SOCIAL MEDIA APP

INTERDISCIPLINARY PROJECT

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Engineering degree in Computer Science and Engineering

By

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SCHOOL OF COMPUTING

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC
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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **EARLADINNE SAI DHEERAJ (41110359)** who carried out the Project entitled "**SOCIAL MEDIA APP**" under my supervision from January 2024 to April 2024.

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Submitted for Interdisciplinary Viva Voce Examination held on _____

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DECLARATION

I, **EARLADINNE SAI DHEERAJ (Reg. No- 41110359),** hereby declare that the Project Reportentitled **"SOCIAL MEDIA APP"** done by me under the guidance of **Dr. V. Nirmalrani, M. Tech., Ph. D**. is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering degree in **Computer Science and Engineering**.

DATE:

PLACE: Chennai **SIGNATURE OF THE CANDIDATE**

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ABSTRACT

In the era of digital connectivity, social media platforms have become an integral part of our lives. With the proliferation of smartphones and the internet, social media apps have revolutionized the way we communicate, share information, and connect with others. In this paper, we explore the design principles and considerations for creating effective social media apps using the popular UI/UX design tool Figma. We begin by discussing the importance of understanding the target audience and their needs when designing a social media app. We then explore the key elements and features that contribute to a user-friendly and engaging social media experience, such as intuitive navigation, visually appealing interfaces, and seamless user flows. We also discuss the importance of considering cross-platform compatibility and accessibility when designing social media apps. Next, we delve into the specific affordances and benefits of using Figma for social media app design. We discuss how Figma's collaborative features, prototyping capabilities, and extensive library of UI elements can streamline the design process and enable designers to create high-fidelity prototypes. We also explore how Figma can be used to conduct user testing and gather feedback, ensuring that the final product meets the needs of the target audience. Finally, we present case studies of successful social media apps designed using Figma. We analyze the design choices and strategies employed in these apps and discuss how they contribute to the overall user experience. We conclude by highlighting the key takeaways and best practices for designing effective social media apps using Figma.

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CHAPTER 1

INTRODUCTION

Figma has become a game-changer in the design of social media apps, offering a comprehensive set of tools and features that enable designers to create engaging and user-friendly experiences. Here are some key principles and considerations to keep in mind when using Figma for social media app design:

1.1 Understanding the Target Audience:

- Identify the demographics, interests, and behaviors of the target audience.
- Tailor the design to meet their specific needs and preferences.
- Conduct user research to gather insights into their expectations and pain points.

1.2Identifying Key Elements and Features:

- Determine the core features and functionalities that are essential for the app.
- Prioritize and organize these elements based on their importance and relevance to the target audience.
- Design intuitive and visually appealing interfaces that enhance the user experience.

1.3Ensuring Cross-Platform Compatibility and Accessibility:

- Design the app for seamless use across multiple platforms, including mobile devices, tablets, and desktops.
- Consider the different screen sizes, orientations, and input methods of each platform.
- Incorporate accessibility features such as high contrast mode, font resizing, and keyboard navigation.

1.4Benefits of Using Figma for Social Media App Design:

- Figma's collaborative features allow multiple designers to work on the same project simultaneously, facilitating efficient and streamlined

design processes.

- The prototyping capabilities enable designers to create interactive prototypes that simulate the app's functionality, providing valuable insights into the user experience.
- Figma's extensive library of UI elements, including icons, buttons, and navigation bars, helps designers quickly assemble and iterate on their designs.

1.5 Case Studies of Successful Social Media Apps:

- **Instagram**: Instagram's simple and intuitive interface, with its focus on visual storytelling, has made it a hugely popular social media platform. The design team effectively leveraged Figma's prototyping capabilities to test different layouts and features before implementation.
- **TikTok**: TikTok's engaging short-form video format has captivated users worldwide. The design team used Figma to create a seamless and user-friendly interface that facilitates content discovery and creation.
- **Discord**: Discord's community-focused platform combines text, voice, and video chat. The design team utilized Figma's collaborative features to involve the community in the design process, gathering feedback and incorporating it into the final product.

These principles and considerations, along with the benefits of using Figma, empower designers to create social media apps that are visually appealing, user-centric, and accessible, ultimately contributing to their success in the competitive digital landscape.

