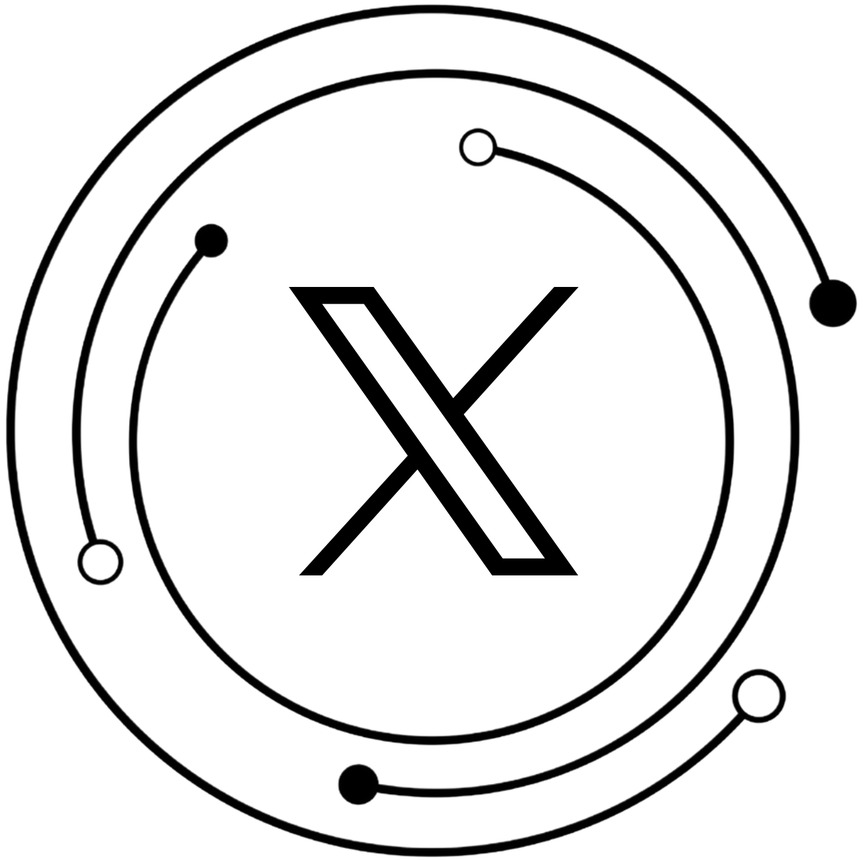

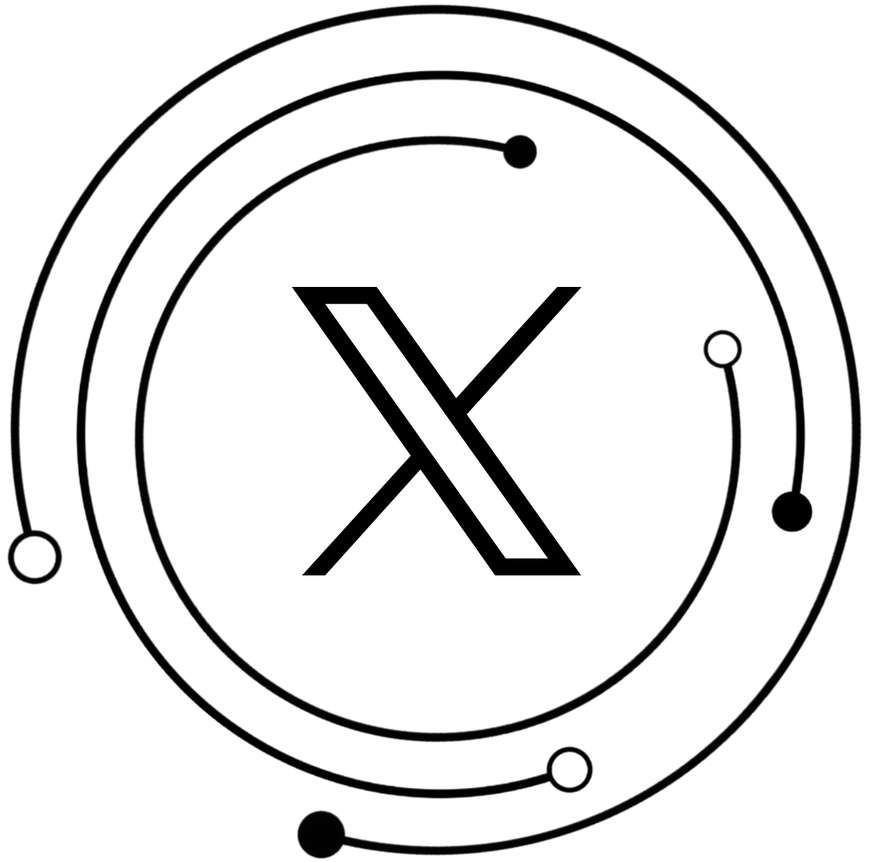

Project X application

Kingdome of Saudi Arabia
Ministry of Education
Prince Sattam Bin Abdulaziz University College of Computer Engineering and Science

المملكة العربية السعودية
وزارة التعليم
جامعة الأمير سطام بن عبد العزيز
كلية هندسة وعلوم الحاسب

