed to help users meet new friends and maintain existing relationships. The main goal of the service is to make your social life and that of your friends, more active and stimulating. OSNS can help you both maintain existing relationships and establish new ones by reaching out to people you have never met before who you interact with is entirely up to you. Before getting to know a forever member, you can even see how they're connecting to you through the friend's network.

This website is provided as an online-only resource so that it may be continually extended and updated. This document begins with a description of the separate applications that the sample application comprises, describes the modular structure of the Friendworld.co.in application, and provides an in-depth description of several pieces of the modules.

Modules of OSNS:

This system consists of five modules, which are described below:

- Module 1
- Module 2
- Module 3
- Module 4
- Module 5
- Module 6
- Module 7

Each OSNS module has different requirements from the others. This section describes the details of each module.

Module 1: Module 1 deals with basic training in JAVA. There after extensive study of existing system is done. After critically analyzing the existing system, problems are framed out and objectives of proposed system are established.

Module 2: Module 2 deals with creating basic classes in JSP. Classes related to database connectivity and UI design are developed. Use of libraries (classes) provides the better connection between frontend and backend.

Module 3: Module 3 deals with user registration, email verification, editing profile, uploading profile picture, resetting password, troubleshooting for forgotten password, maintaining user log. For user registration and verification of genuine users, captcha support and email verification is used. Passwords are stored as SHA512 Hash values in Hexadecimal format for security purposes. Details related to registration are stored in registration table. User Log is maintained by storing login time, logout time, session ID, IP address, location in the userlog table.

Module 4: Module 4 deals with searching friends, sending/accepting/denying friend requests, removing existing friends and open chat. Searching of friends can be done by using the first or last name of the registered user. Registered and verified user is allowed to send friend requests to other users and even block certain persons. The user is also allowed to accept or reject a friend's request and remove anyone from his/her friend list. Another option of open chat is provided in this module. In open chat any user can chat with all other users.

Module 5: Module 5 deals with Private chat, uploading images in albums, and updating status with provision of posting comments.

Module 6: Module 6 deals with writing testimonials, deleting account, Integrating Flash games, word of the day, thought of the day, jokes and other related things.

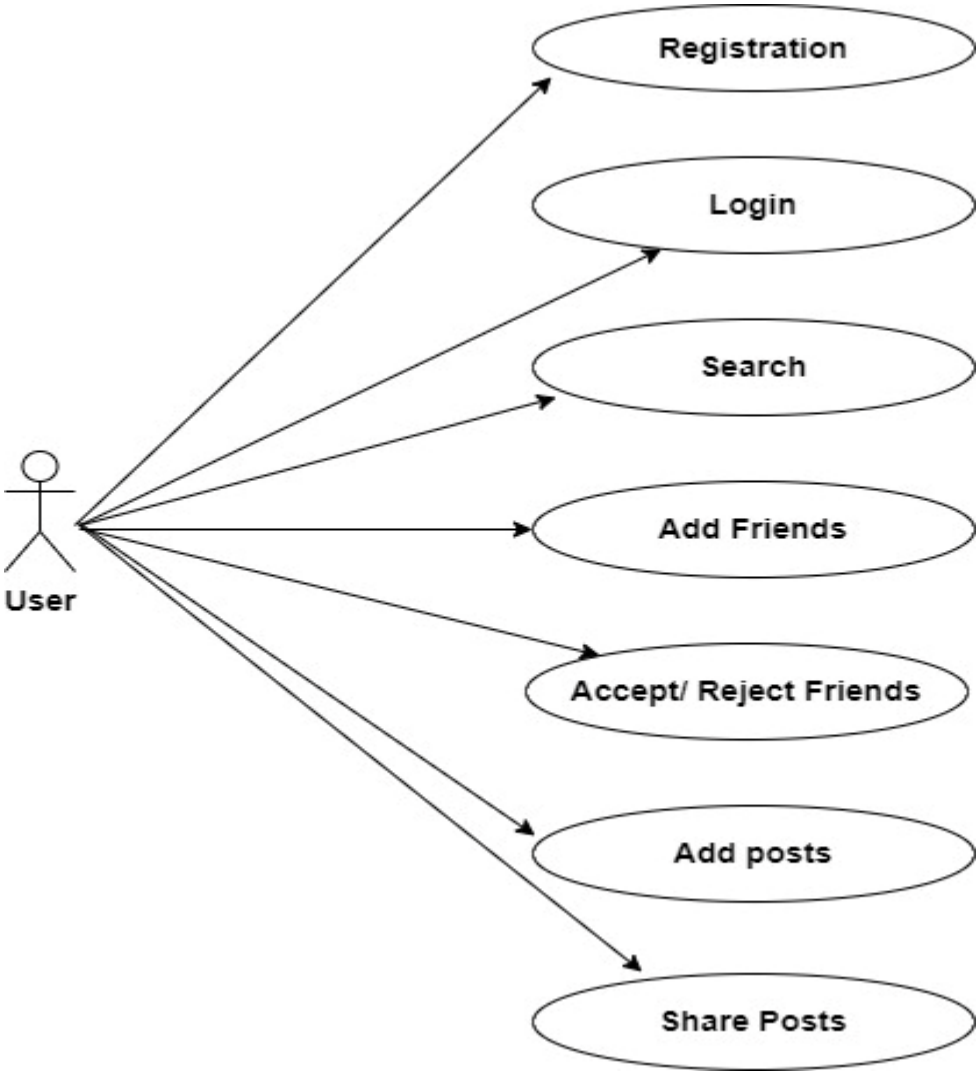
Module 7: Module 7 is related to testing of the website. Unit testing is done after development of each component of the website. For system testing, different test cases are developed, and project is tested as per these cases.

Use Case Diagram

Use cases specify the expected behavior (what), and not the exact method of making it happen (how). Use cases once specified can be denoted both textual and visual representation (i.e. use case diagram). A key concept of use case modeling is that it helps us design a system from the end user's perspective. It is an effective technique for communicating system behavior in the user's terms by specifying all externally visible system behavior.

A use case diagram is usually simple. It does not show the detail of the use cases:

- It only summarizes some of the relationships between use cases, actors, and systems.
- It does not show the order in which steps are performed to achieve the goals of each use case.