CHAPTER 2

LITERATURE SURVEY

2.1 Review on Existing System

Creating a social media platform using Figma tools offers an innovative way for users to connect and share their artwork with a global audience. Figma's versatile features allow for the seamless design and development of a visually appealing and user-friendly platform. Artists can showcase their artwork across various styles, genres, and themes, fostering inclusivity and diversity within the creative community.

Strengths of using Figma for this project include its collaborative capabilities, which enable multiple users to work on the platform simultaneously, ensuring efficient workflow and seamless communication among team members. Additionally, Figma's extensive library of design resources and templates streamlines the design process, allowing for rapid prototyping and iteration to refine the user experience.

However, challenges may arise in ensuring the scalability and performance of the platform, especially as the user base grows. It's essential to prioritize accessibility and inclusivity in the design, making sure the platform is intuitive and easy to navigate for users of all backgrounds and abilities. Continuous user testing and feedback loops are crucial for identifying and addressing any usability issues or pain points.

Overall, leveraging Figma tools to create a social media platform for artists offers an exciting opportunity to empower creators and cultivate a vibrant online community centered around art and creativity.

2.2 Inferences and Challenges in Existing System:

Inferences:

2.2.1. Digital Preference in Social Interaction: The widespread adoption of digital platforms for activities like ticket reservation suggests a preference for online methods of interaction. Developing a social media platform using Figma aligns with this trend, offering users a convenient and time-saving solution for connecting and engaging with others in the digital sphere.

2.2.2. Technological Enhancements in User Engagement: Just as online art galleries leverage technological advancements to enhance the art-viewing experience, Figma tools enable designers to incorporate innovative features into social media platforms. Designers can utilize high-fidelity prototypes, interactive components, and even AR applications to create immersive and engaging user experiences, catering to the evolving preferences of modern social media users.

2.2.3. Data-driven Design Decisions: Similar to how online art galleries leverage data for insights into user behavior and market trends, Figma facilitates data-driven design decisions for social media platforms. Designers can analyze user interactions, engagement metrics, and feedback to refine the platform's features and functionalities, ensuring that it meets the needs and preferences of its target audience effectively.

Challenges :

During the initial stages of creating a social media app using Figma tools, I encountered several hurdles. Alignment issues made it difficult to ensure everything appeared as intended, images weren't always positioned correctly, and achieving a clean design was a struggle. Setting padding proved to be another challenge. Developing UI/UX requires a blend of creativity, innovation, and numerous brainstorming sessions to craft a polished app design.

CHAPTER 3
ANALYSIS AND DESIGN OF PROPOSED SYSTEM

3.1 Necessity for Proposed System

The proposed social media platform aims to address the limitations of existing platforms while leveraging their strengths to create a comprehensive solution for users seeking seamless social interaction. By providing a centralized platform for connecting with others across diverse interests, the proposed system simplifies the process of discovering and engaging with content. Through a consistent and intuitive user interface created with Figma tools, the platform enhances accessibility and usability, ensuring a smooth and enjoyable social media experience for all users. Additionally, incorporating advanced features such as personalized content recommendations, virtual events, and interactive elements elevates user engagement and satisfaction, fostering a vibrant and interactive online community.

3.2 Software Requirements

Figma is a collaborative interface design tool that’s taking the design world by storm. Unlike Sketch, which runs as a standalone MacOS app, Figma is entirely browser-based, and therefore works not only on Macs, but also on PCs running Windows or Linux, and even on Chromebooks. It also offers a web API, and it’s free! Another big advantage of Figma is that it allows real-time collaboration on the same file. When using conventional “offline” apps like Sketch and Photoshop, if designers want to share their work, they typically have to export it to an image file, then send it via email or instant message. 13 In Figma, instead of exporting static images, we can simply share a link to the Figma file for clients and colleagues to open in their browser. This in itself saves significant time and inconvenience in a designer’s workflow. But more importantly, it means that clients and colleagues can interact more richly with the work, and review the latest version of the file. There are two ways to run FIGMA: Web To run in mainstream web browsers, FIGMA relies on a source-to-source compiler to JavaScript. According to the project site, FIGMA was "designed to be easy to write development tools for, well-suited to modern UI/UX development, and capable of high-performance implementations. When running Figma code in a web browser the code is precompiled into JavaScript using the

compiler. Compiled as JavaScript, FIGMA is compatible with all major browsers with no need for browsers to adopt FIGMA. Through optimizing the compiled JavaScript output to avoid expensive checks and operations, code written in FIGMA can, in some cases, run faster than equivalent code hand-written using JavaScript idioms. App The Figma mobile app lets you access your files and test prototypes from anywhere. You can also share files, browse multiple workspaces, and mirror frames from your desktop to your mobile device