جامعة الأمير سطام بن عبدالعزيز
PRINCE SATTAM BIN ABDULAZIZ UNIVERSITY

Project X application

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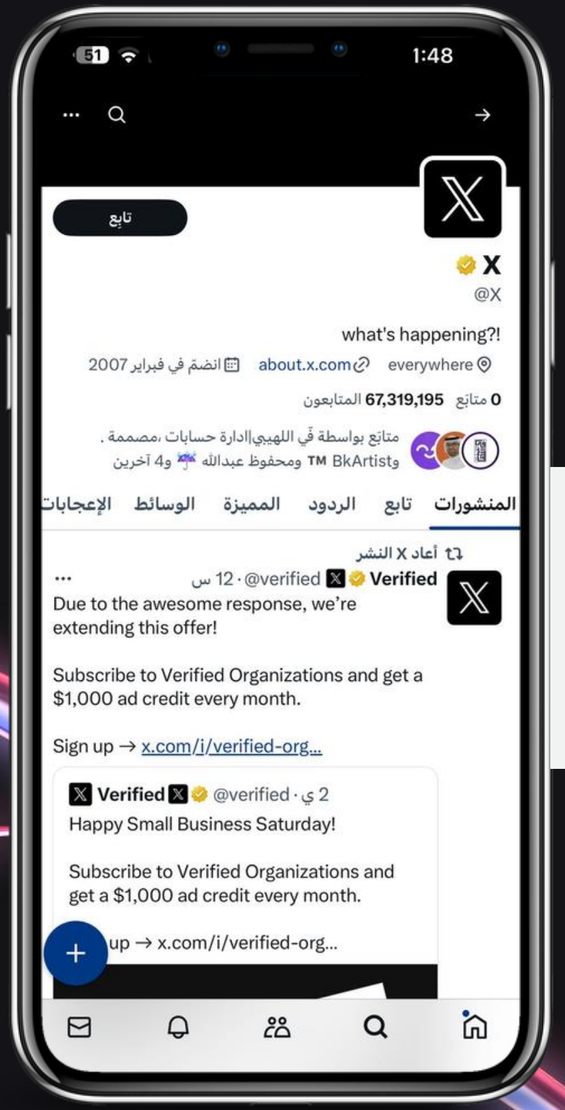
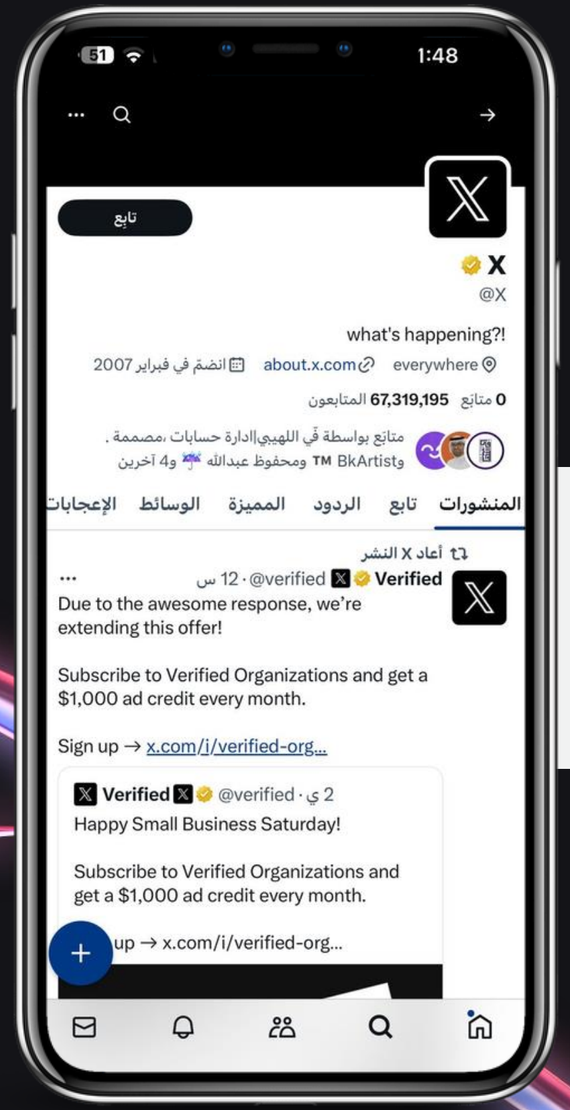
2	Taghreed Saeed Saad Alzuayr	443850326
3	Bushra Murdhi Mohammed Alhabshan	443850234
4	Shikhah Saud Abdullah Alrashoud	443850295

Supervised by: Dr. Mohammed Saad Mohammed Asiri. Year: 2023.



INTRODUCTION:



INTRODUCTION:

In this report , we will talk about the application X, and the importance of this research lies in studying the application X by applying software engineering principles to it and exploring its objectives and development process.

BACKGROUND:

Twitter was created in 2006 by founder "Jack Dorsey" and has achieved great success over the years and in 2022 Following "Elon Musk's" takeover of the app, it has been renamed from 'Twitter' to 'X' and other related changes were implemented

PURPOSE OF THE PROJECT

Explain the software engineering steps to build the X app

WORK PLAN

Methodology : incremental development

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1)Planning :
Market study, specify the goal of the application, specify the scope of the product, calculate the cost and budget, product development time, product potential risk, product and the size of the project and the team size. and determine the programming language.