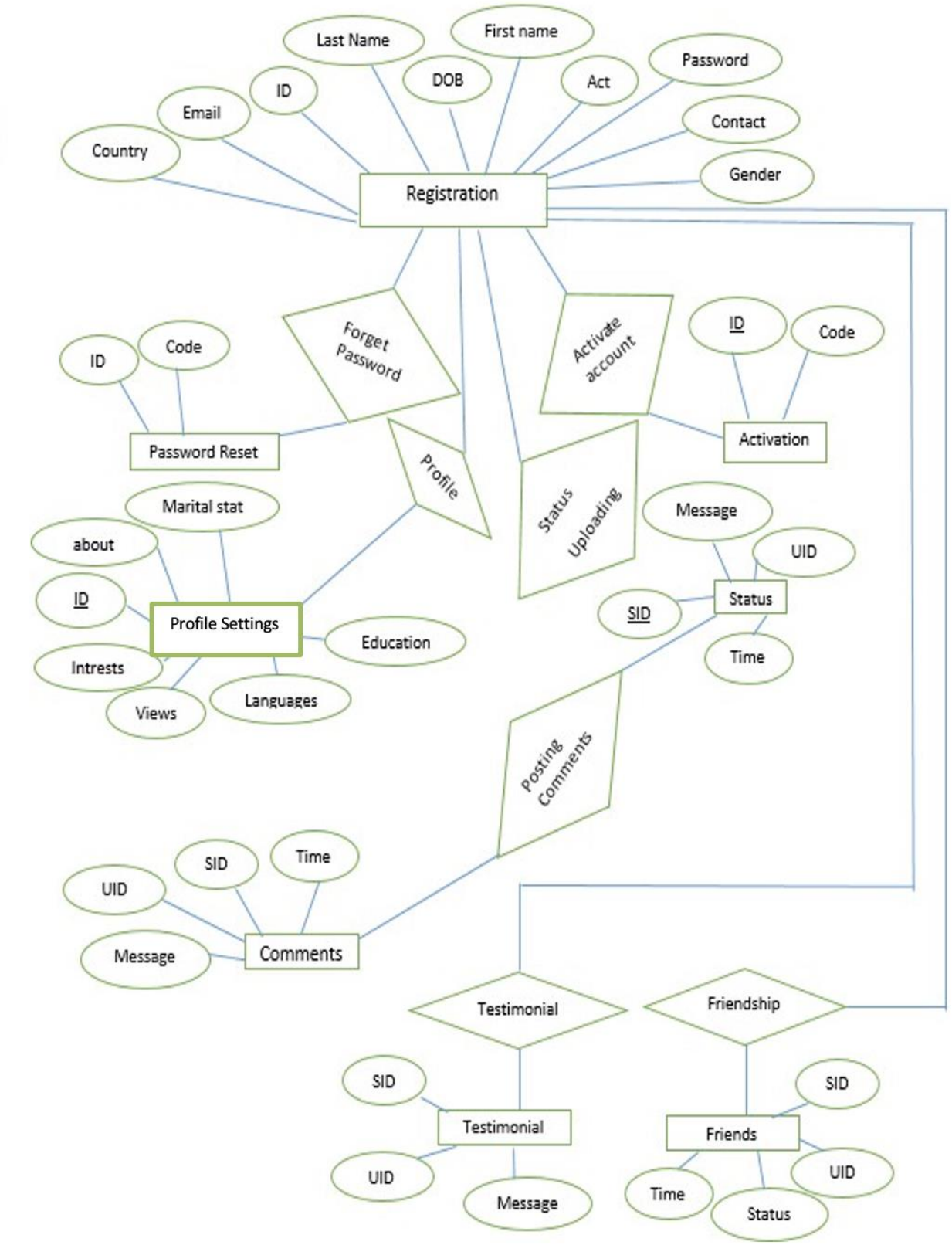


ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

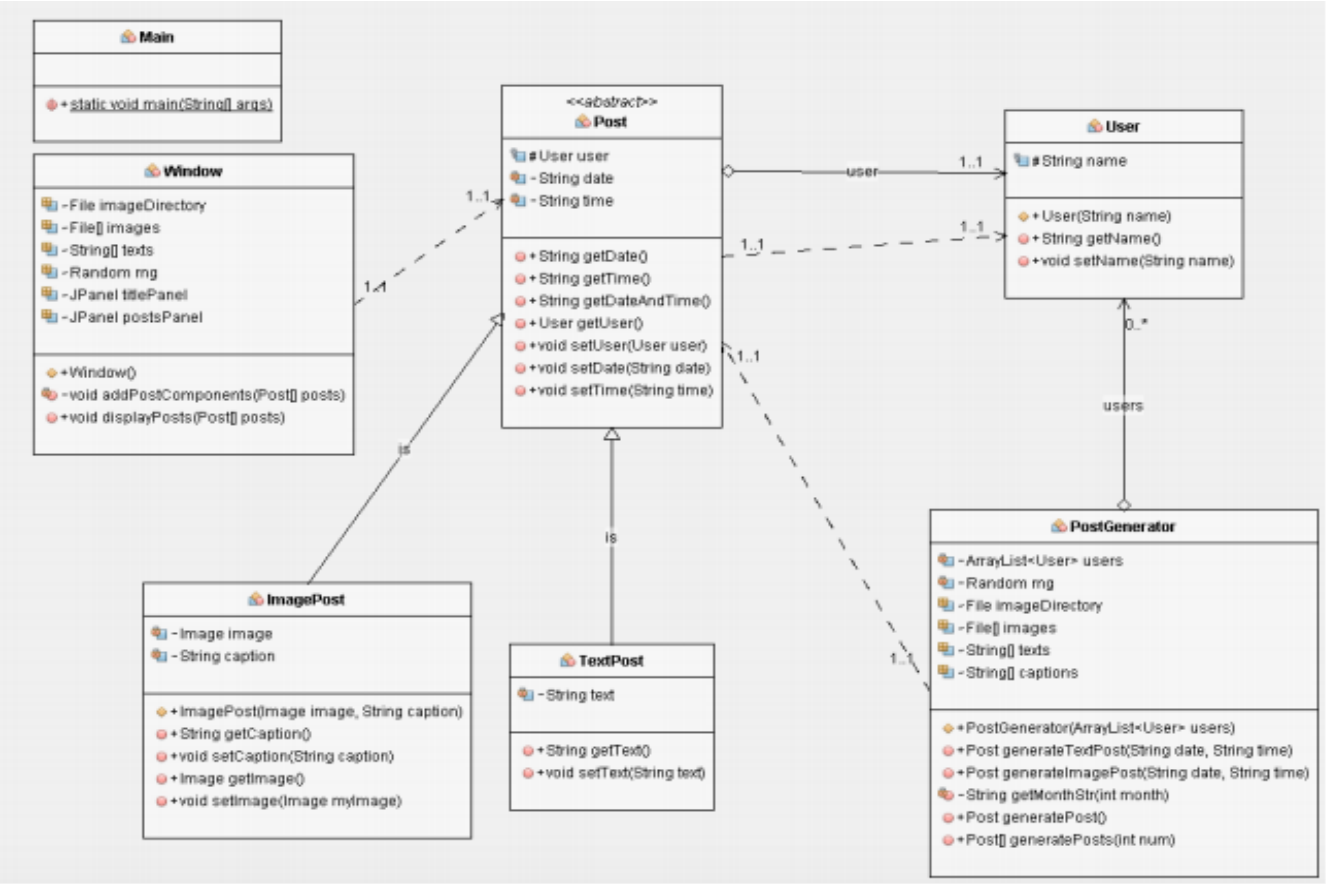
ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships.

At first look, an ER diagram looks very similar to the flowchart. However, ER Diagram includes many specialized symbols, and its meanings make this model unique. The purpose of ER Diagram is to represent the entity framework infrastructure.


Last Name
First name
DOB
Act
Password
ID
Email
Contact
Country
Gender
Registration
Forget password
Activate account
ID
Code
ID
Code
Password Reset
Activation
Profile
Status Uploading
Marital stat
Message
about
UID
ID
SID
Status
Profile Settings
Education
Time
Intrests
Views
Languages
Posting Comments
SID
Time
UID
Message
Comments
Testimonial
Friendship
SID
SID
Testimonial
Friends
UID
UID
Time
Message
Status

Class Diagram

A Class Diagram gives an overview of a system by showing its classes and the relationships among them. Class diagrams are static model views. They display what interacts but not what happens when they do interact.



System Architecture

- Here, our conceptual model defines the entire structure of our system.
- The social networking site is entitled with users which further allow them to register.
- After the registration the choice to User Search, Where he can search for the Neighbors.
- And the Adding them to friend list is also an option left for the User.
- Here, After the registration you can also update profile in make your easy access to neighbors.
- Here, We also have chat option in the system for effective communication.

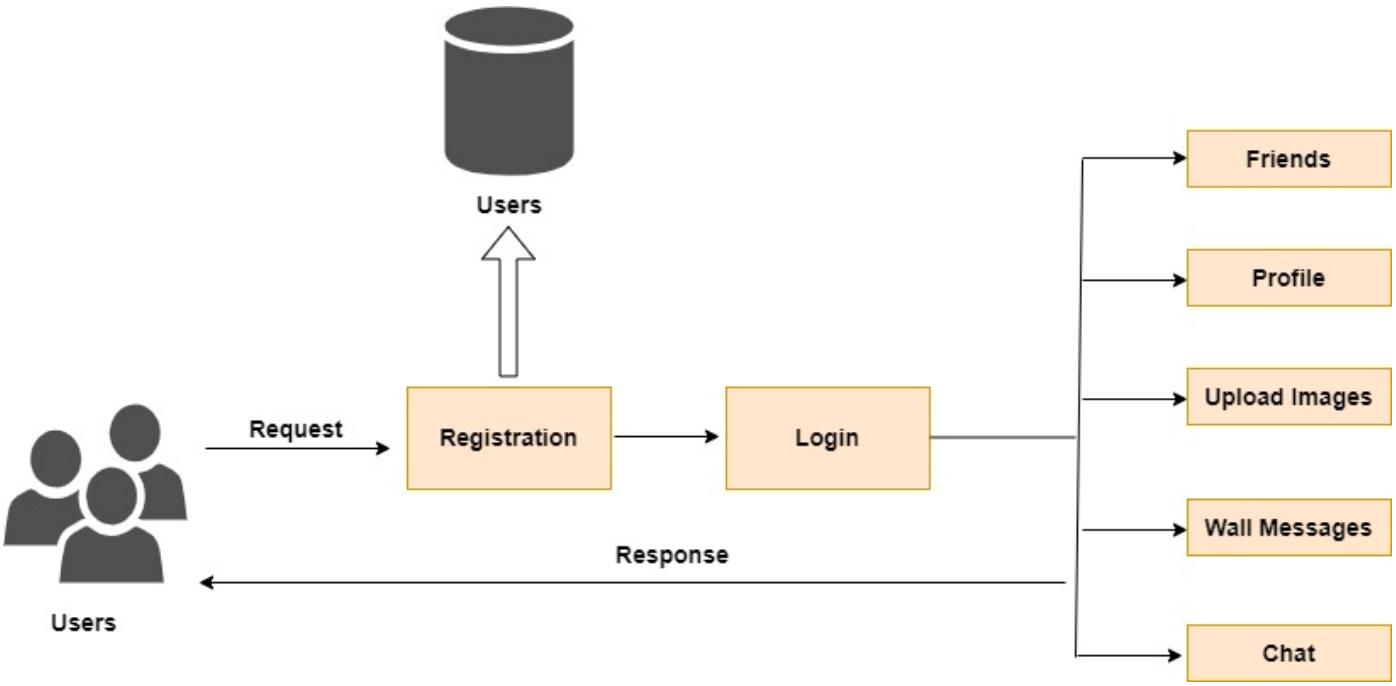
The system architecture explains about the process of various steps in SNS. The project being carried out developing the social networking website titled my neighbors with a tag line Linking Friends. This website aims at providing a new platform for the friends belongs to same colony using which they can stay in touch with each other no matter how many miles apart they are. Along with linking friends worldwide, one can also make new friends as per their own tastes. The main objectives of this website are as follows:

1. Linking Friends: The primary objective of my neighbors is to link the friends all over the world. Based on the zones the friends are connected. They must stay in touch no matter where they are and what they are and my neighbors help this cause.

2. Making new friends: The next objective is to make new friends as per one's own taste. Any social networking must not be limited to liking just existing friends. But there must also be scope of making new friends having desired tastes.

3. Security: Security is a major issue. The next objective of my neighbors is to keep website free from fake accounts, hacks and other threats.

4. Chat: This is one of the significant options that provides the chatting with the friends that are belongs to same zones.



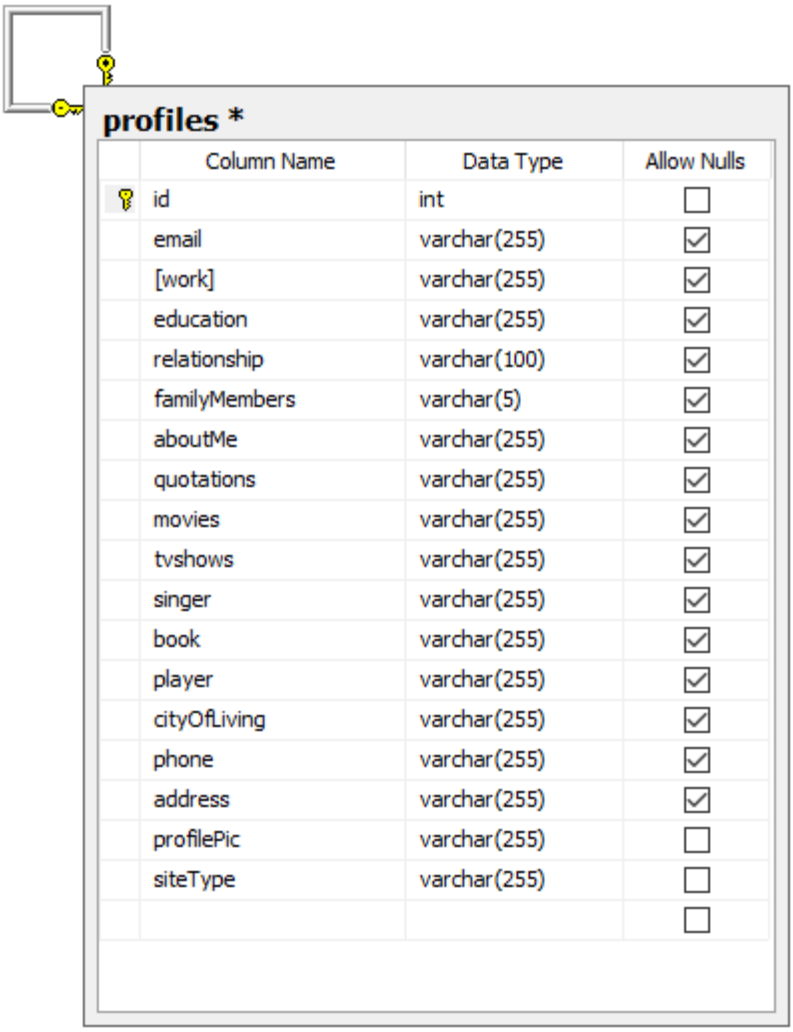
Here, the request from the Users to register will be stored, which allows the Users to register and then proceeding with the Login. The Login enables the Users to get in to all the functionalities like Friends, Profile, Upload Images, Wall Messages and the Chat.

Data Dictionary

A data dictionary is a list of data items with descriptions and attributes. It resembles a set of tables.

Here, For Our Project we have MYSQL as Database.

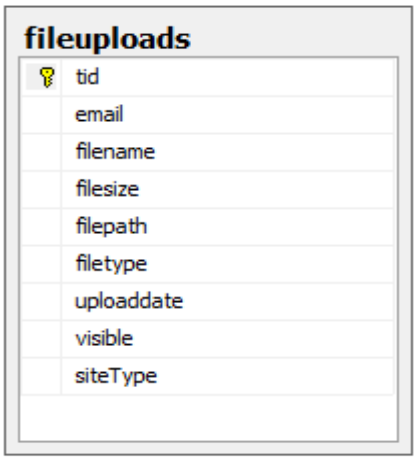
1) Here, we had all the Attributes for the Profiles Entity.



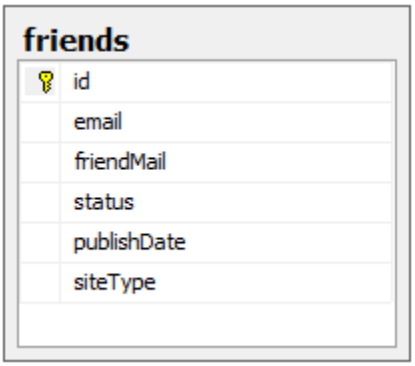
profiles *

Column Name	Data Type	Allow Nulls
id	int	☐
email	varchar(255)	☑
[work]	varchar(255)	☑
education	varchar(255)	☑
relationship	varchar(100)	☑
familyMembers	varchar(5)	☑
aboutMe	varchar(255)	☑
quotations	varchar(255)	☑
movies	varchar(255)	☑
tvshows	varchar(255)	☑
singer	varchar(255)	☑
book	varchar(255)	☑
player	varchar(255)	☑
cityOfLiving	varchar(255)	☑
phone	varchar(255)	☑
address	varchar(255)	☑
profilePic	varchar(255)	☐
siteType	varchar(255)	☐
		☐

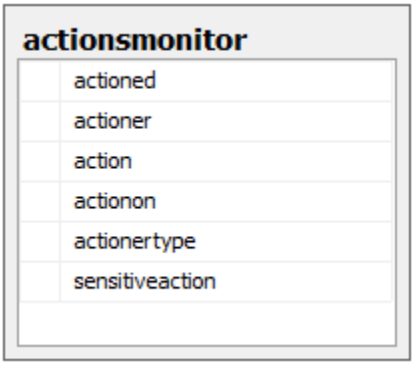
2) This indicates for the File uploads table and its attributes.