Fig 3.2.1 Figma

3.3 Hardware Requirements

- Operating system : Windows 10 or 11
- RAM : 8 GB
- Hard disc or SSD : More than 500 GB
- Processor : Intel 3rd generation or high or Ryzen with 8 GB Ram

CHAPTER 4

IMPLEMENTATION OF PROPOSED SYSTEM

4.1 Detailed Description of Proposed System

The proposed social media platform is a comprehensive web application designed to facilitate seamless social interaction and content sharing among users with diverse interests. It primarily focuses on frontend development to provide users with an intuitive and immersive interface for connecting and engaging with content based on their preferences.

The system comprises dedicated pages for various social features, including user profiles, news feeds, messaging, and content discovery. Each page is meticulously designed to offer a smooth and convenient user experience, with features such as personalized content feeds, messaging functionalities, and easy navigation. Additionally, there is a central homepage for easy access to essential features and navigation, along with a support page for user inquiries and assistance.

Utilizing Figma tools and modern frontend technologies such as HTML5, CSS3, and JavaScript frameworks like React.js or Vue.js, the pages are designed to be responsive, visually captivating, and easy to navigate across various devices. This ensures that users can interact with the social media platform seamlessly from desktops, tablets, or smartphones, enhancing accessibility and user engagement.

One of the key features of the proposed social media platform is its ability to personalize content recommendations and provide comprehensive user profiles, empowering users to connect with like-minded individuals and discover relevant content easily. This enhances the overall user experience and satisfaction by facilitating meaningful social interactions and content discovery.

Overall, the proposed social media platform aims to streamline social interaction and content sharing for users while providing a visually appealing and user-friendly frontend experience. By offering efficiency, reliability, and ease of use, it simplifies the social media experience and promotes meaningful connections in a digital environment.

4.2 Advantages: Users can access and watch content on the social media app without needing to download it.

4.2.2 High-Quality Multimedia: The app supports high-resolution media playback, including videos, images, and graphics, offering superior visual quality compared to traditional TV broadcasts.

4.2.3 Cost-Effective: Some social media platforms, like Instagram and Twitter, are free to use, while others may offer subscription models that are more affordable than cable TV subscriptions.

4.2.4 Versatile Platform Compatibility: The social media app is accessible across various platforms, including mobile devices, tablets, and desktops. Users have the flexibility to engage with content in real-time or view prerecorded media whenever convenient.

4.2.5 Diverse Content: Users can explore a wide range of content types, including photos, videos, live streams, and user-generated content. The app fosters creativity and allows for the sharing of various multimedia content formats.

4.3 Disadvantages:

4.3.1 Scalability Concerns: Ensuring the social media app's backend architecture is scalable to accommodate a growing number of users without performance issues can be challenging.

4.3.2 Security Risks: Social media apps may face copyright infringement issues and unauthorized content sharing. Implementing proper rights management, access controls, and encryption measures is crucial to protect intellectual property.

4.3.3 Device Compatibility: Users access social media content from various devices with different operating systems (iOS, Windows, Android), making it essential for the app to support multiple platforms and formats.

4.3.4 Data Storage Challenges: Storing large amounts of data on a social media app can be costly and slow. Bandwidth requirements are also demanding.

4.3.5 Live and On-Demand Features: Supporting both live and on-demand content in the app can be expensive due to infrastructure costs and limited reusability.

4.3.6 Content Transcoding Complexity: Encoding and saving content in various formats for optimal viewing can be resource-intensive and costly.

4.3.7 Analytics Limitations: Gathering and analyzing user data for insights into app usage and engagement can be challenging, often requiring expensive analytics tools with limited detail.

CHAPTER 5

RESULTS AND DISCUSSION

5.1 Results

The social media platform has been successfully designed and prototyped using Figma tools, incorporating modern design principles and user experience techniques to ensure a seamless and engaging user interface. The key features and outcomes of the platform design are outlined below Users can discover content by browsing through personalized feeds, exploring trending topics, or searching for specific users or hashtags. The platform dynamically updates content based on user interactions, ensuring relevant and engaging content discovery. Each user has a dedicated profile page showcasing their bio, profile picture, and content shared on the platform. Users can customize their profiles with additional information such as interests, preferences, and contact details. Content is presented in an interactive and visually appealing manner, with cards or thumbnails displaying images, videos, or text posts. Users can interact with content by liking, commenting, or sharing, fostering engagement and interaction within the community. The platform is designed to be responsive and adaptive to different screen sizes, ensuring a consistent user experience across desktops, tablets, and mobile devices. The responsive design enhances accessibility and usability, allowing users to engage with the platform from any device.The design is structured with modularity in mind, allowing for easy maintenance and potential future enhancements. Components are well-organized and reusable, facilitating efficient design iteration and scalability.

