## **SOCIAL MEDIA PLATFORM**

#### A MINI-PROJECT REPORT

Submitted by

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of

**BACHELOR OF ENGINEERING** 

IN

COMPUTER SCIENCE AND ENGINEERING



RAJALAKSHMI ENGINEERING COLLEGE AUTONOMOUS, CHENNAI NOV/DEC, 2024

#### **BONAFIDE CERTIFICATE**

Certified that this mini project "Social Media Platform" is the bonafide work of
"MADHAVA GANESH A (2116220701150)" who carried out the project work
under my supervision.

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	( T   N	$\boldsymbol{A}$			r,

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Thandalam, Chennai - 602105

|--|

**INTERNAL EXAMINER** 

**EXTERNAL EXAMINER** 

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#### **ABSTRACT**

WaveLink is a next-generation social media platform designed to enhance user interaction, privacy, and community-building in the digital age. Its key focus is to provide a seamless, user-friendly experience, offering customizable features that cater to both personal and community-driven communication.

Developed using HTML, CSS, and JavaScript for a responsive front-end experience, WaveLink is optimized for all devices. Its back-end is powered by robust JavaScript-based technologies, ensuring real-time interactions and secure data management. The platform is built with scalability in mind, enabling efficient handling of large user bases and high-traffic scenarios.

One of WaveLink's standout features is its focus on "Links"—personalized connections that users can form with others. These Links allow users to connect with like-minded individuals and engage in deeper, more meaningful interactions, all within a customizable and controlled environment. Unlike traditional platforms, WaveLink provides advanced privacy settings that give users granular control over who can view their posts, Links, and content.

WaveLink also leverages intelligent algorithms to recommend relevant Links and content based on user behavior and preferences. This personalized approach ensures that users are constantly discovering new, relevant connections and communities. Additionally, WaveLink supports multimedia sharing, live interactions, and event coordination, making it a powerful tool for both personal and professional networking.

By placing a strong emphasis on privacy, community, and user engagement, WaveLink aims to revolutionize the way individuals form connections and interact online, providing a secure and customizable social media experience that fosters meaningful relationships.

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## CHAPTER 1 INTRODUCTION

#### 1.1 INTRODUCTION

In an increasingly connected world, social media platforms play a vital role in how people communicate, share information, and build networks. However, many platforms fail to create truly meaningful, lasting connections among users. WaveLink is a social media platform designed to redefine the way users interact, focusing on fostering deeper, more authentic connections. Unlike traditional platforms that prioritize superficial engagements, WaveLink emphasizes building long-term 'Links' between users, encouraging more personalized and impactful interactions. The platform integrates real-time data analytics and user-generated content to create a dynamic environment where users can engage meaningfully with each other.

#### 1.2 SCOPE OF WORK

WaveLink aims to go beyond conventional social networking. The platform's scope includes creating an ecosystem where users can not only connect but also collaborate, share resources, and build communities. It is designed to cater to a wide range of users, from individuals seeking personal connections to influencers and brands looking for genuine engagement. WaveLink will offer features such as usergenerated content management, real-time messaging, and personalized suggestions based on user behavior. The platform also prioritizes privacy and security, ensuring that users' interactions are both meaningful and protected.

#### 1.3 AIM AND OBJECTIVES OF THE PROJECT

WaveLink aims to create a groundbreaking social media platform that encourages deeper, long-lasting connections between users by focusing on authentic engagements. The platform will use AI and machine learning algorithms to suggest meaningful interactions, providing users with a tailored experience. By leveraging advanced technology, WaveLink will give users insights into their network behavior, helping them strengthen existing 'Links' and build new ones. Additionally, WaveLink will store and analyze user data to provide insights into connection patterns, offering a robust and user-centric experience.

#### **OBJECTIVES:**

- 1. Enable users to create and manage 'Links' with others, focusing on building long-term, authentic connections.
- 2. Implement AI-driven suggestions for interactions based on user behavior, preferences, and previous engagements.
- 3. Store user data in a secure database, allowing users to track their connection history and network growth.
- 4. Provide real-time analytics on user interaction trends, helping users better understand their engagement patterns within the platform.