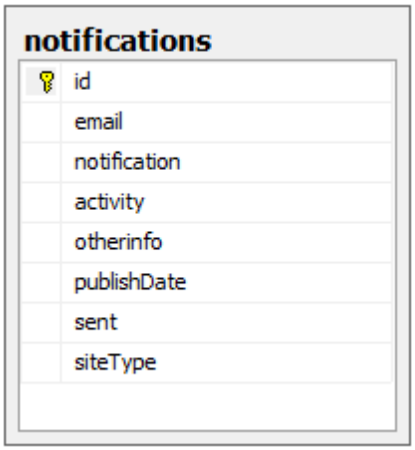
3) The Friends table with the Attributes.



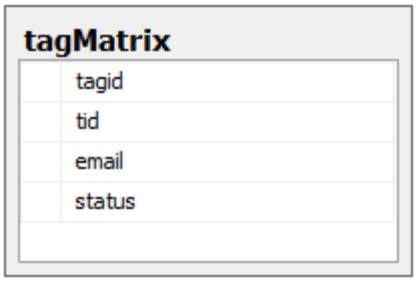
4) The Action monitor table with set of Attributes.



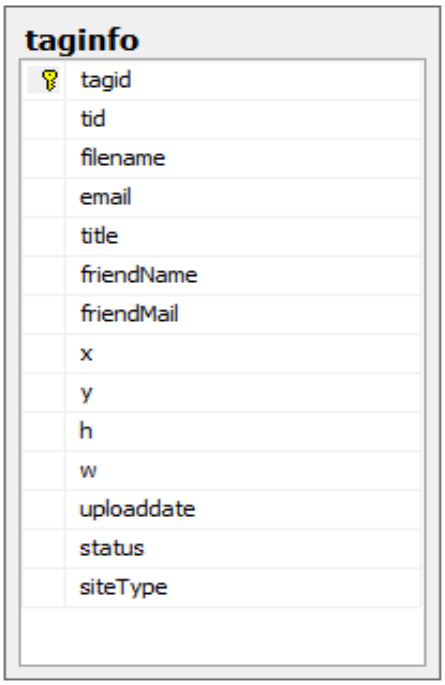
5) The Notifications table with Attributes.



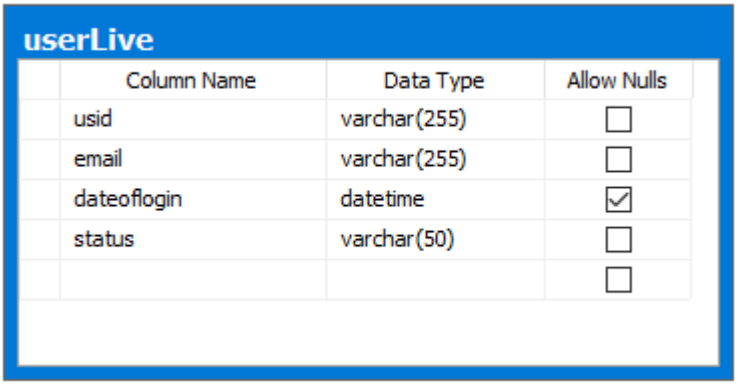
6) The Tag matrix table with Attributes.



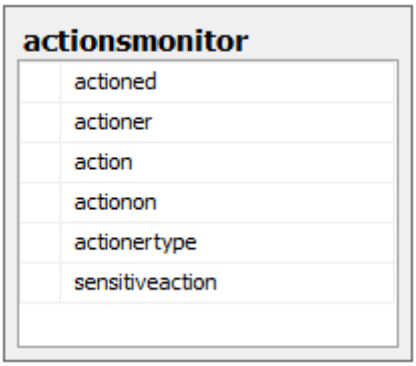
7) The Tag info Table with Attributes.



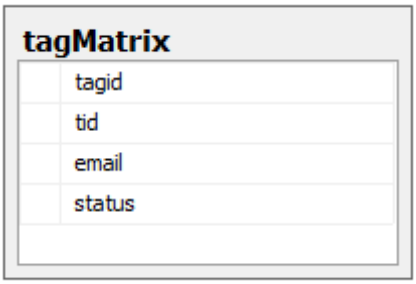
8) The User Live with the Attributes.



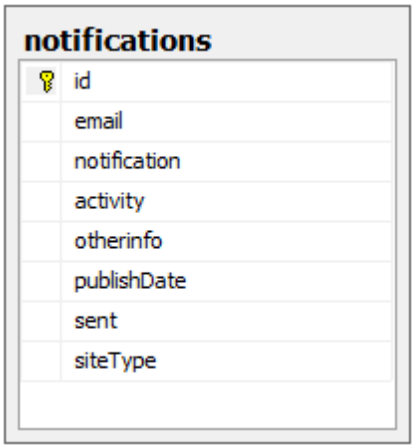
9) The actions monitor with Attributes.



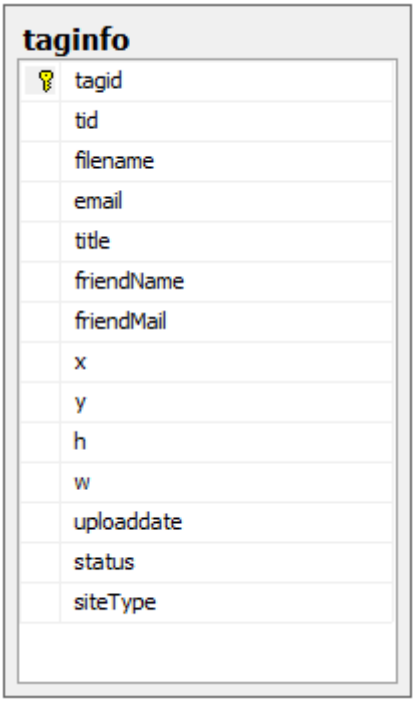
10) The Tag matrix table with Attributes.

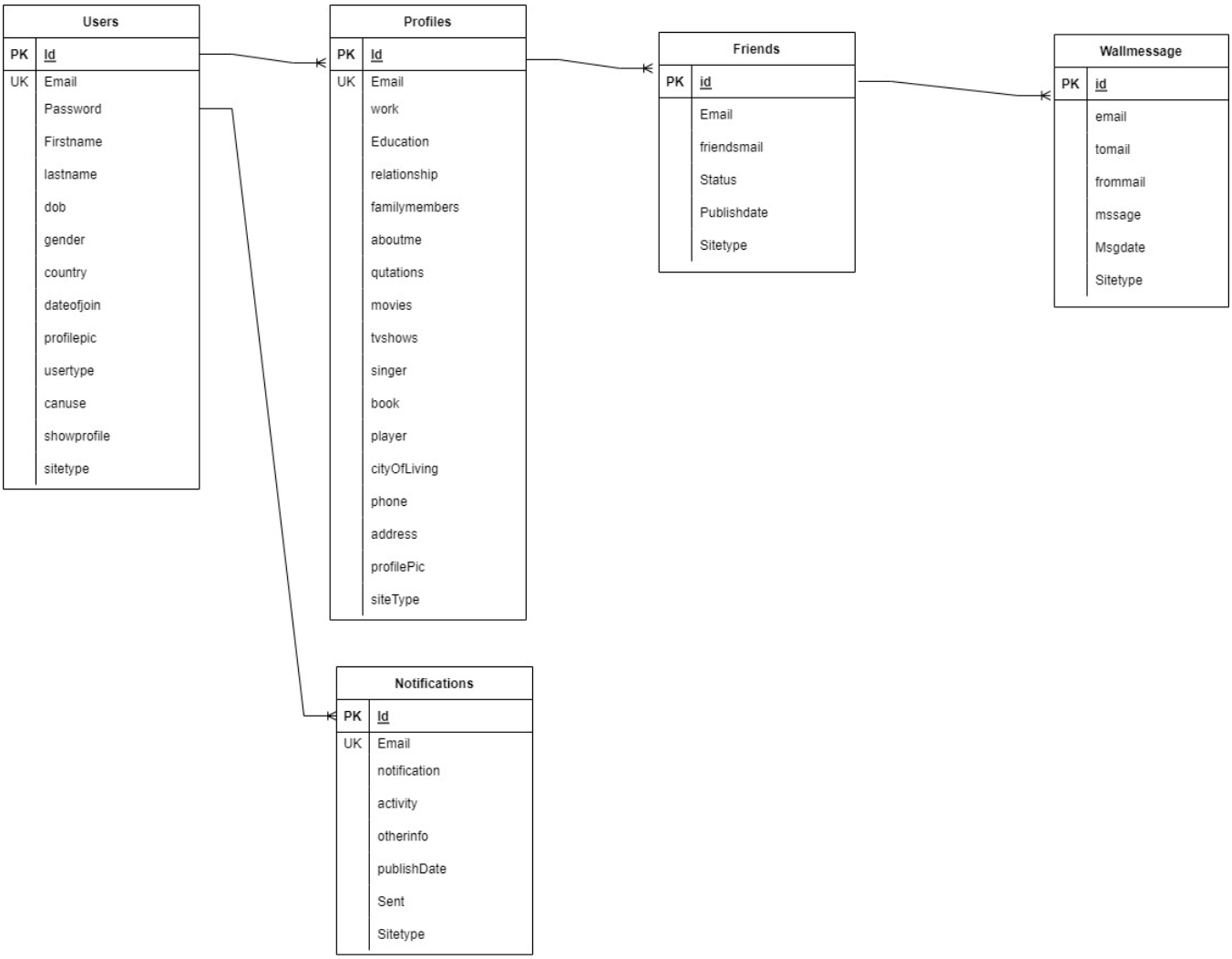


11) The Notifications table with Attributes.