Overall, the design of the social media platform using Figma tools successfully incorporates user-centric design principles, intuitive navigation, and engaging visual elements to create a vibrant and interactive online community.

5.2 Discussion

Implementing a social media platform using Figma tools offers convenience and accessibility to users worldwide. They can connect and engage with others from the comfort of their homes or while on-the-go, eliminating the need for physical gatherings. This accessibility enhances the overall user experience and broadens the platform's reach to a diverse audience.The social media platform helps reduce waiting times experienced in traditional social gatherings or events. By allowing

users to interact and share content online, the platform streamlines social interactions and communication, resulting in more efficient and immediate connections between users.The social media platform generates valuable data on user interactions, content preferences, and engagement metrics. This data can be analyzed to gain insights into user demographics, popular content trends, and user behavior patterns. By leveraging data analytics, platform operators can make informed decisions, tailor content to user interests, and enhance overall user satisfaction.A well-designed user interface and seamless interaction process are essential for delivering a positive user experience on the social media platform. Any usability issues or design flaws, such as confusing navigation or slow loading times, can negatively impact user engagement. Therefore, prioritizing user experience design and continuous improvement is crucial for the success of the platform.Social media platforms that implement effective design strategies using Figma tools gain a competitive advantage in the digital market. It sets them apart from competitors who rely on outdated design methods and allows them to attract and retain a larger user base. Additionally, offering innovative features and personalized experiences can further differentiate the platform and solidify its position in the competitive landscape.