2)Specification :
Defining what the system should do functionally and non-functionally, covering all the needs of the user and what is truly expected from the system, make a use case diagram.

3) Design :
Designing a software structure that meets the specification, and it contains: wire-framing, user stories, data flow diagram, technical design, user interface.

4) Implementation :
Installing the design into an existing program, setting up software components and orienting users.

5) Validation :
Testing the unit, testing the integration, testing the entire system, acceptance testing 'testing the final system'.

6) Testing :
Checking it satisfied user expectations and needs, stakeholders must see the reports to check if an application works as expected.

7) Evolution :
Add more features based on the stakeholders needs.

8) :Maintenance: It is a continuous process for bug fixing or improving existing features and this process must be done every month due to the large size of the app

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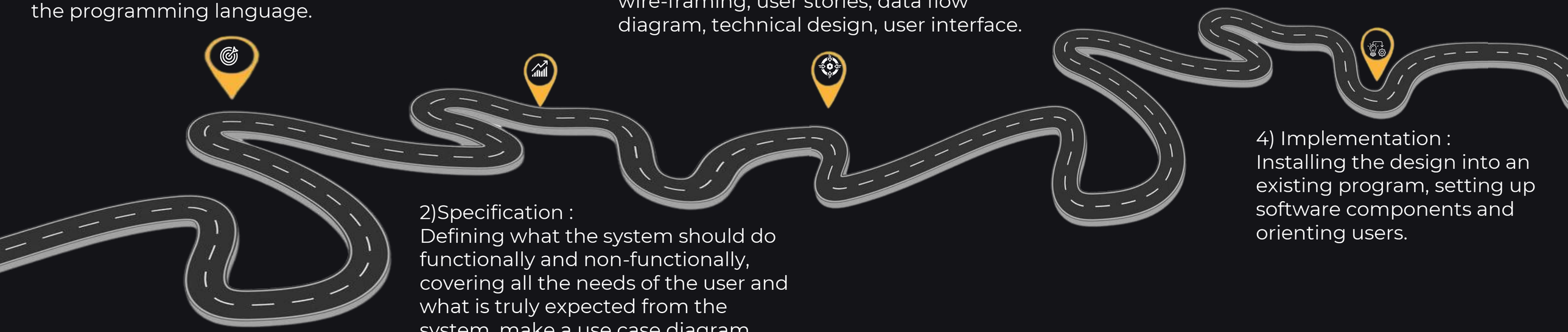

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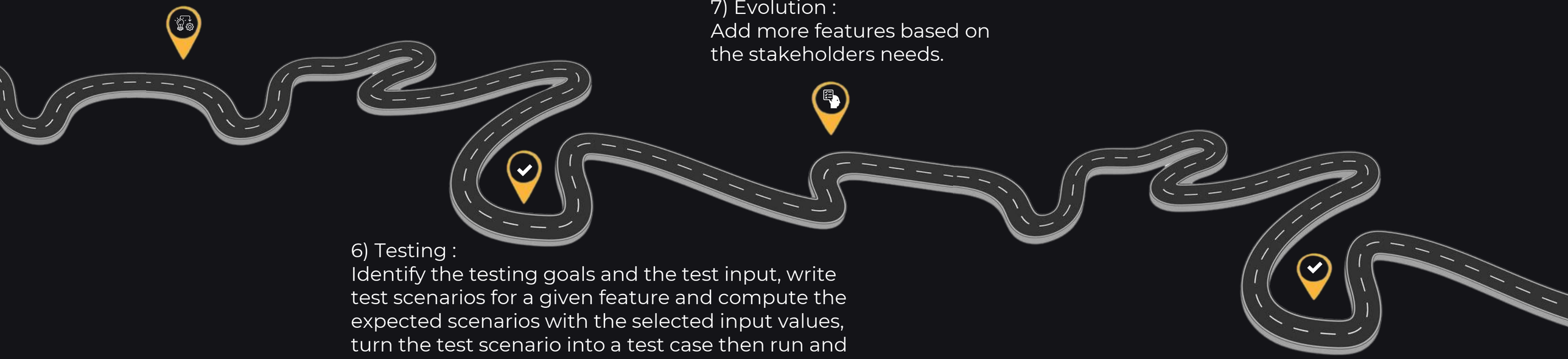

6) Testing :
Identify the testing goals and the test input, write test scenarios for a given feature and compute the expected scenarios with the selected input values, turn the test scenario into a test case then run and execute the test case, finally compare actual outcomes against expected results

7) Evolution :
Add more features based on the stakeholders needs.

8) Maintenance: It is a continuous process for bug fixing or improving existing features and this process must be done every month due to the large size of the app

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Functional Requirements:

1- Account:

The user should be able to create an account using a phone number or email address ،username and date of birth to access the application.

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Functional Requirements:

2- Deletion:

The user should be able to delete and remove the account after registration.

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Functional Requirements:

3- Posting:

The premium and register users should be able to post, quote post, mention, comment and it may include text, images, videos , GIF and audio recordings.

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Functional Requirements:

4- Follow or Unfollow:

The premium and registered user should be able to follow other users’ accounts or unfollow them, and they can follow them by their unique username, every account has a followers list and a following list.

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Functional Requirements:

5- Search:

The premium and registered user should be able to search for other users' accounts by their unique username ,or posts, using the search bar, and they can search multiple time .