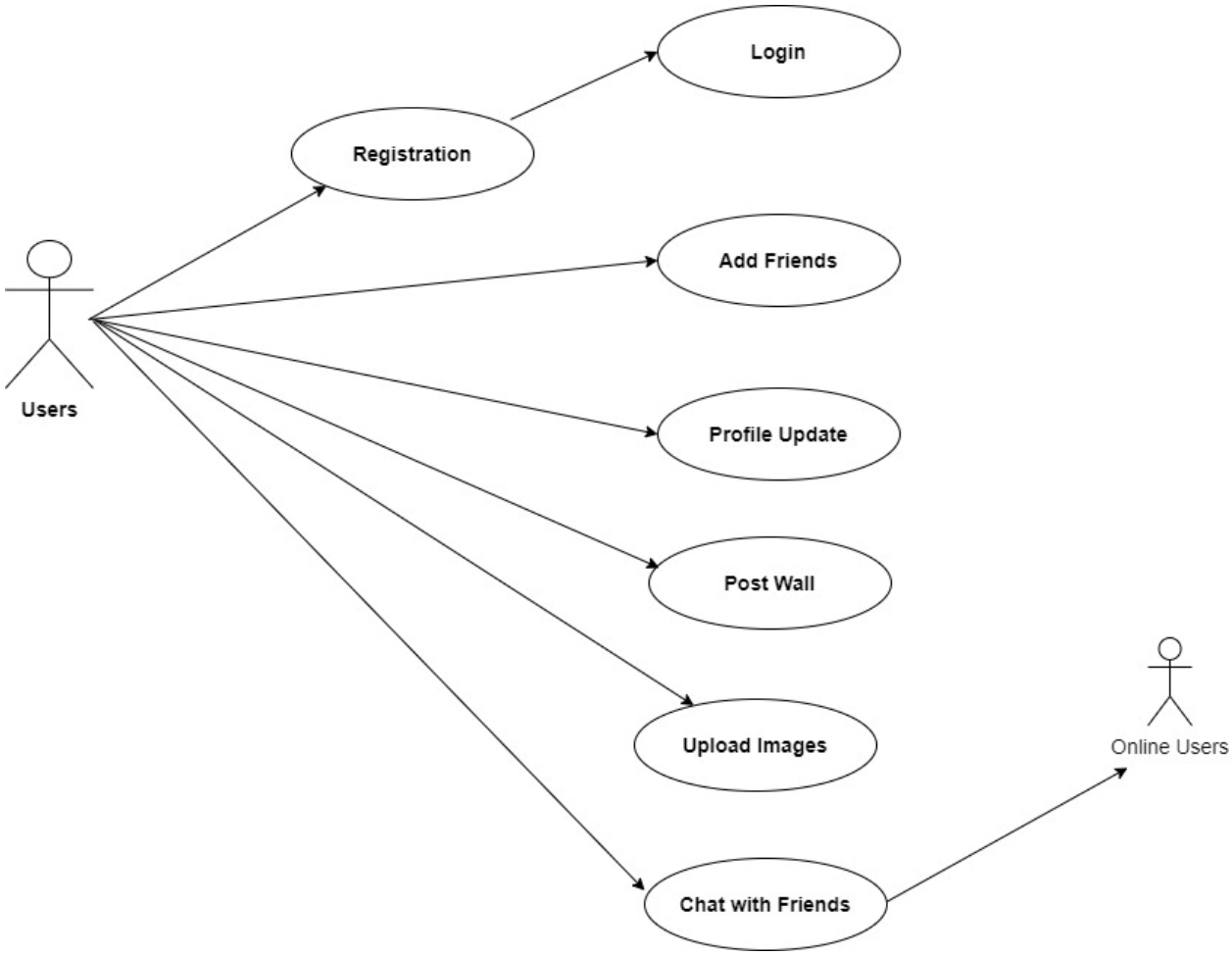


12) The Tag Info Table with Attributes.




Users
PK Id
UK Email
Password
Firstname
lastname
dob
gender
country
dateofjoin
profilepic
usertype
canuse
showprofile
sitetype
Profiles
PK Id
UK Email
work
Education
relationship
familymembers
aboutme
qutations
movies
tvshows
singer
book
player
cityOfLiving
phone
address
profilePic
siteType
Friends
PK id
Email
friendsmail
Status
Publishdate
Sitetype
Wallmessage
PK id
email
tomail
frommail
mssage
Msgdate
Sitetype
Notifications
PK Id
UK Email
notification
activity
otherinfo
publishDate
Sent
Sitetype

Application Programming Interface Prototype



Here, This Prototype helps us to know how the flow of response and acknowledge requests are sent in the project Network. The API helps other external sites to pull data from the social media networking site and Integrate with their application.

User Interface

We have developed the user interface in a simple and efficient manner it can be used by anyone, even for the people who are using it for the first time. Below are the few screenshots and their information on what they define.

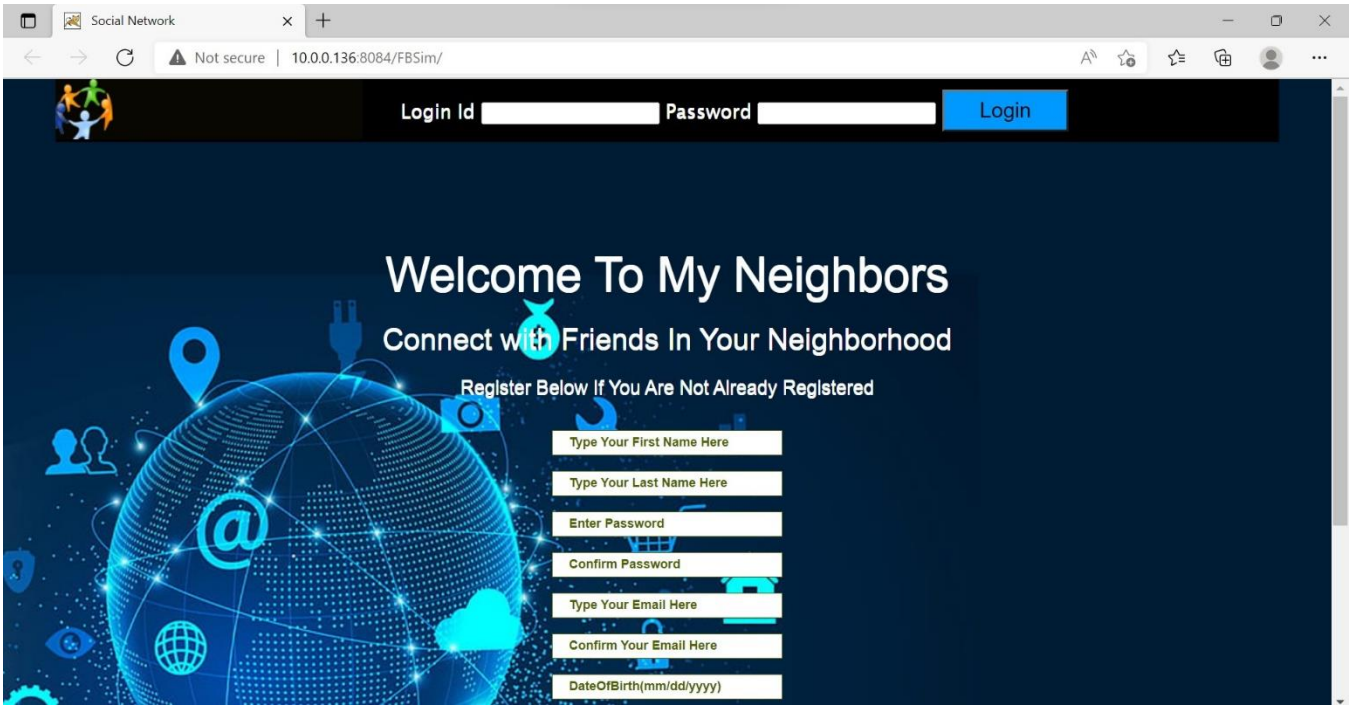


Figure 1: Login and Register

The above Figure 1 shows the webpage in which users can register and login.

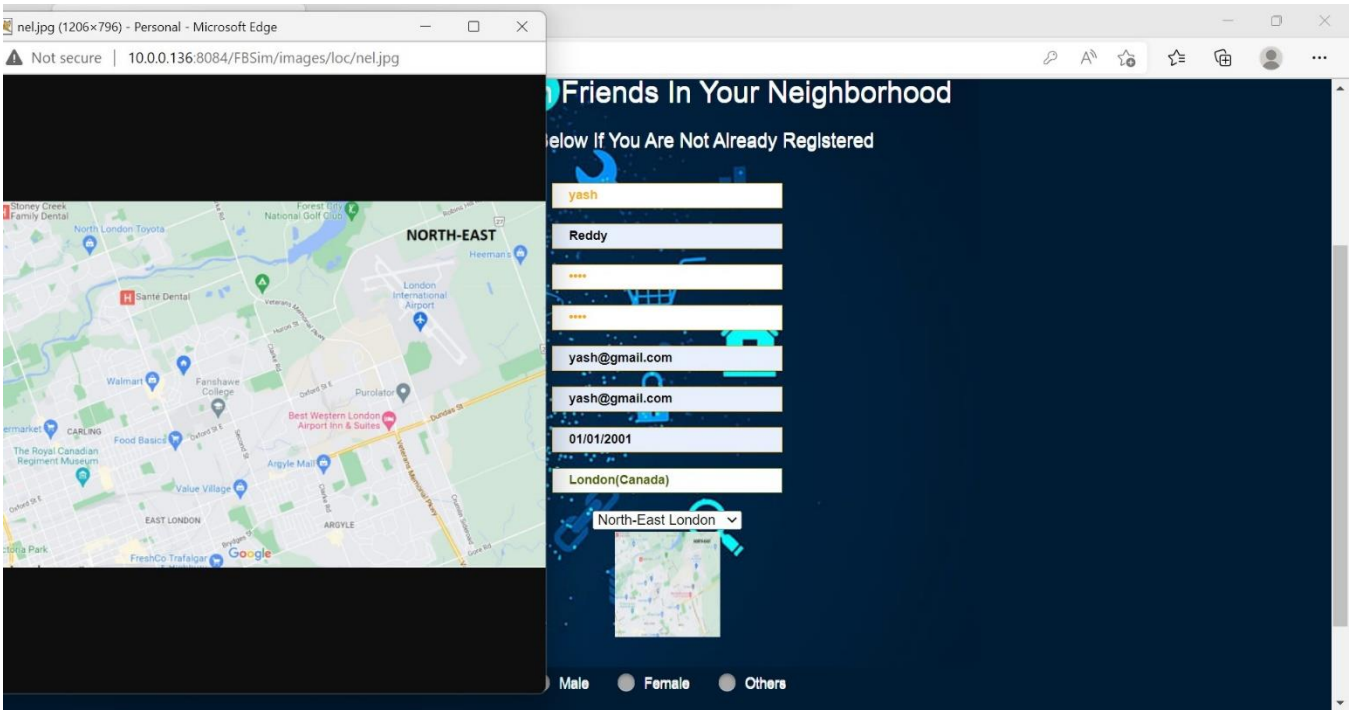


Figure 2: Zone selection during signup

Figure 2 shows that user has selected North-East zone of London which had pop-up the map image. This will be changed when the user selects different location.

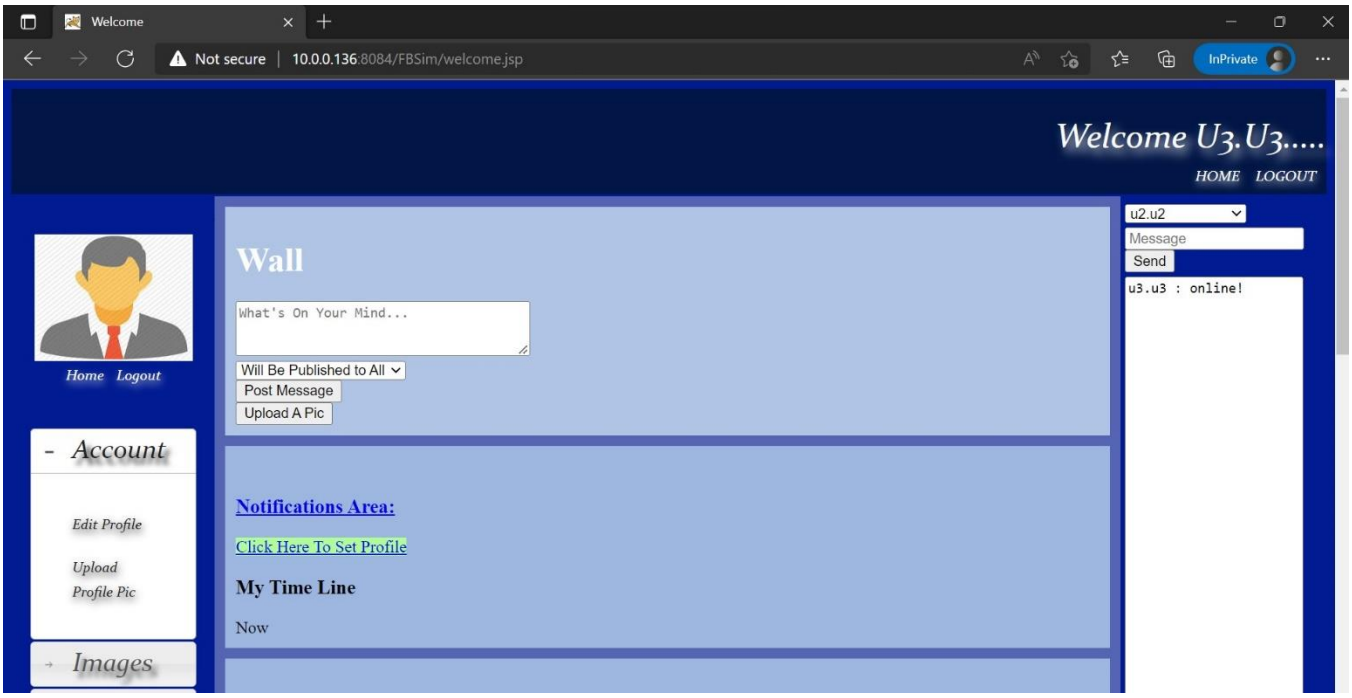


Figure 3: Wall Page

Figure 3 shows how the welcome page looks once the user logs in.