5.3 Screenshots

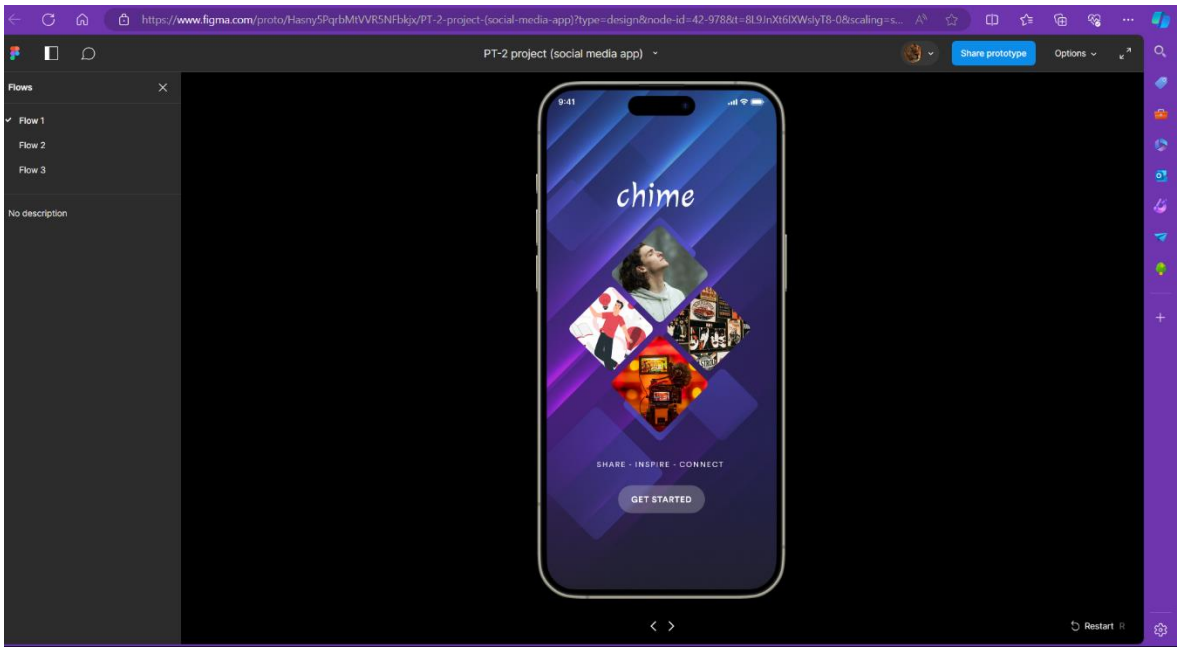

Fig 5.3.1 -> User Interface

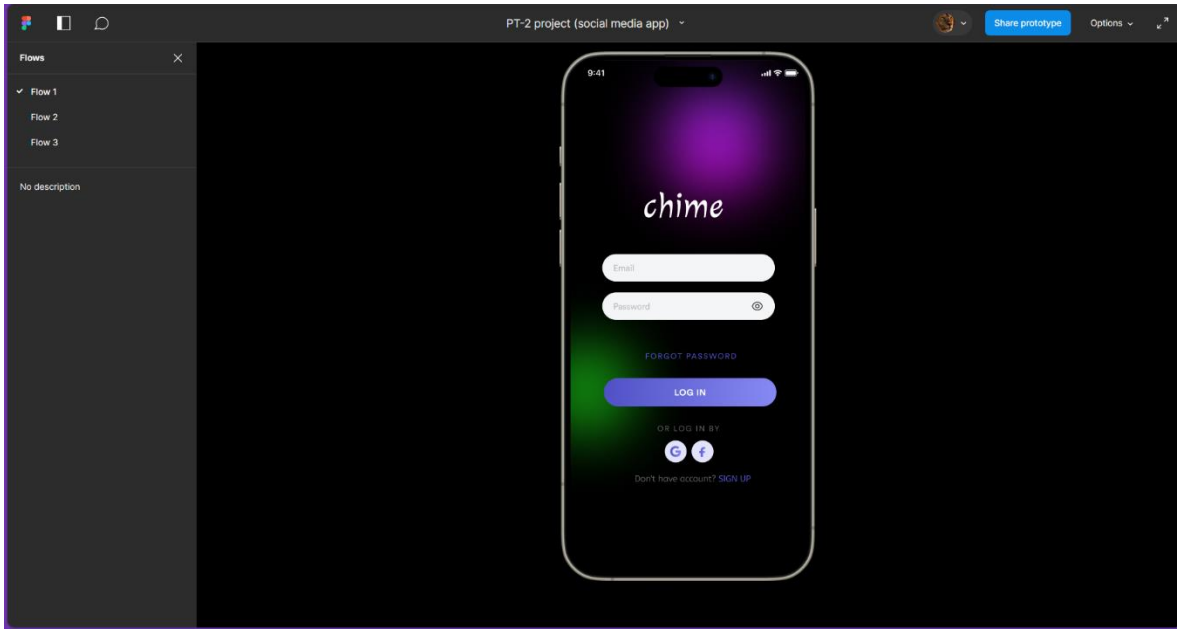