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Functional Requirements:

6- Interaction:

The premium and registered user should be able to interact with other users (e.g: likes, repost, mention, or comment)

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Functional Requirements:

7- Bookmark:

The premium and registered user should be able to bookmark posts and access them privately.

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

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8- Direct Messages:

Users should have message options to use, such as text, photo, video, GIF and voice recording.

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FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Non-Functional Requirements:

1- Services must be reliable (e.g., when a posting is successful, it should not be lost).

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Non-Functional Requirements:

2- The service should be highly available at any time, so users can send and see posts without interruption.

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Non-Functional Requirements:

3- The system should be scalable and accommodate increased load (e.g., an increase in users and postings).

FUNCTIONAL & NON FUNCTIONAL REQUIREMENTS

Non-Functional Requirements:

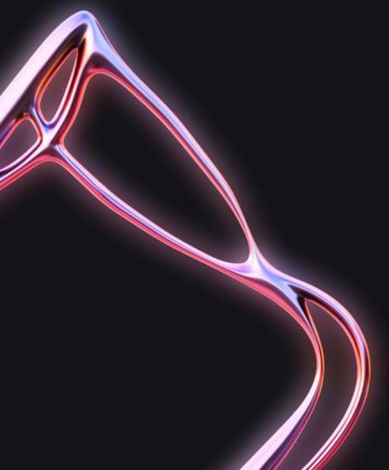
4- The system should implement the provisions for violating the privacy policy or application laws for users as set out by the user's country.

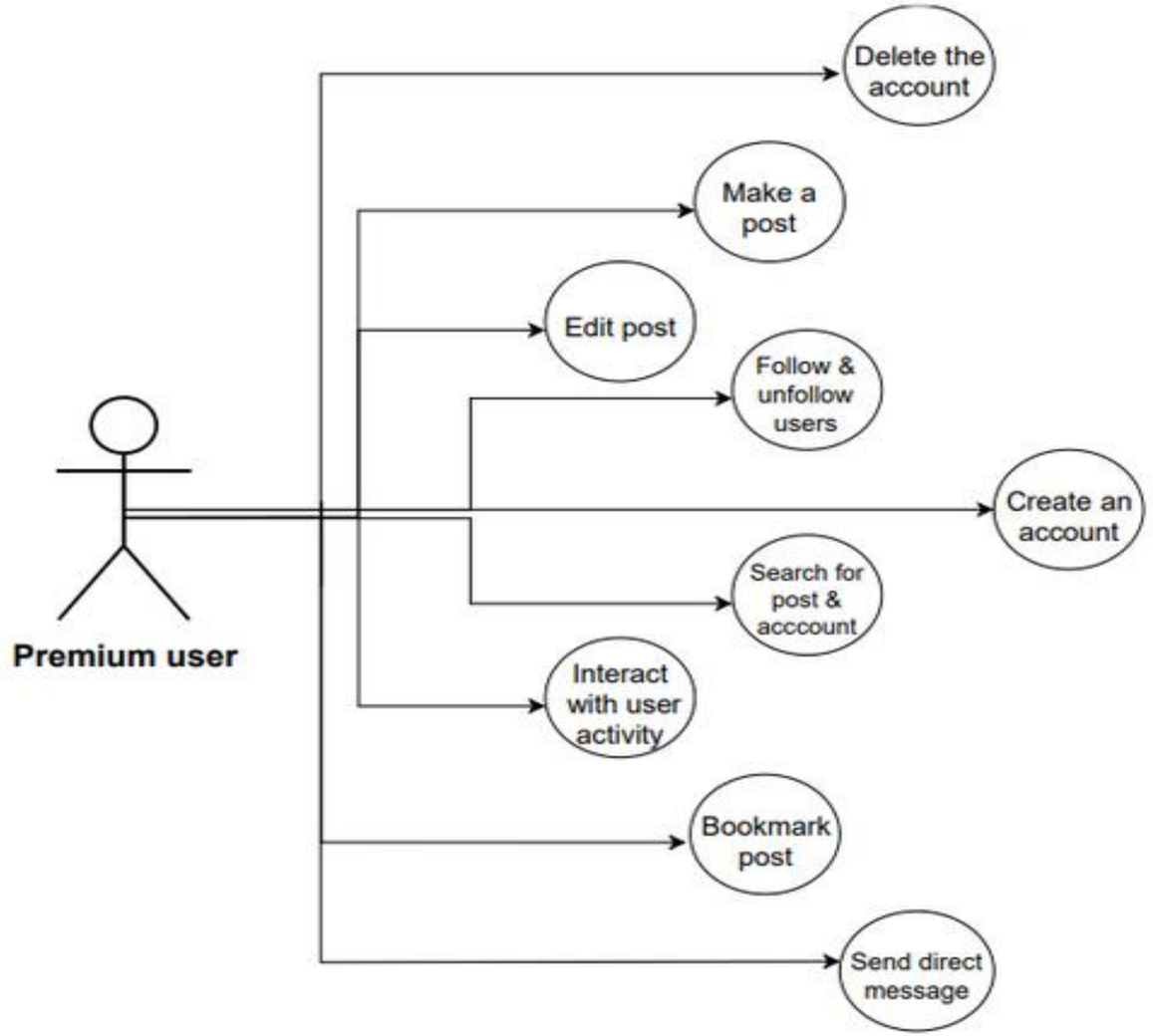
ACTIVITY DIAGRAM:

Describes control, input, and output flows among actions.