#### **CHAPTER 2**

#### **SYSTEM SPECIFICATIONS**

#### 2.1 HARDWARE SPECIFICATIONS

To ensure smooth operation of the WaveLink social media platform, the following hardware specifications are recommended:

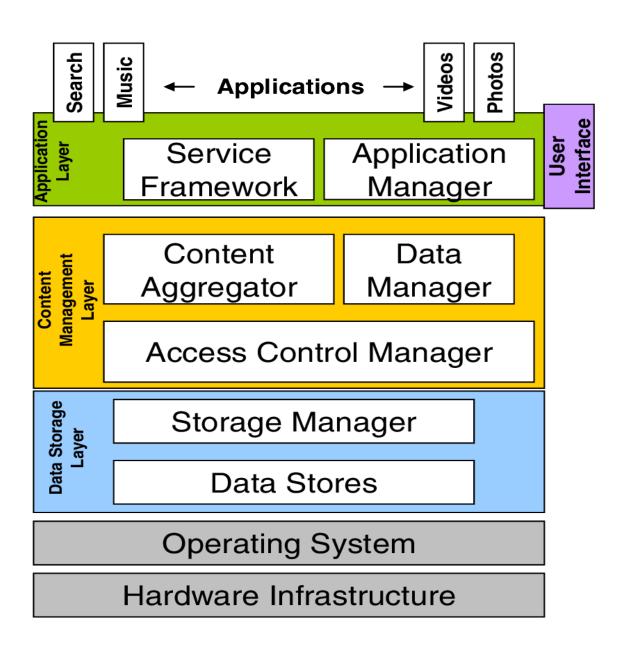
- Processor: Intel Core i5 or higher (or equivalent AMD Ryzen processors) to efficiently handle backend operations and user interactions.
- RAM: At least 8 GB to manage multiple web requests and handle real-time interactions.
- Storage: 500 GB hard drive or SSD for storing application files, user data, and multimedia content.

#### 2.2 SOFTWARE SPECIFICATIONS

The WaveLink project relies on the following software tools and technologies for development and deployment:

- **Front-End**: HTML, CSS, Bootstrap, and JavaScript for building a responsive and dynamic user interface.
- Framework: PHP for handling backend logic and user interactions.
- Backend: PHP (server-side scripting) for managing and storing user data.

# CHAPTER 3 ARCHITECTURE DIAGRAM



#### **CHAPTER 4**

#### MODULE DESCRIPTION

#### 4.1 LOGIN MODULE

The Login Module provides a secure authentication system for users to access the WaveLink platform. Users are required to create an account using their email or social media login, ensuring they can access personalized features such as connections, posts, and messages. This module supports password management, including password reset and encryption for secure login.

#### **4.2 HOME PAGE MODULE**

The Home Page Module is the central hub of WaveLink. Upon logging in, users are greeted with a personalized feed that displays recent posts, shared links, and updates from their connections. The home page includes intuitive navigation, enabling users to create new posts, browse through their feed, and engage with content by liking, commenting, or sharing links. It also displays trending content, ensuring users stay up to date with popular discussions and events within their network.

#### 4.3 NOTIFICATION MODULE

The Notification Module keeps users informed about recent activities on WaveLink. Notifications are triggered by events such as new messages, likes, comments, and accepted connection requests. Users can easily manage notifications, marking them as read or adjusting their notification preferences to stay updated on the activities that matter most to them.

#### 4.4 PROFILE PAGE MODULE

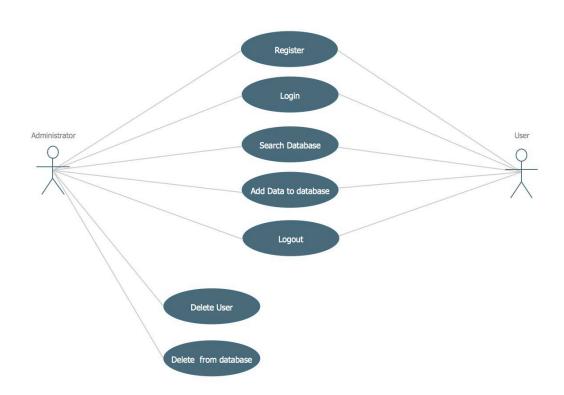
The Profile Page Module allows users to create and manage their personal profile on WaveLink. Users can customize their profiles by adding a profile picture, bio, and personal information such as their location and interests. The profile page also displays a user's posts, connections, and activity history, giving them full control over how they present themselves on the platform. This module includes privacy settings, allowing users to control who can view their information and posts.