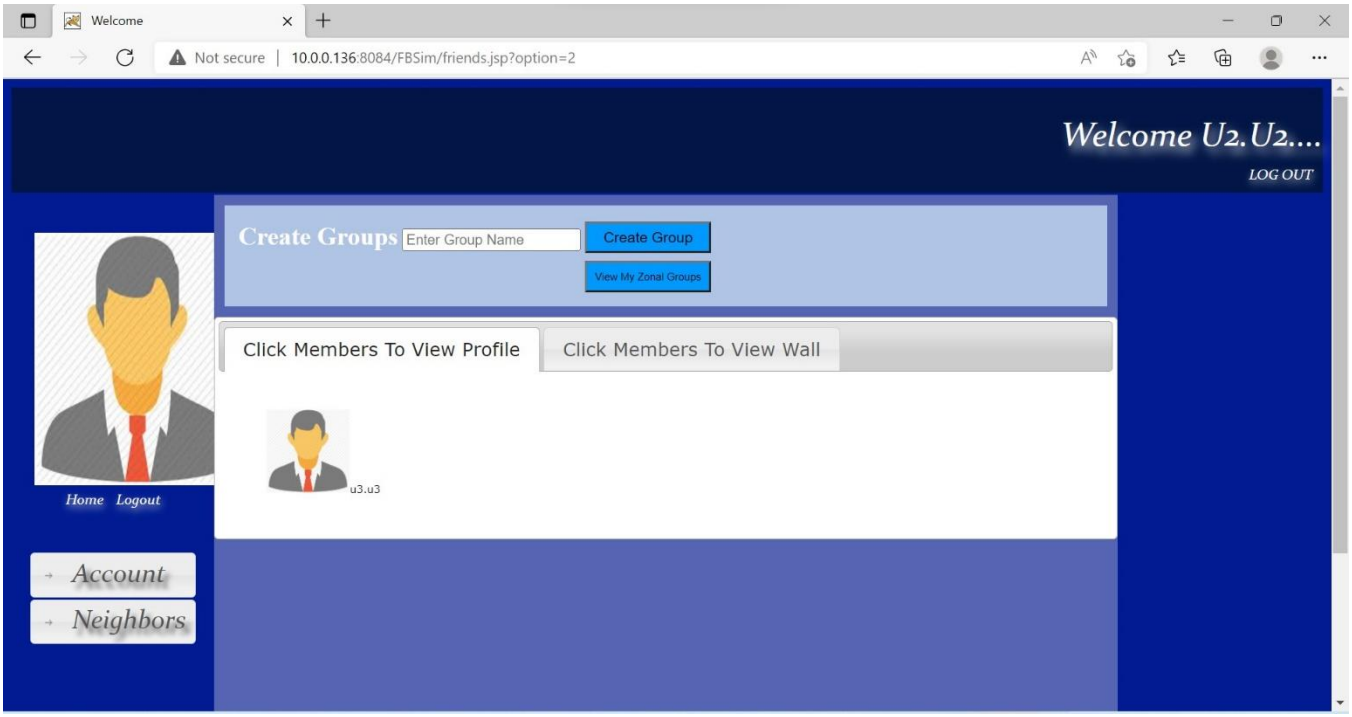


Figure 4: Neighbors Page

Figure 4 shows the list of all neighbors who are from the same zone.

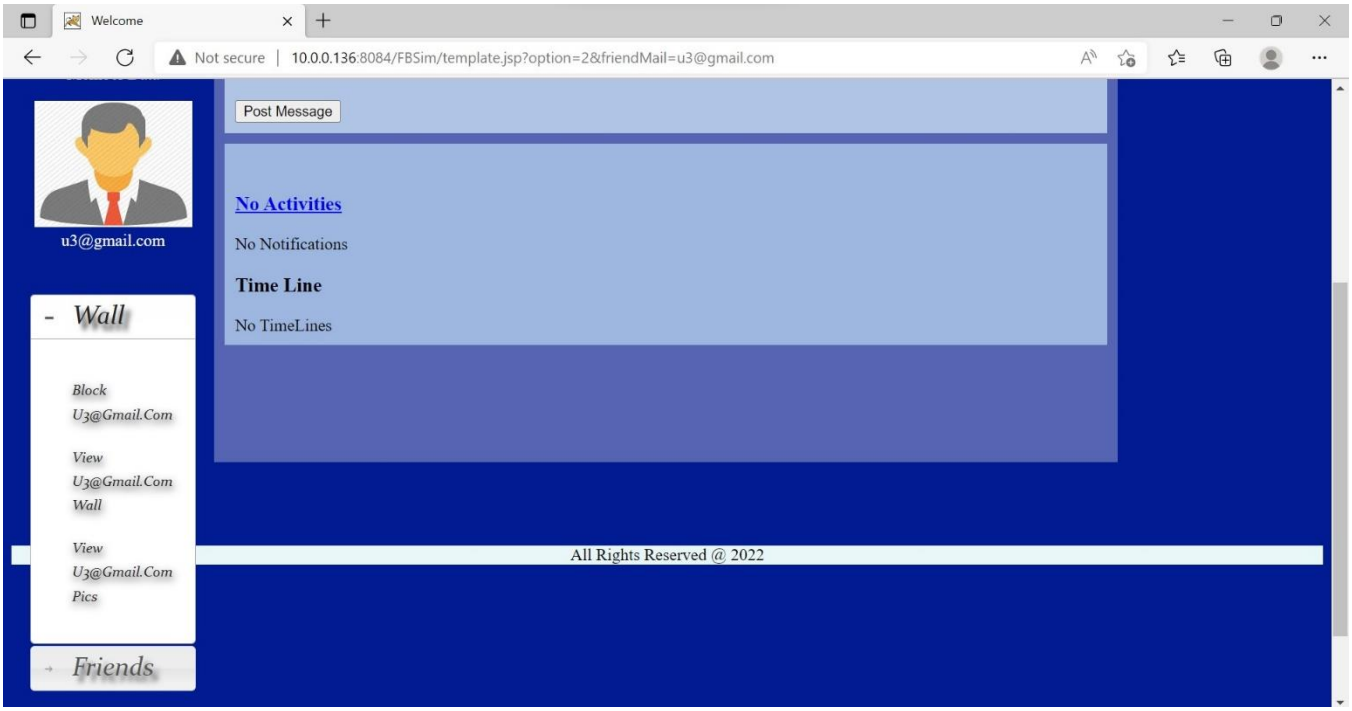


Figure 5: Wall Page of Neighbor with Block option.

Figure 5 shows the option of blocking the neighbor from their wall page.

Figure 6: Post message feature on Wall

Figure 6 shows the option to post a message on the wall. The message in the figure 6 is posted by User 2.

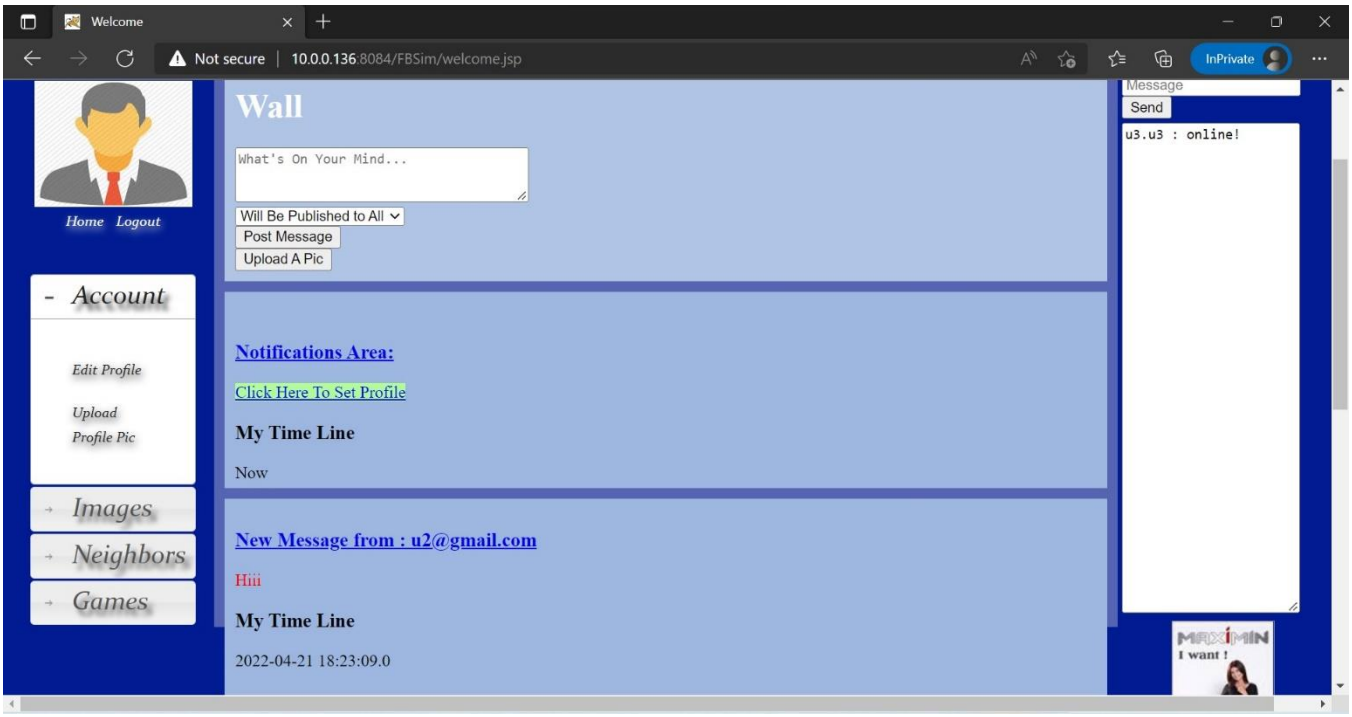


Figure 7: Message received on wall

Figure 7 shows the received message on the wall. The message sent in the figure 6 posted by User2 is received by user 3 in Figure 7.