USE CASE MODELING:

description of the ways in which a user interacts with the system.





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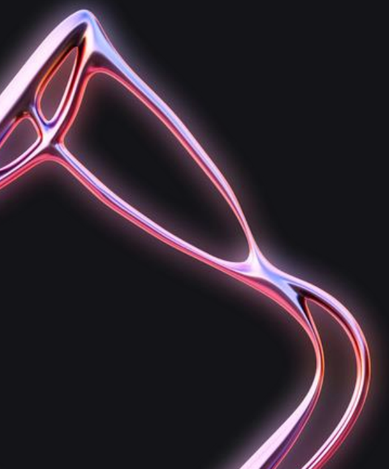

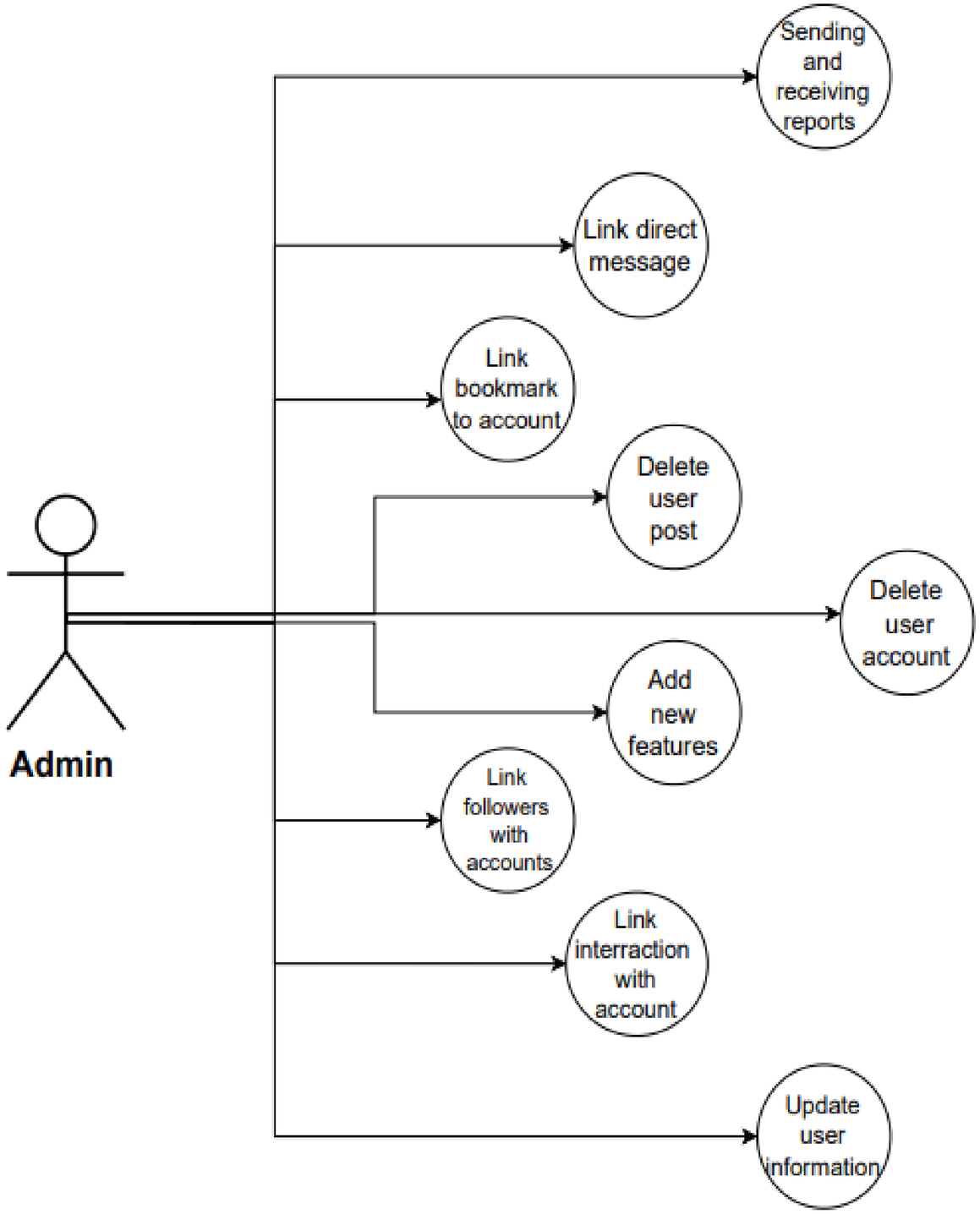

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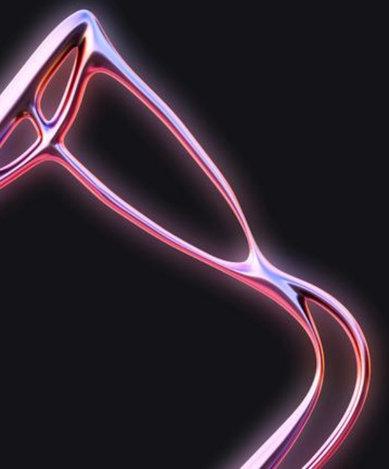
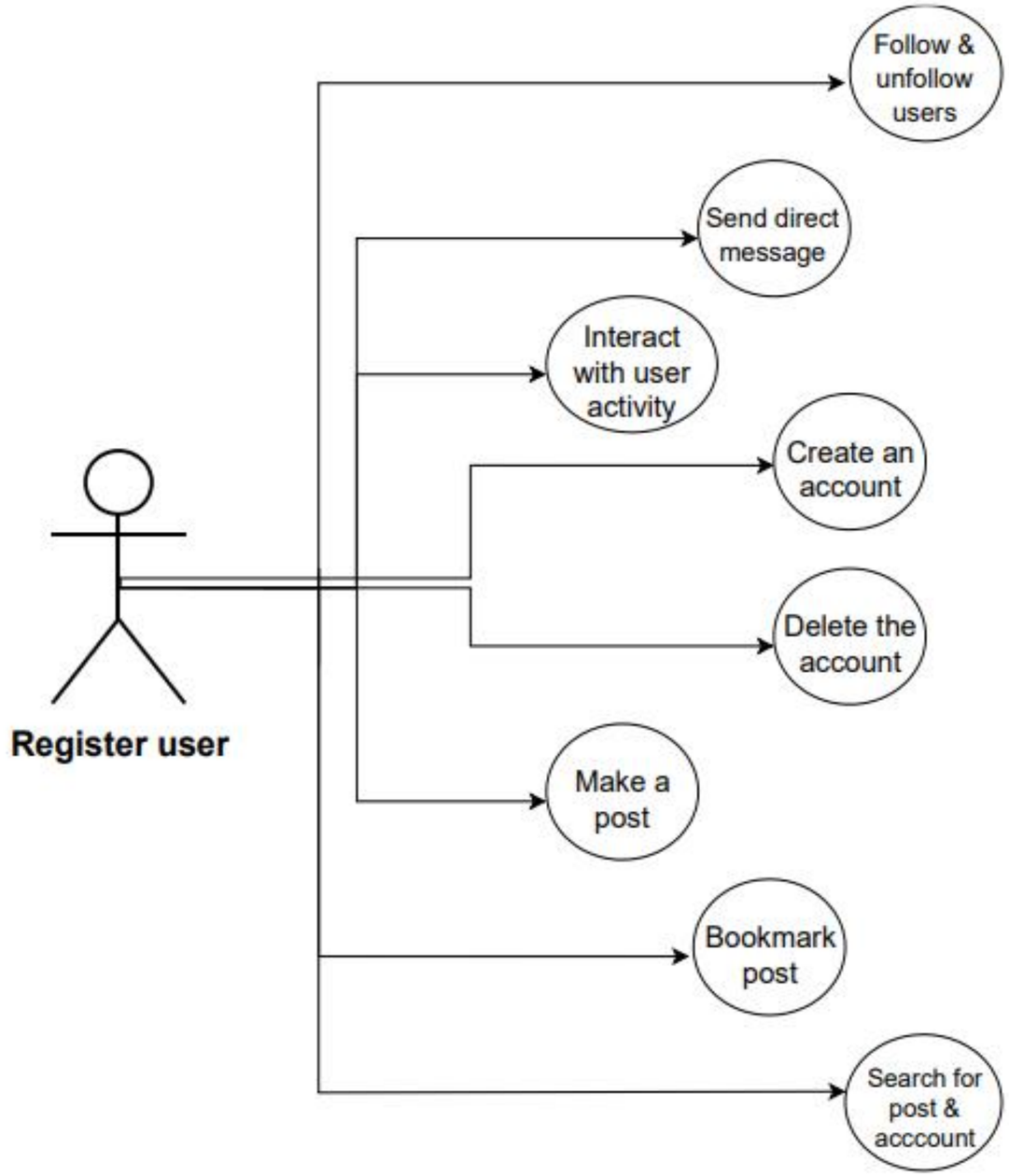
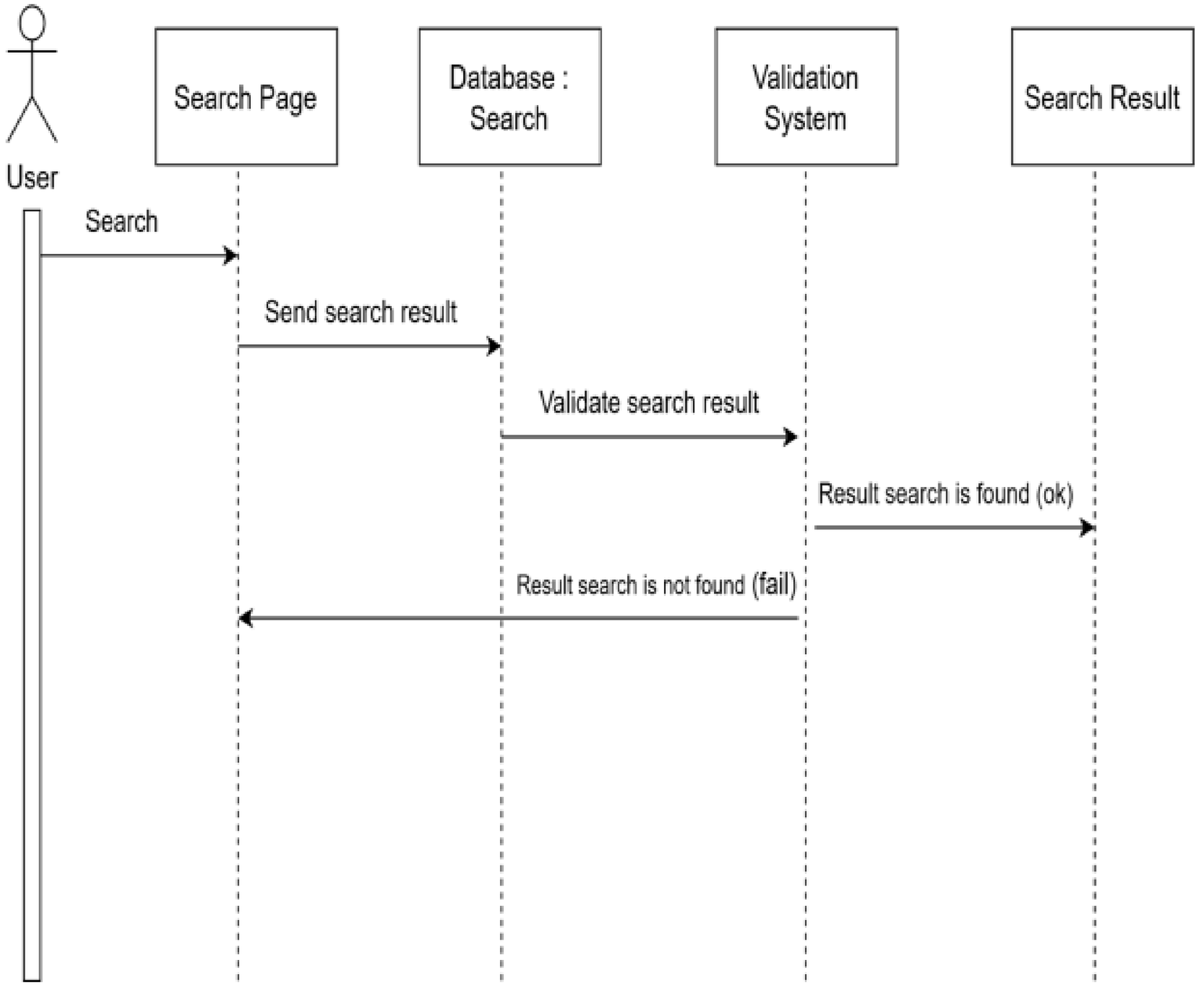