Fig 5.3.2 -> Login Page

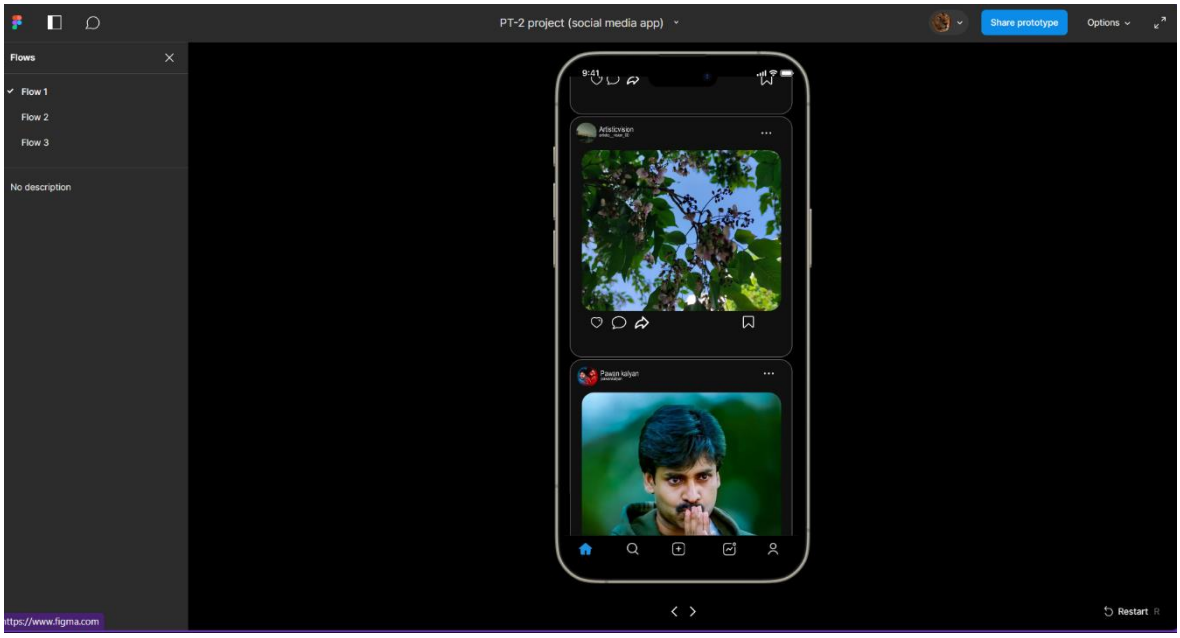

Fig 5.3.3 -> Home Page

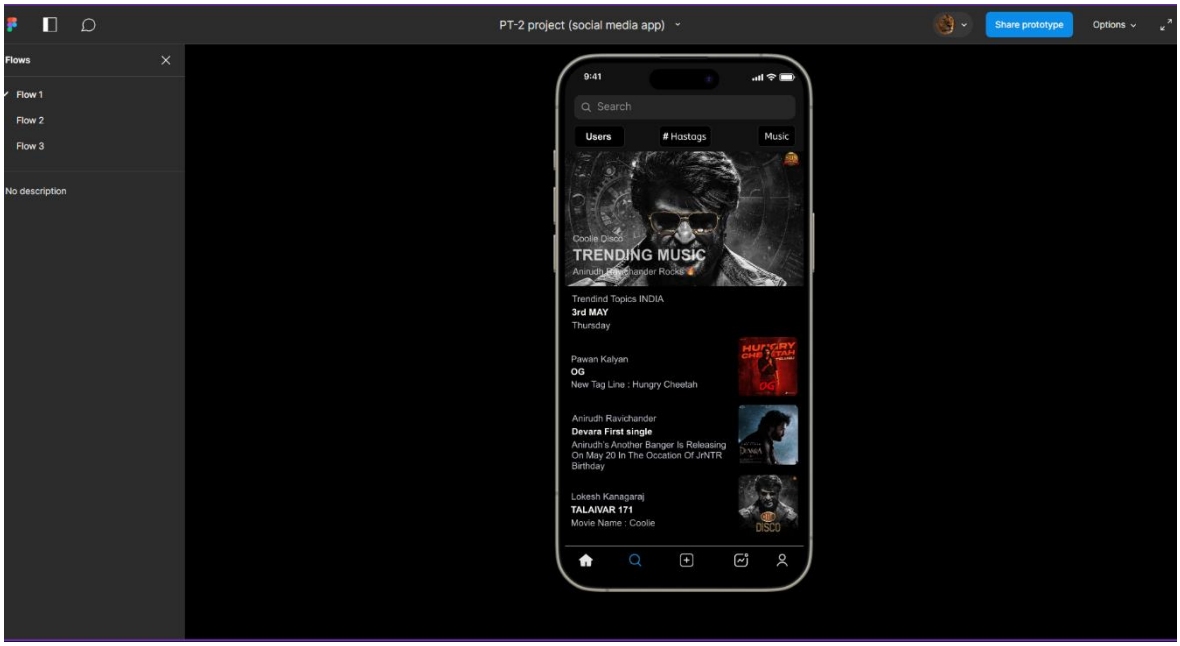

Fig 5.3.4 -> Search option