#### 4.5 DATABASE MODULE

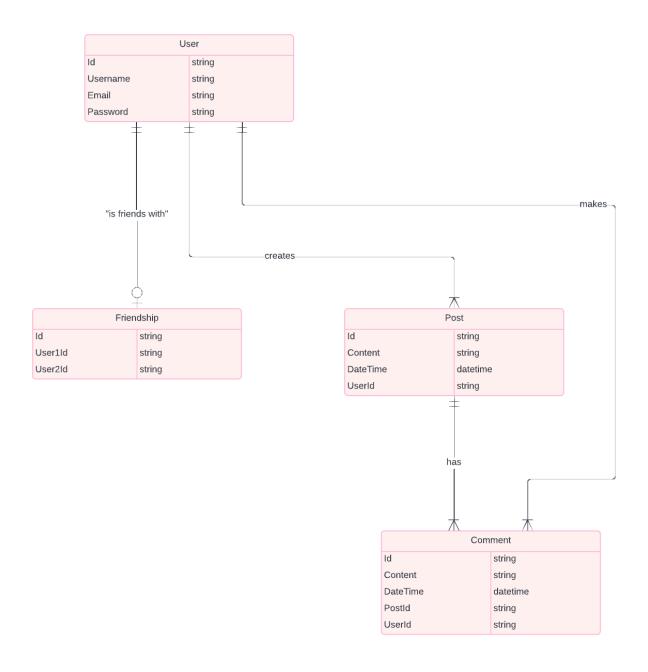
The Database Module handles all data storage and retrieval operations for WaveLink. It securely stores user profiles, connections, posts, and interactions within a relational or NoSQL database. This module ensures that the data is accessible for the other modules, allowing users to retrieve past messages, posts, and notifications. The Database Module also supports data backups and maintains data integrity to ensure that users' information is safely stored and retrievable at any time.