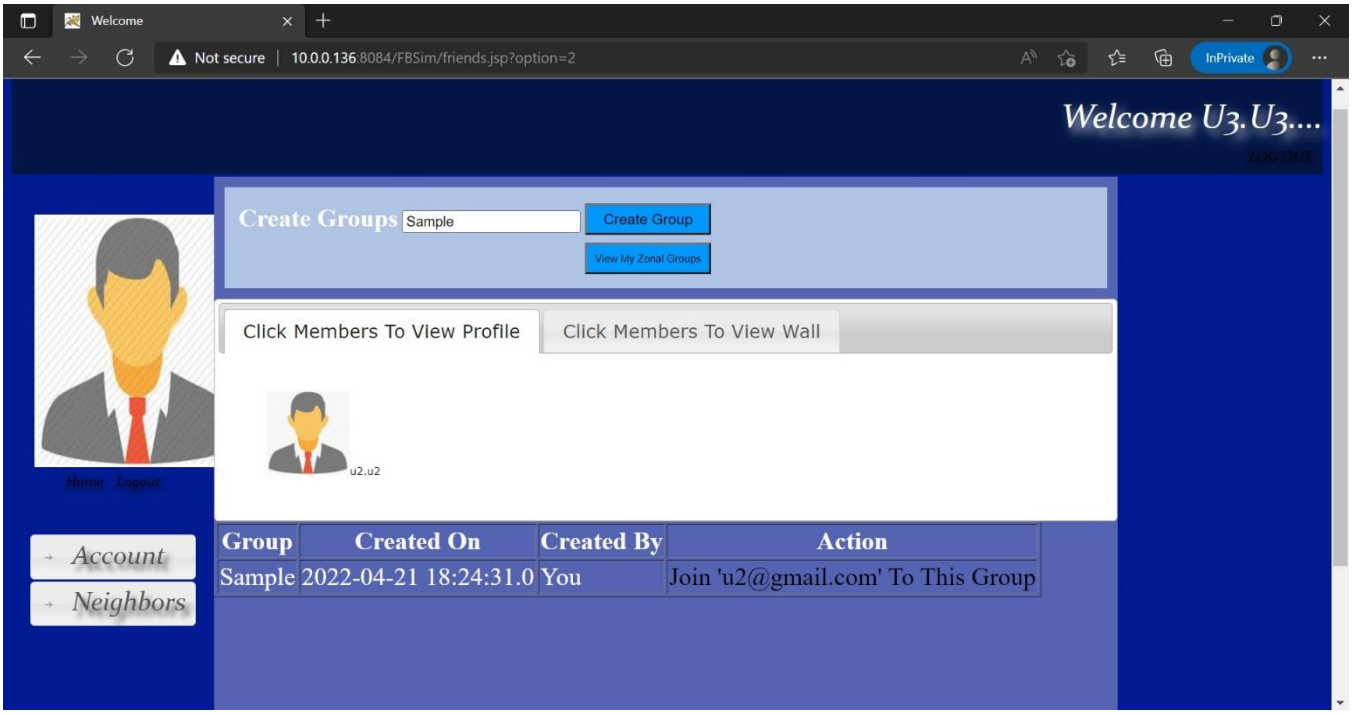


Figure 8: Groups

Figure 8 shows the option to create groups, view groups and add members to the group.

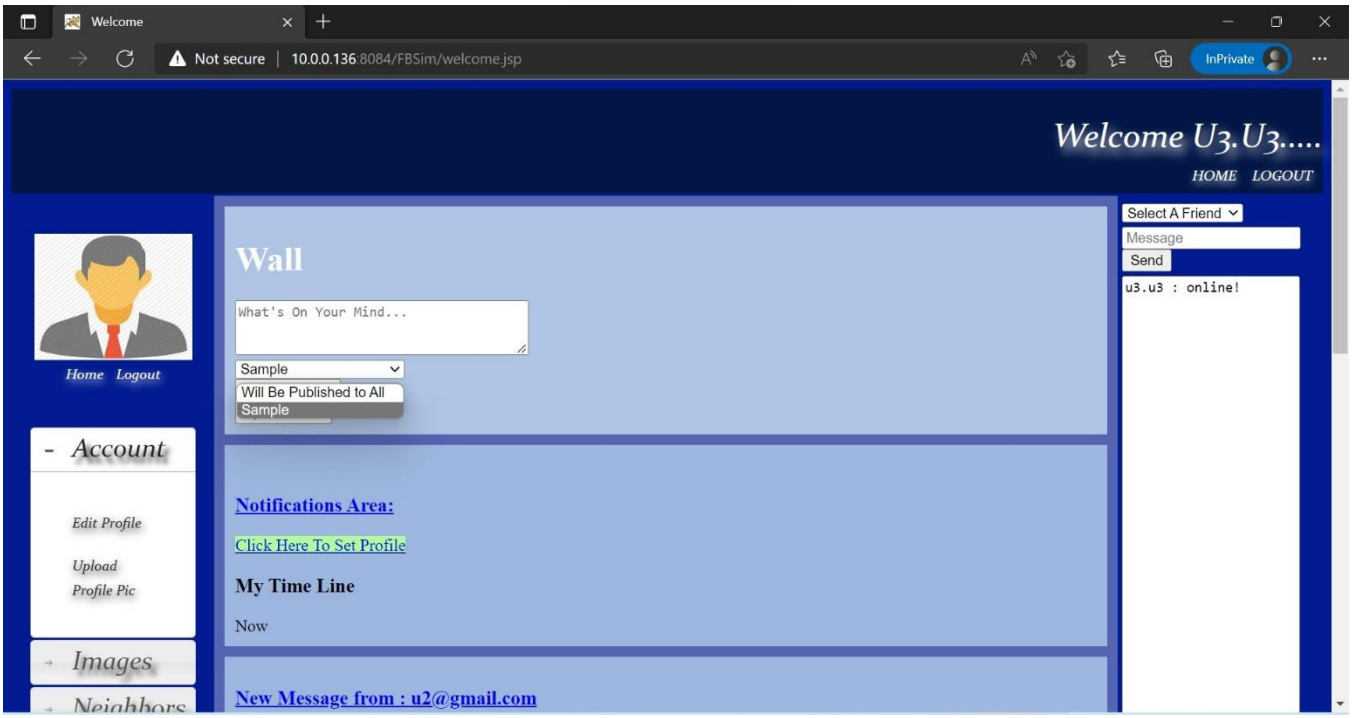


Figure 9: Post message feature on Group Wall

Figure 9 shows the option to post a message on the wall which can be either posted to all or only in the group.

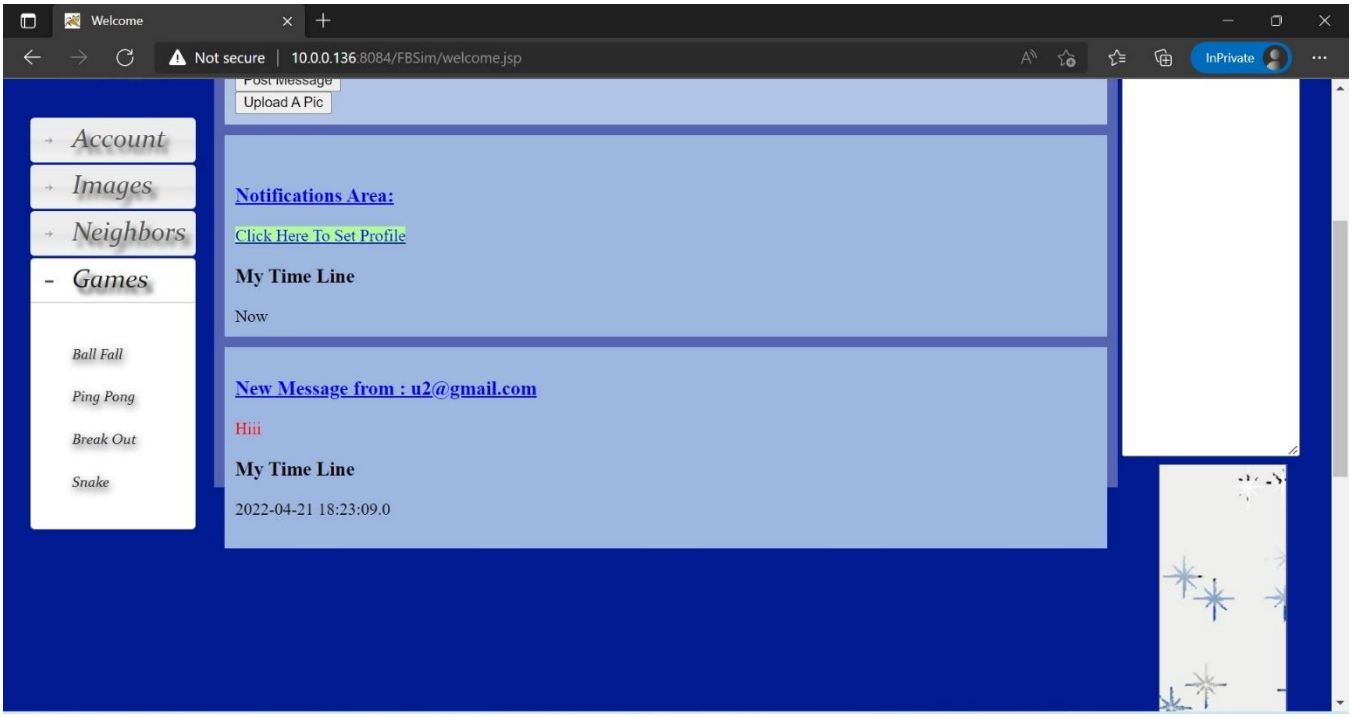


Figure 10: Games

Figure 10 shows all the available games which can be played by the users.

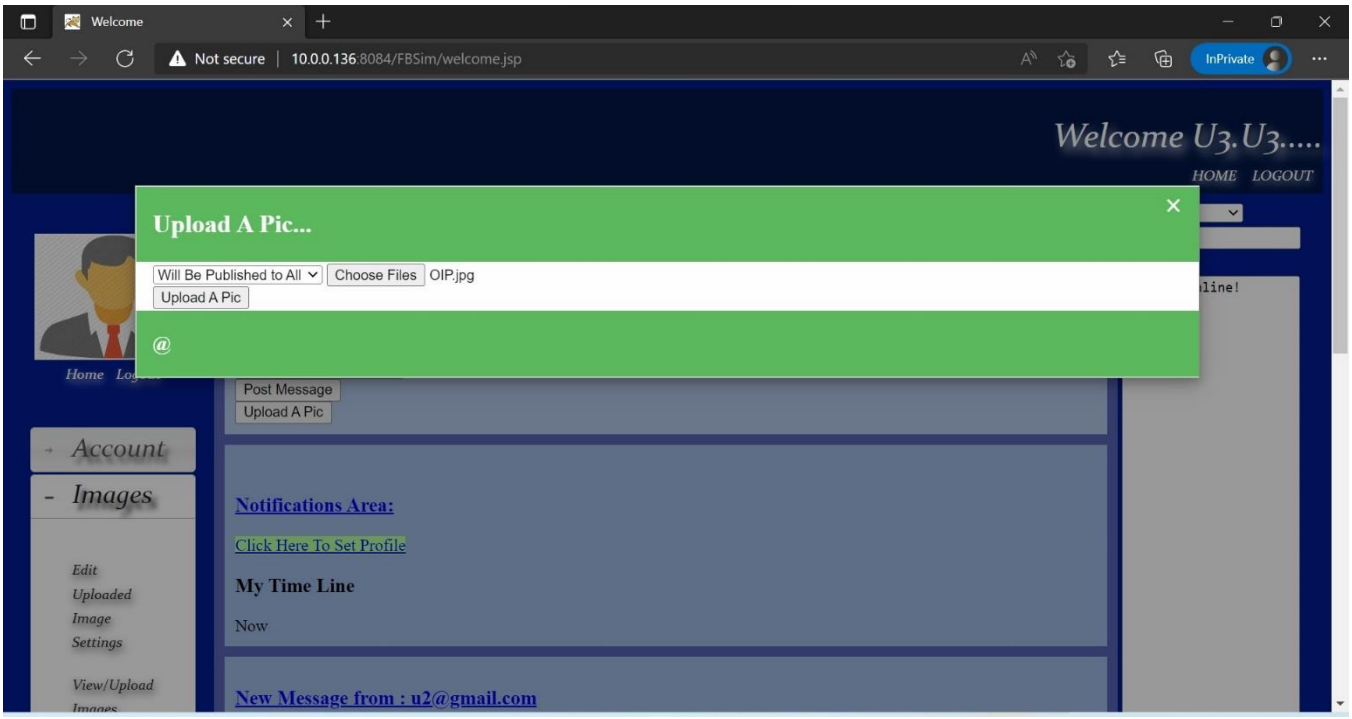


Figure 11: Post image feature on Wall

Figure 11 shows the option to upload an image by the user.

