Introduction

Our project DA-Community is a Social Networking website just for DA-Residents. Our website is an online platform that allows users tocreate a public profile and interact with other users on the platform whohave registered as a user. DA-Community focuses on building an online identity for everyone who is interested and wants to build connections over their time at DA and for the Alumni connect. Most services are primarily web-based and provide a collection of various ways for users to interact, such as messaging, queries, advice and file uploading.

DA-Community comprises various features like profile updating, friend list organisation and other features to enhance the overall look and feel of the website.

Technologies Used:

• PHP 7.4.13, MySQL

• Functional requirements

9.1. USER INTERFACE

- Login or Signup Page
- Homepage containing the timeline of the user.
- Screen displaying information on his own mentions and data and others publicly shared data.
- If the user wants to upload images, set up his profile, add notes, search for acquaintances, chat etc., he can do it all in one click.
- After the user has finished with time spent with social media, he can logout from his account until the next time.

9.2. HARDWARE INTERFACES

Since the application must run over the internet, all the hardware shall require to connect to the internet will be the hardware interface for the system. For e.g. Modem, WAN – LAN, Ethernet Cross- Cable. The

system requires a Database also for the store any transaction of the system.

Non-functional requirements

Security Requirements: The details like the user's password must be stored encrypted. Also, the user

profile customisation should be accessible only to the registered website user.

Design Constraints: The website should be developed using the latest technologies, and it should

support the majority of the browsers in the market.

Availability: The website must be available to use all the time.

Response time: The website should not take much time to respond to the request for the content.

Simplicity: The UX must be simple and tidy to make it easier for every user to understand.

Capacity - The capacity of the database will be enough to store all the large files like videos and files

uploaded by users.

Reliability: The social media platform and services must be reliable.

Process Model:

The model we have chosen is the **Incremental Model**. The incremental model is a process of software development where requirements are divided into multiple stand-alone modules of the software development cycle. In this model, each module goes through the requirements, design, implementation, and testing phases. Every subsequent release of the module adds a function to the previous release. The

process continues until the complete system is achieved.

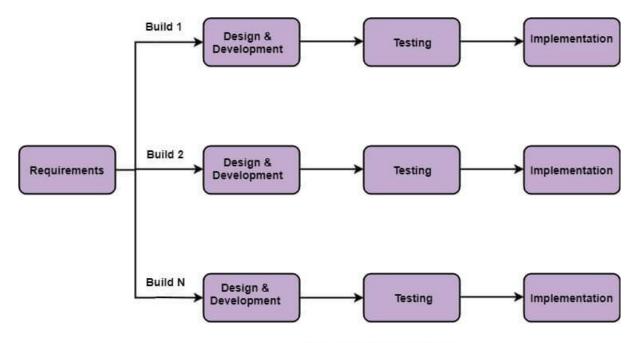


Fig: Incremental Model

When we use the Incremental Model:

- When Software teams are not very well skilled or trained.
- When the customer demands a quick release of the product.
- You can develop prioritized requirements first.

The main advantages of the Incremental model are:

- Errors are easy to recognize.
- More flexible.
- Simple to manage risk because it is handled during its iteration.
- Lowers initial delivery cost.

System Testing

BLACK BOX TESTING: The method of Black Box Testing is used by the software engineer to derive the required results of the test cases:

Black box testing was performed to find errors in the following categories:-

- Incorrect or missing functions
- Graphics error.
- File error.
- Variable error
- Performance error

WHITE BOX TESTING:

→ TEST CASES

LOGIN:

S.no	Input Values	Testcase	Conditions being checked	Result
1	Email	Empty	Please Enter valid username	Successful
2	Email	Already exists or does not exist	Login ID should be unique	Successful
3	Password	Empty	Please enter valid password	Successful
4	Password	Wrong Password	Enter correct password	Successful

SIGN UP:

S.no	Input Values	Testcase	Conditions being checked	Result
1	First Name	Empty	It must not be empty	Successful
2	Last Name	Empty	It must not be empty	Successful
3	Username	Empty	Enter unique username	Successful
4	Email	Empty	Enter valid email	Successful
5	Password	Length	Enter valid password	Successful
6	Re-Enter Password	Empty	Should be the same as password	Successful

Edit Profile:

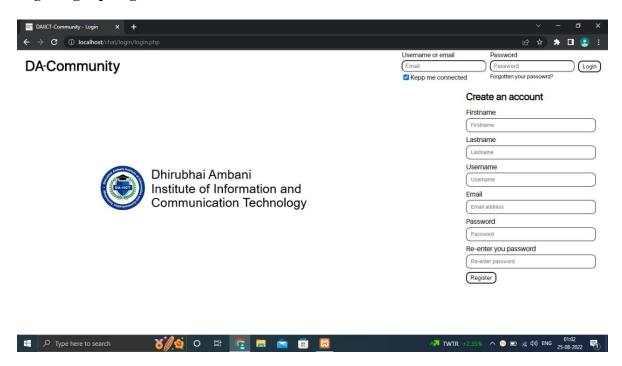
S.no	Input Values	Testcase	Conditions being checked	Result
1	First Name	NULL	First Name must not be empty	Successful
2	Last Name	Empty	Last Name must not be empty	Successful
3	City	Empty	City must not be empty	Successful
4	State	Empty	state must not be empty	Successful
5	Pin-code	Empty	PIN code must not be empty	Successful
6	Country	Select	Please select country	Successful
7	College	Select	Please select college	Successful
8	Course	Empty	Course must not be empty	Successful

Photos table:

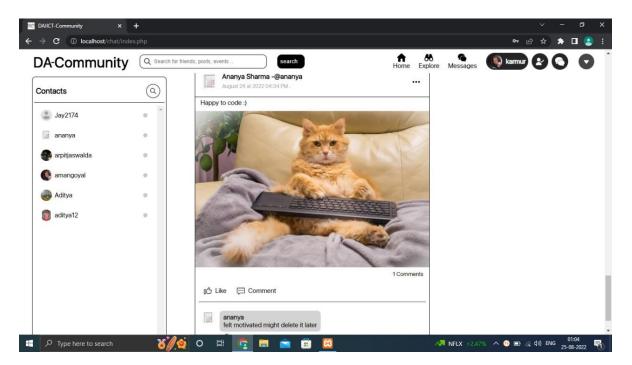
S.no	Input Values	Testcase	Conditions being checked	Result
1	Image Title	NULL	Image can have a title	Successful
2	Add Image	Browse	Please browse image	Successful
3	Delete image	Select	Select image to delete	Successful
4	Edit image/post	Select	Select image to edit	Successful

Snapshots to demonstrate the working of our website:-

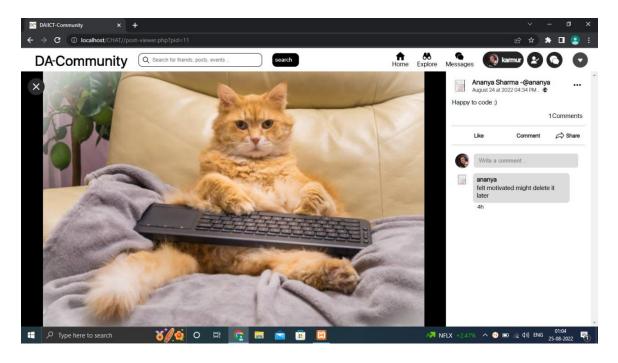
Login/Signup Page:



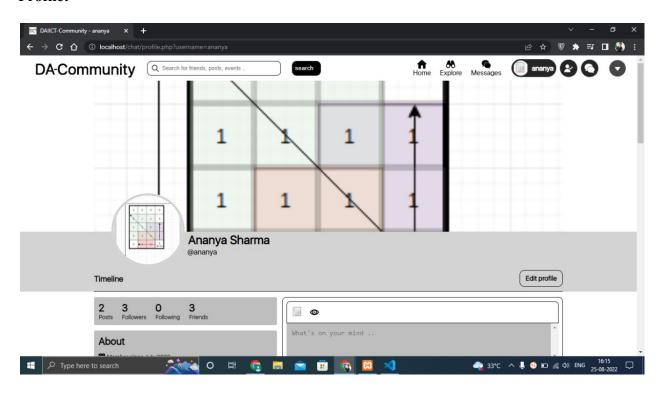
Timeline:



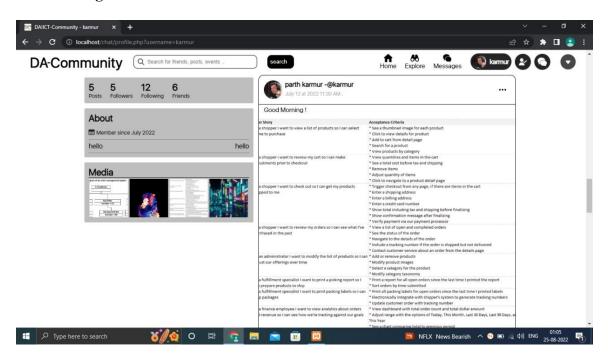
Like, Comment and Share Section:



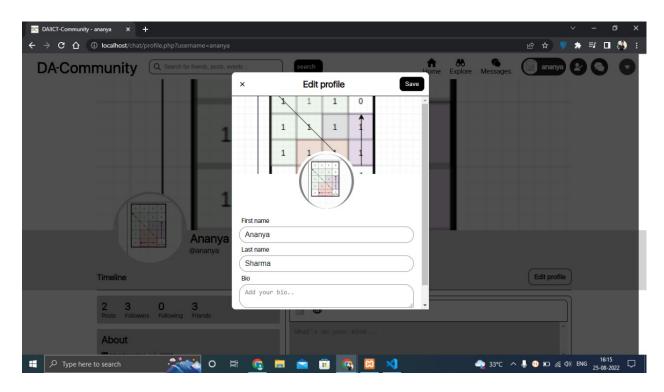
Profile:



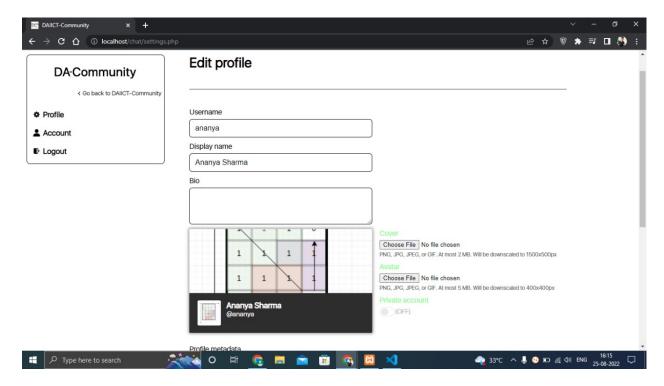
Personal Page:



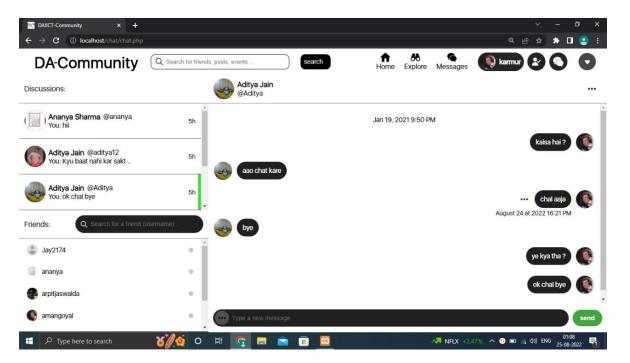
Edit Profile:



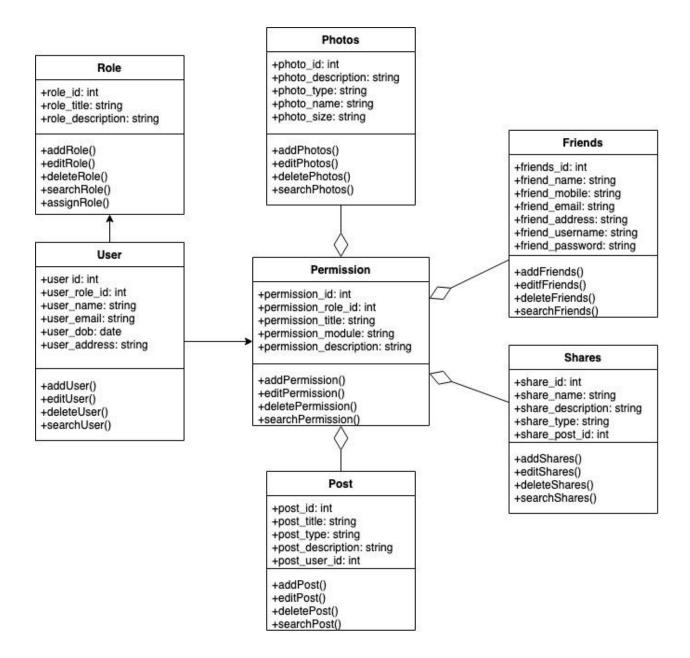
Upload Profile and Cover Image:



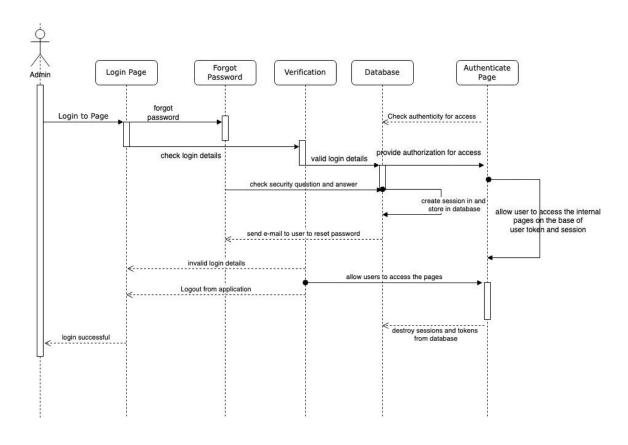
Messaging section:



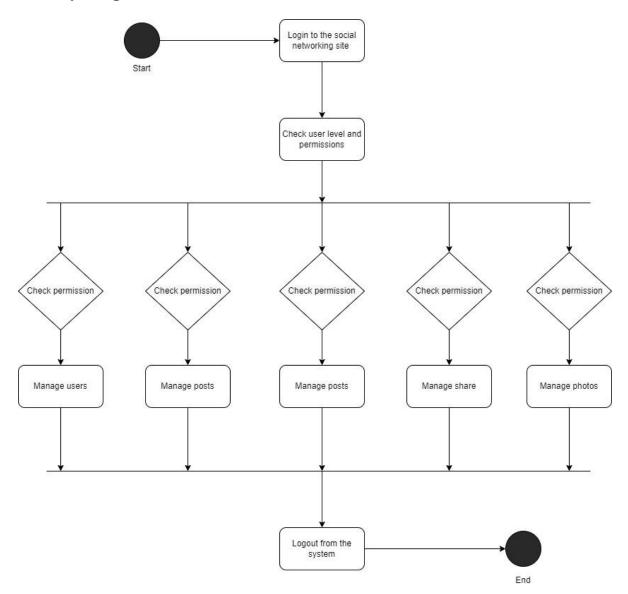
Class Diagram:



Sequence Diagram:



Activity Diagram:



Summary and lessons learnt:

While developing the system a conscious effort has been made to create and develop a software package, making use of available tools, techniques and resources – that would generate a proper system for DA-Community. While making the system, an eye has been kept on making it as user-friendly. As such one may hope that the system will be acceptable to any user and will adequately meet his/her needs. As in the case of any system development process where there are a number of short comings, there have been some shortcomings in the development of this system also which are to be sorted out in the near future.