## CHAPTER 5 SYSTEM DESIGN

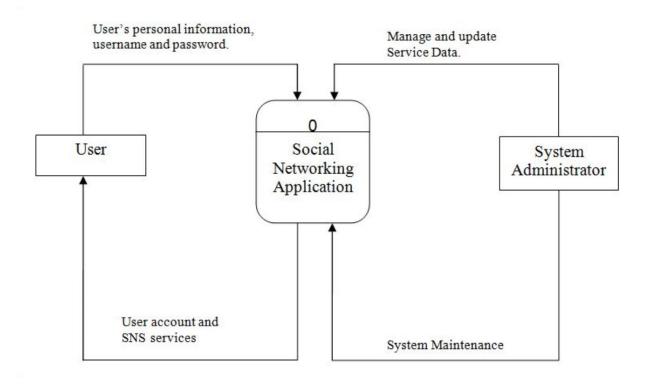
## **5.1 USE CASE DIAGRAM**



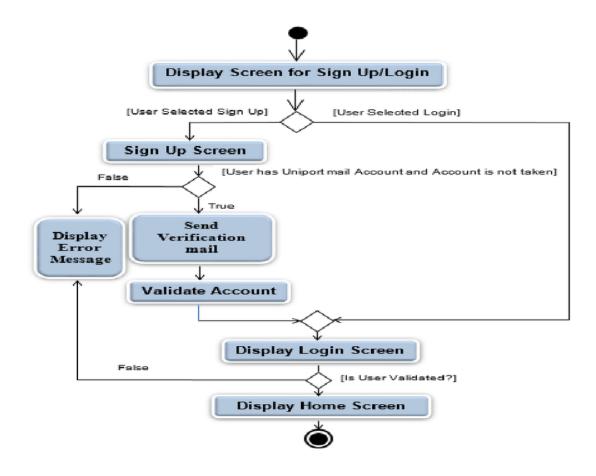
## **5.2 ER DIAGRAM**



## **5.3 DATA FLOW DIAGRAM**



#### **5.4 ACTIVITY DIAGRAM**



## CHAPTER 6 SAMPLE CODING

```
<!DOCTYPE html>
<html>
  <head>
    link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9
UJ0Z" crossorigin="anonymous">
    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"</pre>
integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXa
Rkfj" crossorigin="anonymous"></script>
    <script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
integrity="sha384-
9/reFTGAW83EW2RDu2S0VKaIzap3H66lZH81PoYlFhbGU+6BZp6G7niu735S
k7lN" crossorigin="anonymous"></script>
    <script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
integrity="sha384-
B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPlYxofvL8/KUEfYiJOMMV+r
V" crossorigin="anonymous"></script>
    <link rel="stylesheet" href="homepage.css">
    <script src="https://kit.fontawesome.com/e9028ed6b2.js"</pre>
crossorigin="anonymous"></script>
  </head>
  <body>
    <div id="sectionHome">
      <div class="bg">
         <div class="d-flex flex-row">
```

```
<div class="left-container d-flex flex-column">
              <div class="d-flex flex-row">
                <img src="https://i.postimg.cc/RFLrNsfD/logo1.png" class="top-
logo"/>
                <h1 class="top-head">WaveLink</h1>
              </div>
              <div class="d-flex flex-row">
                <img src="https://i.postimg.cc/ZRjrvkGm/Screenshot-2024-08-
21-at-21-06-34.png" style="margin-top: 15px; border-radius:100%;" class="left-
imggg"/>
                <h1 class="sidebar-head">Home</h1>
              </div>
              <div class="d-flex flex-row">
                <img src="https://i.postimg.cc/NFscsnXZ/Screenshot-2024-08-</pre>
21-at-21-07-08.png" class="left-imgg left-mar"/>
                <h1 class="sidebar-headd">Search</h1>
              </div>
              <div class="d-flex flex-row">
                <img src="https://i.postimg.cc/YqzWyBnw/Screenshot-2024-08-
21-at-21-08-01.png" class="left-img left-mar"/>
                <h1 class="sidebar-headdd">Messages</h1>
              </div>
              <div class="d-flex flex-row" onclick="openOKMPage()">
                <img src="https://i.postimg.cc/rwbx5CZd/Screenshot-2024-08-</pre>
21-at-21-07-42.png" class="left-img left-mar"/>
                <h1 class="sidebar-headddd">Notifications</h1>
              </div>
              <script>
                function openOKMPage() {
                   window.location.href = 'okm.html';
              </script>
              <div class="d-flex flex-row" onclick="openWavePage()">
                <img src="https://i.postimg.cc/FR6M46Tr/Screenshot-2024-08-
21-at-21-06-09.png" class="left-img left-mar"/>
```

```
<h1 class="sidebar-heaad">Profile</h1>
            </div>
            <script>
               function openWavePage() {
                 window.location.href = 'wave1.html';
            </script>
            <div class="d-flex flex-row">
               <img
src="https://imgs.search.brave.com/RGbfc8mm7oMwr2aAcTk9CEzCl8mxH2L96"
QwmjicSRVI/rs:fit:500:0:0/g:ce/aHR0cHM6Ly9lMS5w/eGZ1ZWwuY29tL2Rl/
c2t0b3Atd2FsbHBh/cGVyLzE0Ny84NjUv/ZGVza3RvcC13YWxs/cGFwZXItYW
5pbWUt/cHJvZmlsZS1waWMt/YW5pbWUtcHJvZmls/ZS10aHVtYm5haWwu/an
Bn" class="pic-img"/>
               <h1 class="sidebar-heead">Logout</h1>
            </div>
          </div>
          < div>
            <div class="center-container">
               <div d-flex flex-column>
                 <div class="d-flex flex-row ml-5">
                   <div>
                     <img
src="https://imgs.search.brave.com/xvgZMWBbt5BKhOjoT2sbv5QPEIKNjoGW6
aHgsAQO7tQ/rs:fit:500:0:0/g:ce/aHR0cHM6Ly9wbGF5/LWxoLmdvb2dsZXVz
/ZXJjb250ZW50LmNv/bS9kNXZoUTg4YXlB/ZnhuY2xyMVVYYTd0/TlJ0V0xx
TzIySUtX/WHhLemNXNGZjeEhT/ZGc5ZXFReDVqUDhB/Z05fZlFVRWc9dzU
y/Ni1oMjk2LXJ3.jpeg" class="story-img"/>
                   </div>
                   < div>
                     <img src="https://i.postimg.cc/prPBc8Rj/goku-Profile-</pre>
Image-1.webp" class="story-img-1"/>
                   </div>
                   < div>
```

```
<img src="https://i.postimg.cc/rs4XWkbh/anime-profile-</pre>
picture-eren-yeager-0ml45i78qva0e0zh-1.webp" class="story-img-1"/>
                     </div>
                     <div>
                       <img src="https://i.postimg.cc/Ssk5t9np/img-4-1.jpg"
class="story-img-1"/>
                     </div>
                     <div>
                       <img src="https://i.postimg.cc/3RwgfrFw/anime-profile-
picture-p0rdraymywqeham2-1.jpg" class="story-img-1"/>
                     </div>
                  </div>
                  <div class="center-post-container">
                     <div class="d-flex flex-column">
                       <div class="d-flex flex-row">
                            <img
src="https://imgs.search.brave.com/1cZO6ikN3vtipjzUMkuDk2Bh4izjd09BrnG3
MhZMkWM/rs:fit:500:0:0/g:ce/aHR0cHM6Ly93d3cu/bG9nb2Rlc2lnbmxv/dmU
uY29tL2ltYWdl/cy9jYXIvcG9yc2No/ZS1sb2dvLTAxLmpw/Zw" class="post-
img-1"/>
                           <h1 class="mnb1-post">Porche</h1>
                            <button class="follow-button">Follow</button>
                       </div>
                       <div>
                         <img src="https://i.postimg.cc/wv5kTzX2/Screenshot-
2024-08-26-at-12-33-28.png" class="post-por-1"/>
                       </div>
                       <div class="like-section d-flex flex-row">
                         <label class="heart-container">
                            <input type="checkbox" id="heart-checkbox">
                            <i class="fa-regular fa-heart fa-xl heart-icon"></i>
                         </label>
                         <div>
```

```
<i class="fa-regular fa-comment fa-xl pl-3 mt-
2" style="color: #FFD43B;"></i>
                                <i class="fa-regular fa-paper-plane fa-xl pl-3"
style="color: #FFD43B;"></i>
                                <i class="fa-regular fa-bookmark fa-xl save-al"
mr-4 mt-2" style="color: #FFD43B;"></i>
                         </div>
                       </div>
                       <div class="mt-4 ml-4 d-flex flex-row">
                         <h1 class="usernamepo">Porsche</h1>
                         Take the road less
travelled... \( \sqrt{p} 
                       </div>
                       <div class="add-comment">
                         <input type="text" placeholder="Add a comment...">
                         <button>Post</button>
                       </div>
                    </div>
                  </div>
                  <hr class="post-divider-1">
                </div>
             </div>
           </div>
           <div class="cont">
             <div class="so mt-5">
                <div class="user d-flex flex-row">
                  <img
```