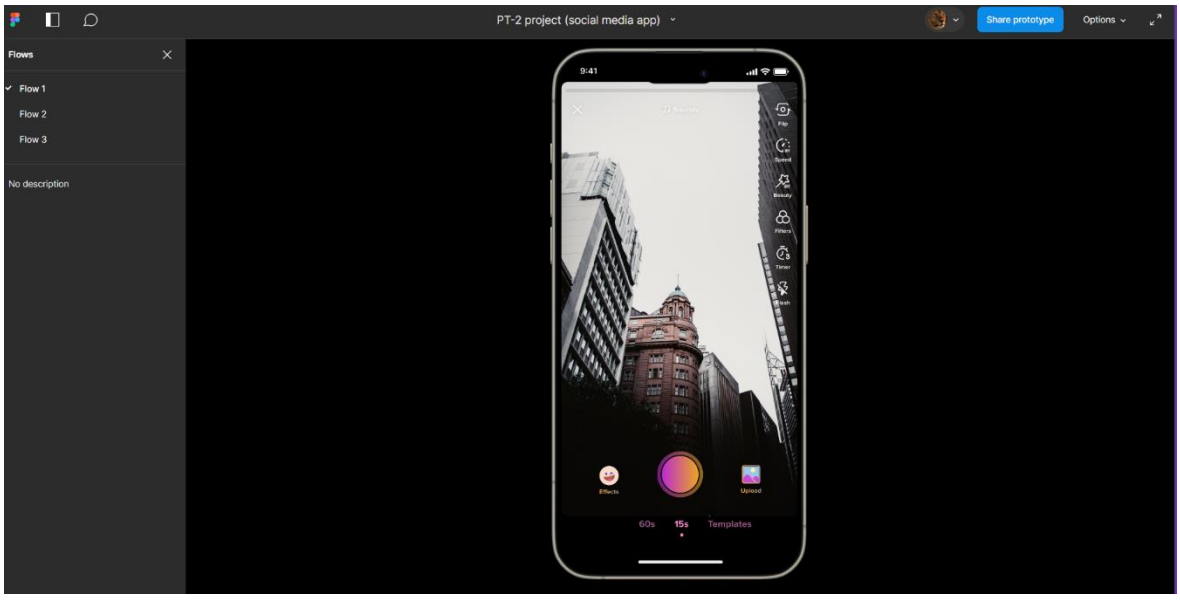

Fig 5.3.5 -> Upload Screen

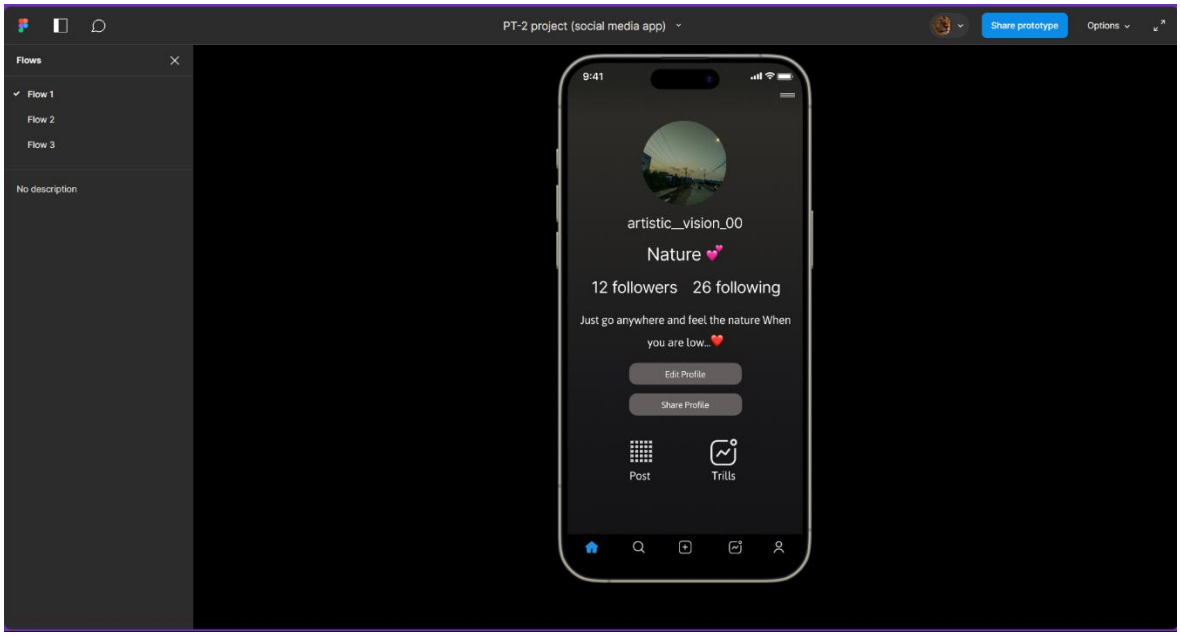

Fig 5.3.6 -> Profile Screen