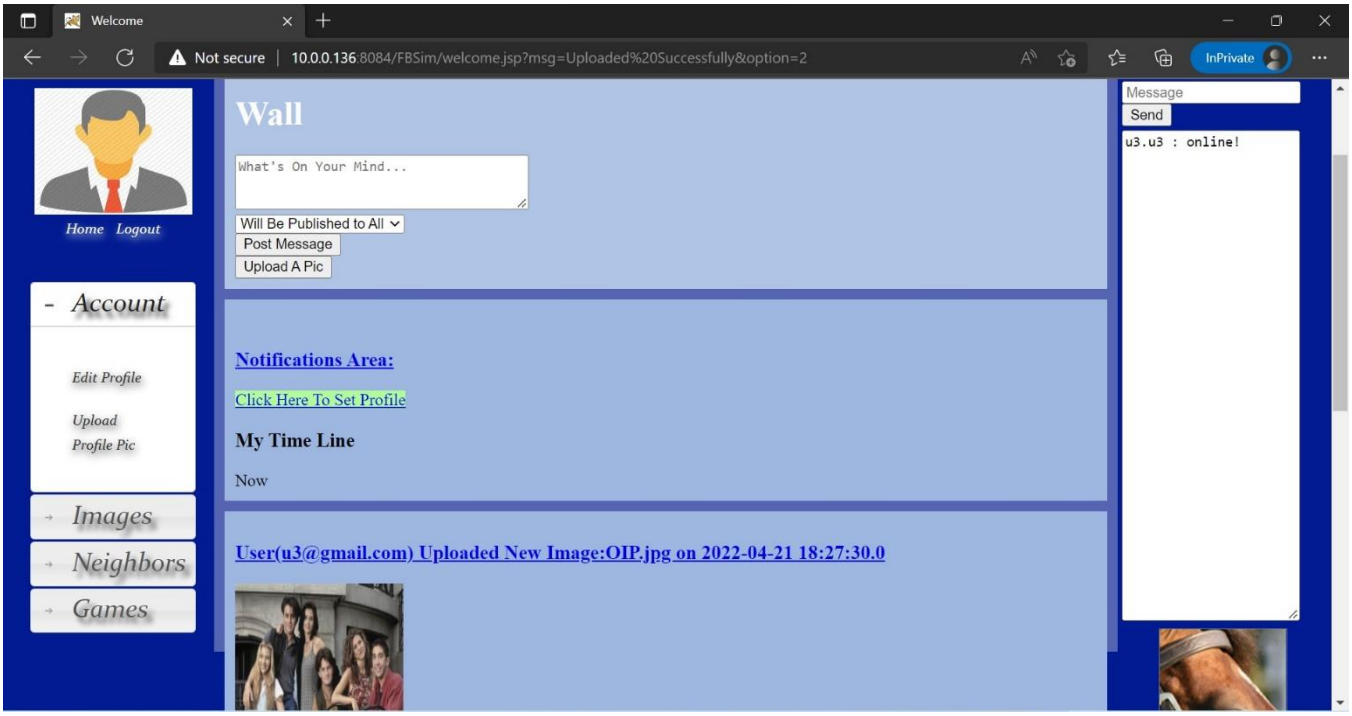


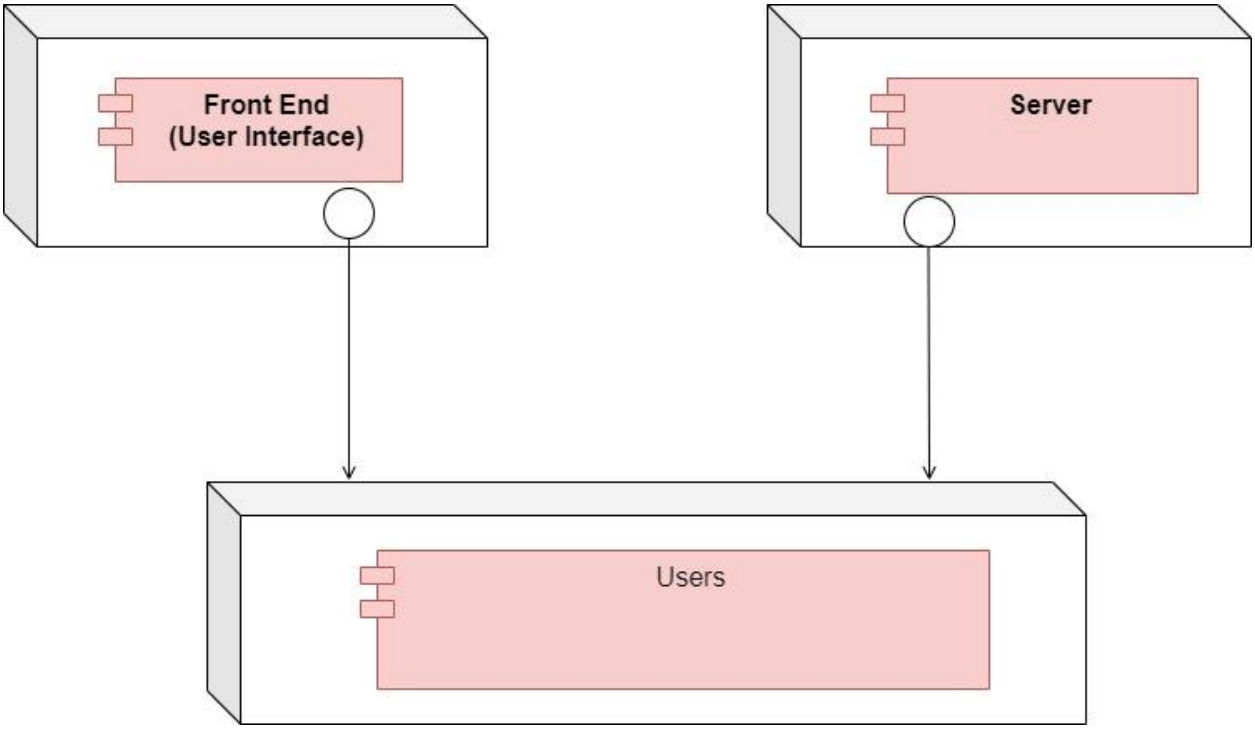
Figure 12: Posted image on wall.

Figure 12 shows the user uploaded image.

Deployment Diagram

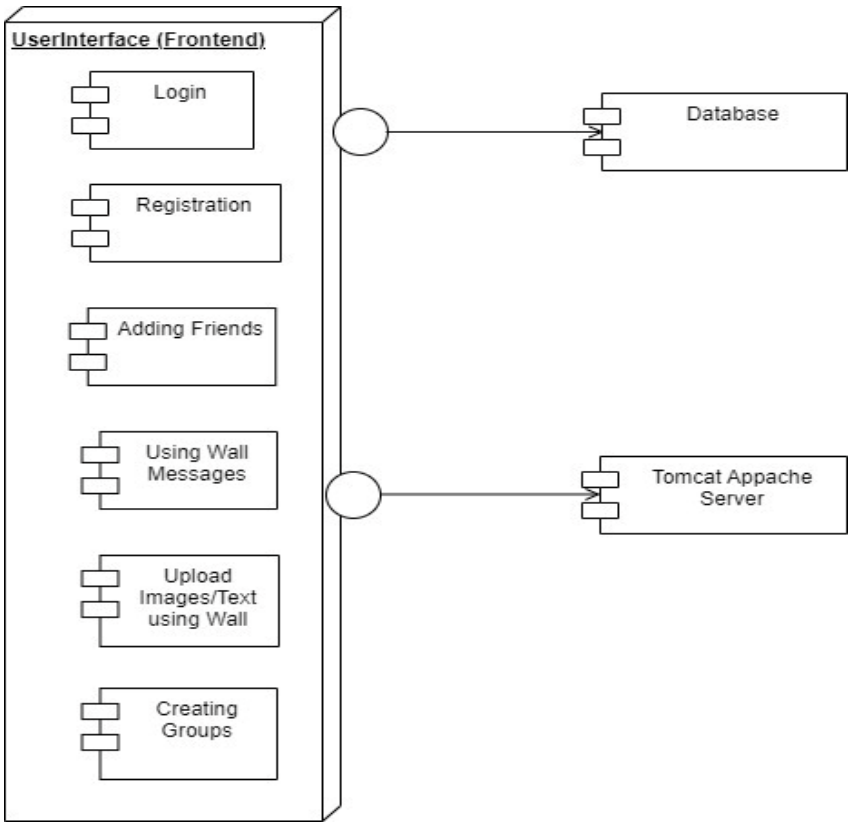
A deployment diagram is a sort of UML diagram that depicts a system's execution architecture, containing nodes like hardware or software execution environments, as well as the middleware that connects them.

Deployment diagrams are commonly used to depict a system's physical hardware and software.



The Purpose of Deployment Model Diagram:

- They simulate physical hardware components as well as the communication links that connect them.
- They depict the run-time system's structure.



This deployment is divided into two types that is frontend and backend.

Frontend is for user interface where it consists of six modules, they are: -

- Login: - Users may access their accounts here by entering their email address and password.
- Registration: - Users may register for our application using their email address and password.
- Adding friends: - Here users may make friends in their neighborhood by sending and accepting requests from them after logging into our app.
- Using wall messages: - The user can send messages to his or her neighbors from this website. Where his/her neighbors can also respond to him.
- Upload images/ Text using wall: - Users will be able to post photos or text to be shown on the walls of their neighbors. As a result, the neighbor will be able to view what he or she has posted.
- Creating groups: - Here, users may create a group with their neighbors and discuss and publish about anything pertaining to their neighborhood.

This is one type of diagram that shows the overall execution of system. This includes connections between all the modules by using the middleware components. This diagram typically used to visualize the physical hardware and software of a system. Using it you can understand how the system will be physically deployed on the hardware.

Deployment diagrams help model the hardware topology of a system compared to other UML diagram types which mostly outline the logical components of a system.

Test Cases

Testing: Software testing plays a significant role in improving the quality of the software program or software project. This can be used to analyze the quality of the project or programs that are written in software development. A developer has to know the different types of functional and specialty testing. Every type of testing is used according to the requirement of the user. Once the developer retrieves the types of functional testing, then the developer can allocate the time and resources according to the usage. It is very tedious to achieved the high rate of test coverage, even the programmer has the advantage of manual and automated testing. A high quality of software applications can develop by using this testing and gives the better software experience.

Types of functional testing:

- Unit testing
- Component testing
- Integration testing
- System testing
- White-box testing
- Black-box testing
- Acceptance testing

Unit testing: Before testing the total OSNS project, the developer has to test every part of the program i,e every program in the software. All the methods and functions in this testing are considered as the unit, the two source codes give the accurate and required output after testing. By using this testing an improvement is seen in this program. After using this testing, the output of the software shows the impact on the design and code of the project. Many developers run their programs by using the automation test.