src="https://imgs.search.brave.com/RGbfc8mm7oMwr2aAcTk9CEzCl8mxH2L96 QwmjicSRVI/rs:fit:500:0:0:0/g:ce/aHR0cHM6Ly9lMS5w/eGZ1ZWwuY29tL2R1/c2t0b3Atd2FsbHBh/cGVyLzE0Ny84NjUv/ZGVza3RvcC13YWxs/cGFwZXItYW5pbWUt/cHJvZmlsZS1waWMt/YW5pbWUtcHJvZmls/ZS10aHVtYm5haWwu/anBn"

```
class="img1">
                 <p class="text"> maddy 007
                 Switch
                 <hr class="wsx">
              </div>
            </div>
            <div class="pl d-flex flex-row">
              Suggested for you
              show all
            </div>
            <div class="poi d-flex flex-row">
              <div class="ee d-flex flex-column">
                   <img src="https://i.postimg.cc/JzDrSz8D/img1.jpg"</pre>
class="p1">
                   <img src="https://i.postimg.cc/HLvXQMVC/im23.jpg"
class="p1">
                   <img src="https://i.postimg.cc/j5GfjZ4Z/im78.webp"
class="p1">
                   <img src="https://i.postimg.cc/DycWV2HC/im24.webp"</pre>
class="p1">
                   <img src="https://i.postimg.cc/DyfvX1pg/fcjbkdsj.webp"
class="p1">
              </div>
              <DIV CLASS="qas d-flex flex-column">
                 kazue<br>new to wavelink
                 mitsuko<br>new to wavelink
                 <P class="mnb">rokuro<br>new to wavelink</P>
                <P class="mnb">nezuko chan<br/>br>new to wavelink</P>
                <P class="mnb">grundyer<br/>br>new to wavelink</P>
              </div>
              <div class="was d-flex flex-column">
                <button class="xcv1">link
                 <button class="xcv">link
                 <button class="xcv">link
                <button class="xcv2">link
```