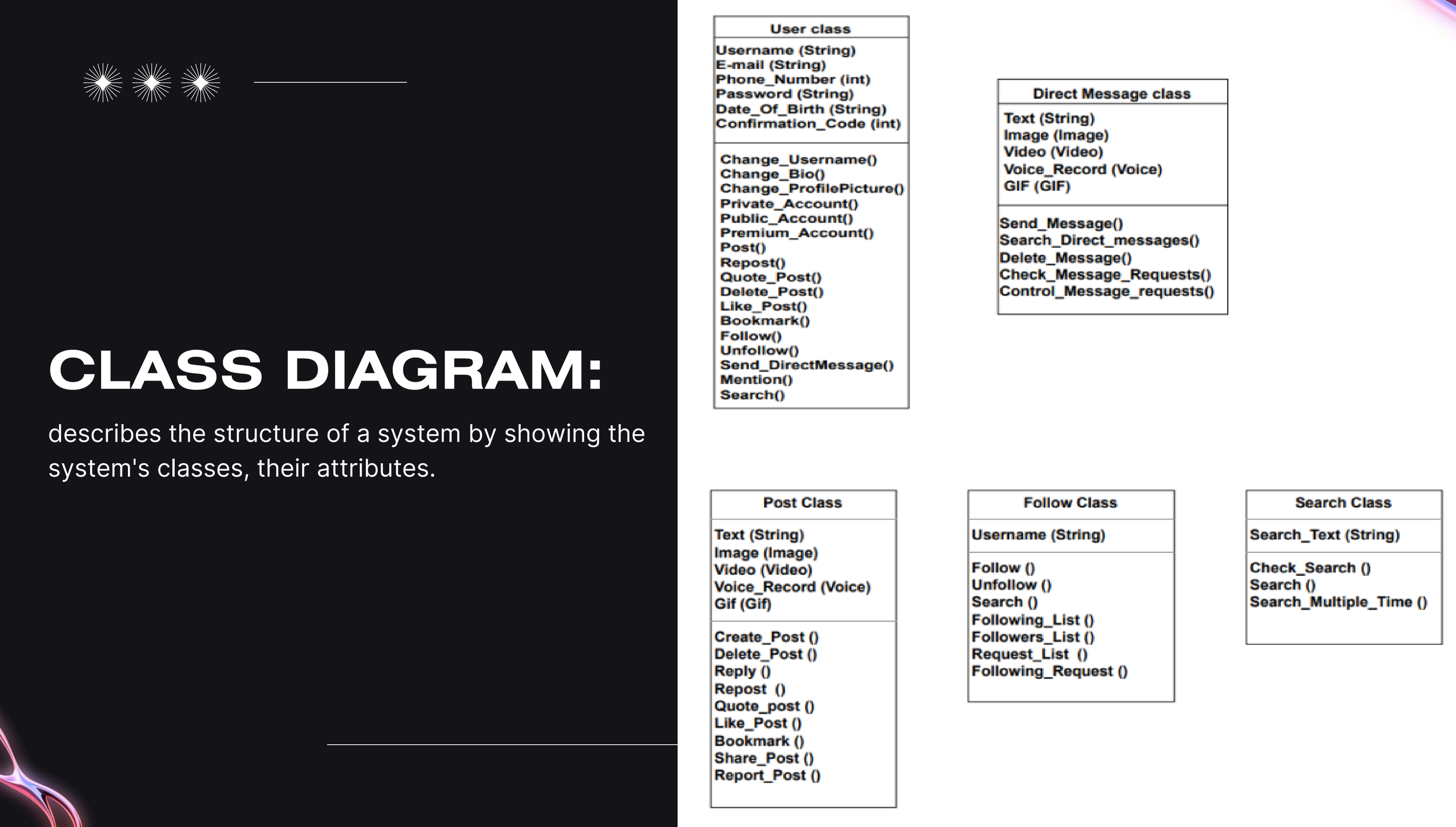
SEQUENCE DIAGRAM:

describe the interaction between elements over a chronological sequence.

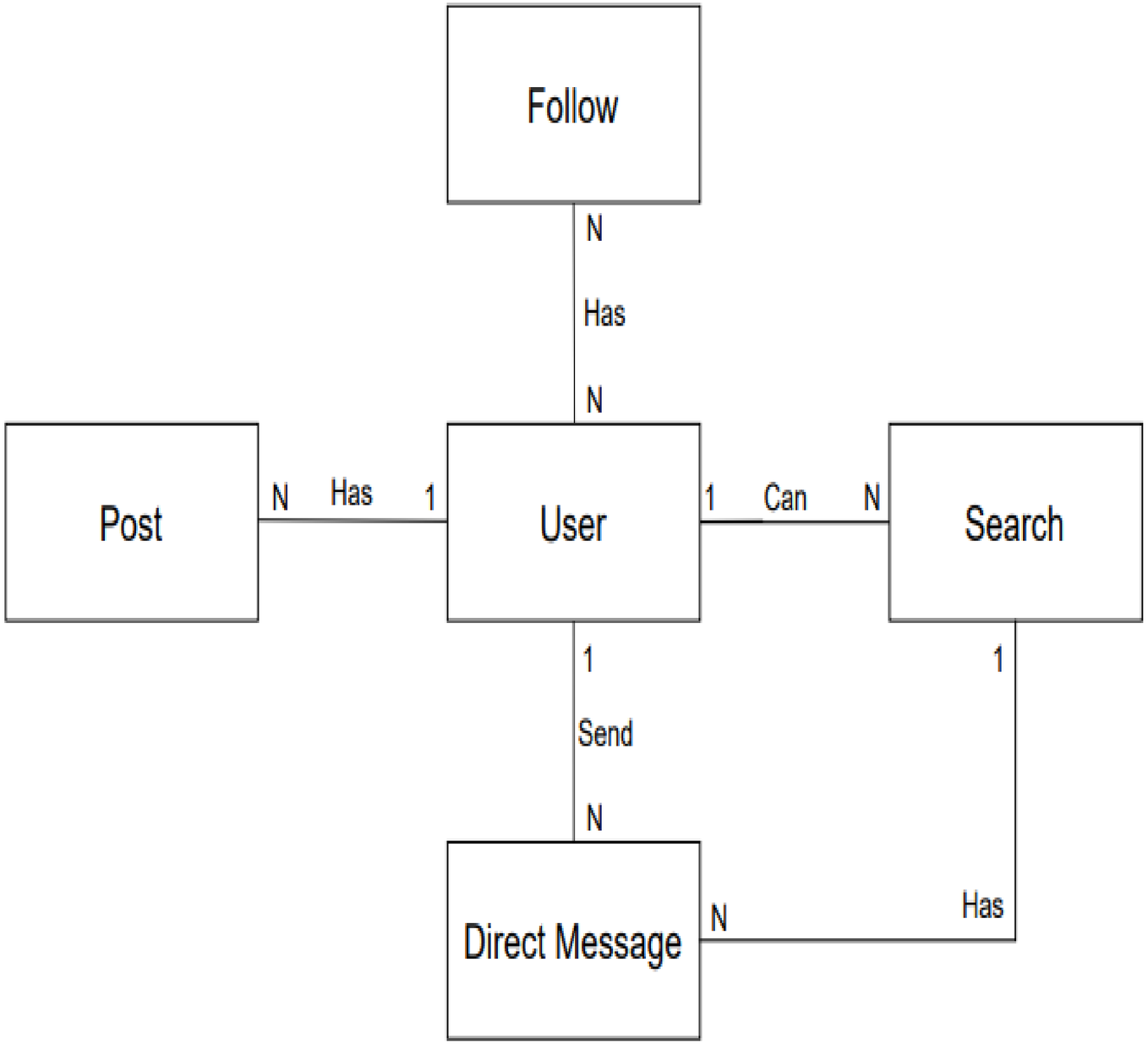


CLASS DIAGRAM:

describes the structure of a system by showing the system's classes, their attributes.



REALATIONSHIP:



CONCLUSION:

During the study and analysis of the system, the focus was on what makes the application easy to use, effective, and meets the needs of users. As a result of this study, the team was able to determine the necessary steps to build an application X based on what was studied.