Example for Unit testing: The programmer plays the major role in designing the user interface to store the data into database. This testing is used to check whether the user given the correct input or not. Different unit testing validates another functionality of the OSNS project, such as preprocessing, training and testing.

Component testing: The other name for this testing is module testing, this testing really takes a look at individual pages of an application. Similar to unit testing, this type of testing is also used to separate the software program files. The difference between these two types of testing is the unit testing is worked by the developers in using the proposed configuration to confirm the modules in the software, and this is done by the researchers that find the single program files in the software application. On the other side, the programming depends on this part by using this testing, experts use the tools to improve the communication among the various components.

Example for Component testing: In this OSNS application, an option is available to search the friends and retrieve the friends that are nearer to the user. This will retrieve the huge number of persons that are belongs to similar name.

Integration testing: In this testing, the unit testing is integrated and works together. According to the experts, every single file of the project together works better. Many advanced applications execute on micro-systems and applications that are worked on the specific undertaking. These miniature administrations should have the option to speak with one another, or the application will not fill in as expected. Through mix testing, analyzers guarantee these parts work and convey together consistently.

Example of Integration testing: The OSNS project the developer includes the several options for the OSNS users with separate functionalities with separate codes. Every separate is code is one algorithm. The testers in this test remember this type of navigation and perform the actions according to the requirements.

System testing: In this testing, the QA analyzes will test the overall software and complete the software without any bugs in the software. In this testing, the developer of the OSNS project validates the competition for the project and integrates the package of the software that checks the requirements. Many testers are providing the functionality and performance of the application or website without having any knowledge about the software development. This will helps all the tester teams to develop the test cases that move forward. This is also called end-to-end testing.

Example of System testing: The OSNS is the project that provides the buttons, radio buttons, textboxes and other types of components that are present in the project page. The tester access all the features that are belong to every component that gives the better experience.

White-box testing: This testing analyzes the internal pages of the software and the internal code of every program that works on OSNS projects or software. This testing will collect all the components that are present in the software. This testing will also perform the risk analysis in the software development that guides the overall process. This testing will cover all the code present in the software. The test cases are generated until the OSNS becomes the bugs-free software. The output of this testing gives the overall report of the software.

Example of white-box testing: This testing considered the user's pages in the application. By using the white box format the testers and programmers use the sensitive data such as dataset attributes. This testing also analyzes the flow of ML to generate the accurate predictions.

Black-box testing: This testing mainly focused on test the functionality of the software without checking the inside structure code. The requirements of this testing are to be specified by the user. The tester in this testing selects the method or function in the program and gives the accurate value to observe the functionality and checks this function

is correct or not. If the function gets the accurate output, then the testing is passed and else it is failing. The testing team gives information about the failed functions in the testing. Then the developers will test all the functions and solved the issues.

Example of black-box testing: When the OSNS platform is streaming, the tester wants to test the OSNS searching based on the functionality and executes the search for particular actor. The verification is done by the tester and features of the searching gets the actual output that includes the local TV shows that actor appear in.

Acceptance testing: This testing aims to provide the accurate design of the project to the end-user. The end-user has to satisfy the requirements. This testing analyzes the particular features and involves the complete flow of the project to experience the end-to-end software files. This testing is used to complete the analysis of the software application. The developers can evaluate the software and make the required changes.

Example of Acceptance testing: The research project such as OSNS is the application that manages the huge user's data which manages the big data. In any software company or any research organization, several significant and capable users apply this testing to specify the drawbacks and advantages of the present system.

TestCase_ID	Test Method	Pre-Condition	Expected Result	Actual Result	Pass /Fail ?	Severity	Comments
New User Registration							
TC-1	Registration of New Users	Registration of Valid Users	User Registered	User Successfully Registered	Pass	Low	No Comments
TC-2	Registration of Valid New Users	Entering Invalid Details	User Unregistered	User Not Registered	Fail	Low	No Comments
TC-3	Enter valid Entries	Check all the entries in the filed	User registration successful	User Not Registered	Fail	High	No comments
Login							
TC-1	Valid Login	Entering Valid Login/Password	Go to user home	As Expected	Pass	Low	No Comments
TC-2	In Valid Login	Entering InValid Login/Password	Error Page	As Expected	Fail	Low	No Comments
TC-3	Select Valid Zone based map	Select Valid Zone Image	User Registered	As Expected	Pass	Low	No Comments
TC-4	Select Invalid Zone based map	If the zone is not selected	User Not registered	As Expected	Fail	Low	No Comments
User Home Page							
TC-1	Adding Friends based on zones	Adding same zone friends	New Friends Added	As Expected	Pass	Low	No Comments
TC-2	Update Profile	Entering valid profile details	Profile Updated	As Expected	Pass	Low	No Comments
TC-3	Entering Wall Posts	Entering correct wall posts	Users wall post	As Expected	Pass	Low	No Comments
TC-4	Posting messages on users wall based on Zones	Checking the users wall according to the zonal.	Users message should post on same zone friend.	As Expected	Pass	High	No comments

Friends.JSP							
TC-1	Checking zone based friends	Check friends according to the zones	Friends should be from the same zone	As Expected	Pass	High	No Comments
TC-2	Checking zone based friends	Check friends according to the zones	Friends are not from the same zone	As Expected	Fail	High	No Comments
TC-3	Upload Images	Check valid images	Valid images are checked	As Expected	Pass	High	No Comments
TC-4	Upload Invalid Images	Check Invalid images (image should be jpg format)	Invalid images are checked	As Expected	Fail	High	No Comments
TC-5	Block friends	Friends should be blocked	Block the friends	As Expected	Fail	High	No Comments
TC-6	Checking Valid Neighbors	Check the valid neighbors	Showing Nearest Neighbors	As Expected	Pass	Low	No Comments
TC-7	Checking InValid Neighbors	Check the Invalid neighbors	Invalid nearest neighbors	As Expected	Fail	High	No Comments
TC-8	Checking Valid Posts	Checking Valid Posts	Posts are correct format	As Expected	Pass	Low	No Comments
TC-9	Checking Invalid Posts	Checking InValid Posts	Posts are incorrect format	As Expected	Fail	High	No Comments
TC-10	Searching Friends	Friends Searching from same zone	Searching Failed	As Expected	Fail	High	No Comments
TV-11	Searching Invalid friends	Friends Searching from other zone	Searching Failed	As Expected	Fail	High	No Comments
TV-12	Creating unique groups	New group added	Add new group	As Expected	Pass	High	No Comments
TV-13	Creating Same Group	Group with same name is not added	New group not added	As expected	Fail	High	No Comments
TV-14	Add friends in the same group	Add friends to the group	New friends added	As expected	Pass	High	No Comments
TV-15	Add zone based friends	Add friends based on zones	New friends with zone are added	As expected	Pass	High	No Comments
TV-16	Group based wall messages	Wall messages should give to same group	Messages in the group added	As expected	Pass	High	No Comments
TV-17	Wall messages with group	Wall message should give to all users	Message in common wall	A expected	Pass	High	No Comments
TV-18	Group based wall images	Images should give to same group	Uploaded images in the group added	As expected	Pass	HIgh	No Comments
TV-19	General uploading images	Images are posted on the latest wall	Uploaded images in the users wall	As expected	Pass	HIgh	No Comments
TV-20	Groups check by zones	Checking all the groups and zones	Groups and zone are created	As expected	Pass	HIgh	No Comments

Profile Settings.JSP							
TV-1	Check the profiles	Profiles of users should be checked	Same zone profile should be verified	As expected	Pass	High	No Comments
TV-2	Change Profile Picture	Profile image should be changes	New profile image is added by the user	Should be added	Pass	High	No Comments
TV-3	Enabled Profile update	Profile is enabled	Image Uploaded	As Expected	Fail	High	No Comments

TV-3	Profile Image update	Profile is Disable	Image Uploaded	As Expected	Fail	High	No Comments
TV-4	Upload Self Image	Self image is Enable,	Imge Uploaded	As Expected	Fail	High	No Comments
Photosettings.JSP							
TV-1	Check image settings	Check the settings of uploaded image	Check status of image	As expected	Fail	High	No Comments
TV-2	Check the status of image	Private/Public	Check the type and properties of image	As expected	Fail	High	No Comments
TV-3	Update Image	Private	Check the type if image updated or not.	As expected	Fail	High	No Comments
TV-4	Image	Public	Check the type if image blocked or not.	As expected	Fail	High	No Comments
TV-5	Profile View	Profile view is done by user	Check the profile view	As expected	Fail	High	No Comments
ProjectProperties.JAVA							
TV-1	Connect Database	DB connection should be established	Check DB credentials	As expected	Pass	High	No Comments
TV-2	If database not connected	DB is not connected	Uncheck the DB credential	As expected	Pass	High	No Comments

Games.jsp							
TV-1	Create Ball Fall Game	Game is created for users	Play game	As expected	Pass	High	No Comments
TV-2	Create Ping Pong Game	Game is created for users	Play game	As expected	Pass	High	No Comments
TV-3	Create Break out Game	Game is created for users	Play game	As expected	Pass	High	No Comments
TV-4	Create snake Game	Game is created for users	Play game	As expected	Pass	High	No Comments
TV-6	Check games	Games are created	Play games	As expected	Pass	High	No Comments

Jrp.jsp							
TV-1	Created actual groups	Default group usage is selected	Creating groups	As expected	Pass	High	No Comments
TV-2	Created actual groups	Default group user is not selected	Creating groups	As expected	Pass	High	No Comments

Coding Standards

Testing: Software testing plays a significant role in improving the quality of the software program or software project. This can be used to analyze the quality of the project or programs that are written in software development. A developer has to know the different types of functional and specialty testing. Every type of testing is used according to the requirement of the user. Once the developer retrieves the types of functional testing, then the developer can allocate the time and resources according to the usage. It is very tedious to achieved the high rate of test coverage, even the programmer has the advantage of manual and automated testing. A high quality of software applications can develop by using this testing and gives the better software experience.

We use the following code standards for our project:

- Following Java Naming Conventions.
- Good Null Point Exception Handling.
- Standards For variables, Constants and Methods.

Recommendations

Testing: Software testing plays a significant role in improving the quality of the software program or software project. This can be used to analyze the quality of the project or programs that are written in software development. A developer has to know the different types of functional and specialty testing. Every type of testing is used according to the requirement of the user. Once the developer retrieves the types of functional testing, then the developer can allocate the time and resources according to the usage. It is very tedious to achieved the high rate of test coverage, even the programmer has the advantage of manual and automated testing. A high quality of software applications can develop by using this testing and gives the better software experience.

Here are some suggestions for the My Neighbors Project.

- We suggest Neighbors to effectively make use of the Application.
- And we recommend them to share only the adequate information.
- We also request them to bound to privacy and security policies.

Summary

We know about the increasing use of social networking sites; people use various social media platforms depending on their requirements and interest. Social media is a dynamic platform that can be used in so many ways to share news, knowledge, entertainment etc. The overall summary of the project is explained in this section. The aim of this project is to create a vigorous community, to allow users to retrieve timely and appropriate information and to carry out actions in a small number of steps. Tightly interweaving professional with social content and actions, as well as providing personal information wherever and whenever suitable was one of the main design concerns. This project is mainly focused on communicating the friends among the zones. This project connects the friends based on same zones present in the London city, Canada. An improved chatting box is also provided for the users to chat with the friends. One more advantage in this project is adding groups to the friends. This group creation gives the better communication to the zone based users to filter the users from the zones into groups. The core function of this proposed social network system is to facilitate and encourage knowledge sharing and knowledge creation on zones in London city. Specifically, the core functions of city social network system are to support online communication, sharing and collaboration in sharing views and ideas of zone users. Knowledge sharing and knowledge creation are closely related with and continuously influenced by each other. Because college social network system provides direct support to knowledge sharing and indirect support to knowledge creation.

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