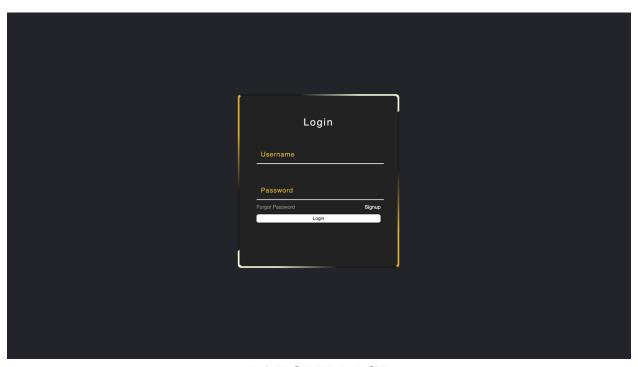
```
<button class="xcv3">link
                </div>
              </div>
           </div>
       </div>
       <div class="bg d-flex flex-row">
         <div class="left-container">
         </div>
         < div >
           <div class="center-post-container-1">
              <div class="d-flex flex-column">
                <div class="d-flex flex-row">
                     <img
src="https://imgs.search.brave.com/fFQSTc4h4_JK7Uif200xY7IgiBrc_G636cAzg
A0Doq4/rs:fit:860:0:0:0/g:ce/aHR0cHM6Ly9sb2dv/d2lrLmNvbS9jb250/ZW50L3
VwbG9hZHMv/aW1hZ2VzLzM5OF9i/bXcuanBn" class="post-img-1"/>
                     <h1 class="mnb1-post">BMW</h1>
                     <button class="follow-button">Follow</button>
                </div>
                < div>
                  <img src="https://i.postimg.cc/tggPvmkN/456896242-</pre>
3759667690957251-2799552372213635111-n.jpg" class="post-por-1"/>
                </div>
                <div class="like-section d-flex flex-row">
                  <label class="heart-container">
                     <input type="checkbox" id="heart-checkbox">
                     <i class="fa-regular fa-heart fa-xl heart-icon"></i>
                  </label>
                  <div>
                         <i class="fa-regular fa-comment fa-xl pl-3 mt-2"
style="color: #FFD43B;"></i>
                         <i class="fa-regular fa-paper-plane fa-xl pl-3"
style="color: #FFD43B;"></i>
                         <i class="fa-regular fa-bookmark fa-xl save-al mr-4 mt-
2" style="color: #FFD43B;"></i>
```

```
</div>
               </div>
               <div class="mt-4 ml-4 d-flex flex-row">
                 <h1 class="usernamepo">BMW</h1>
                 Blue sky () Let's fly
</div>
               <div class="add-comment">
                 <input type="text" placeholder="Add a comment...">
                 <button>Post</button>
               </div>
             </div>
             <hr class="post-divider">
             <div class="d-flex flex-column">
               <div class="d-flex flex-row">
                   <img
src="https://imgs.search.brave.com/3csu3s nDeIj1lNrvap 3Vx GZRKd wj8a9Frl
O8PqM/rs:fit:860:0:0:0/g:ce/aHR0cHM6Ly93YWxs/cGFwZXJzLmNvbS9p/bWF
nZXMvaGQvYWVz/dGhldGljLWF0dGFj/ay1vbi10aXRhbi1s/b2dvLWFmdG94d
Gdm/NDdlcHJvbXYuanBn" class="post-img-1"/>
                   <h1 class="mnb1-post">Levi</h1>
                   <button class="follow-button">Follow</button>
               </div>
               < div>
                 <img src="https://i.postimg.cc/fyCQ5NsM/219096294-
214336550591649-765108746979323303-n-1.jpg" class="post-por-1"/>
               </div>
               <div class="like-section d-flex flex-row">
                 <label class="heart-container">
                   <input type="checkbox" id="heart-checkbox">
                   <i class="fa-regular fa-heart fa-xl heart-icon"></i>
                 </label>
                 <div>
```

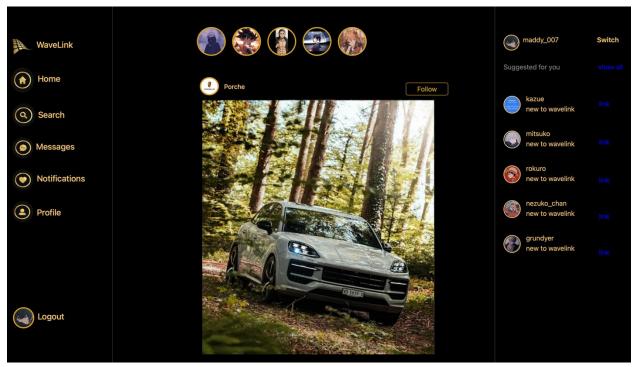
```
<i class="fa-regular fa-comment fa-xl pl-3 mt-2"
style="color: #FFD43B;"></i>
                       <i class="fa-regular fa-paper-plane fa-xl pl-3"
style="color: #FFD43B;"></i>
                       <i class="fa-regular fa-bookmark fa-xl save-al mr-4 mt-
2" style="color: #FFD43B;"></i>
                 </div>
               </div>
               <div class="mt-4 ml-4 d-flex flex-row">
                 <h1 class="usernamepo">Levi</h1>
                 </div>
               <div class="add-comment">
                 <input type="text" placeholder="Add a comment...">
                 <button>Post</button>
               </div>
            </div>
            <hr class="post-divider">
          </div>
        </div>
      </div>
    </div>
  </body>
</html>
```

## **CHAPTER 7**

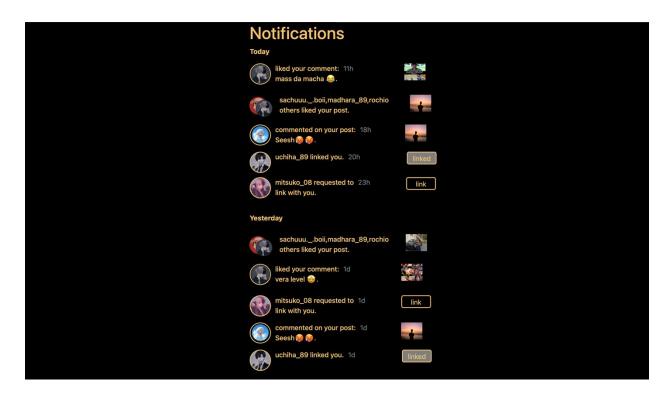
## **SCREENSHOTS**



## 7.1 HOME PAGE



#### 7.2 NOTIFICATION PAGE



### 7.PROFILE PAGE



## CHAPTER 8 CONCLUSION

In conclusion, *WaveLink* offers a dynamic and user-friendly social media platform designed to enhance connections and communication among users. By providing features such as the ability to create posts, share content, and engage with others through personalized interactions called "Links," the platform facilitates seamless networking and community building. WaveLink emphasizes privacy and control, allowing users to manage their connections, curate their social circles, and explore content that aligns with their interests.

Additionally, the platform's advanced functionalities, including house price estimators and mortgage calculators, offer users added value by enabling them to make informed financial decisions. The inclusion of these practical tools makes *WaveLink* more than just a social media site; it becomes a multi-functional platform catering to various aspects of users' lives.

WaveLink's architecture is designed for scalability and adaptability, making it well-equipped for future developments and new feature integrations. Its robust backend, powered by PHP, ensures that users experience a fast and reliable service, while its modular design offers opportunities for continuous innovation. As the platform evolves, WaveLink is poised to grow into a valuable space for social interaction and practical utilities in the digital age.

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