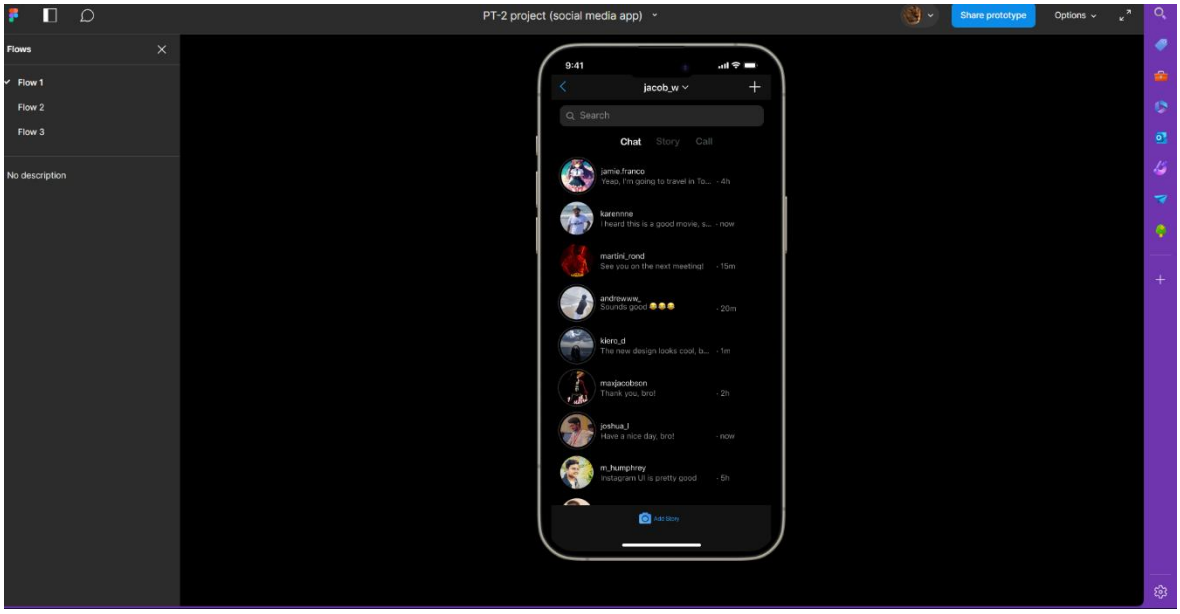

Fig 5.3.7 -> Chat Screen

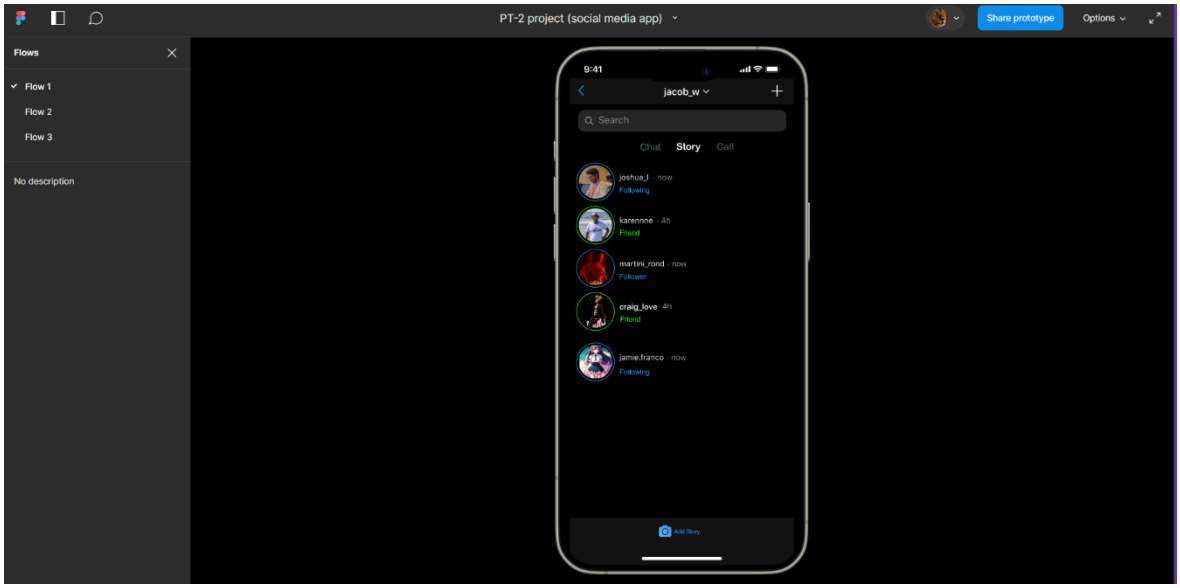

Fig 5.3.8 -> Story Screen

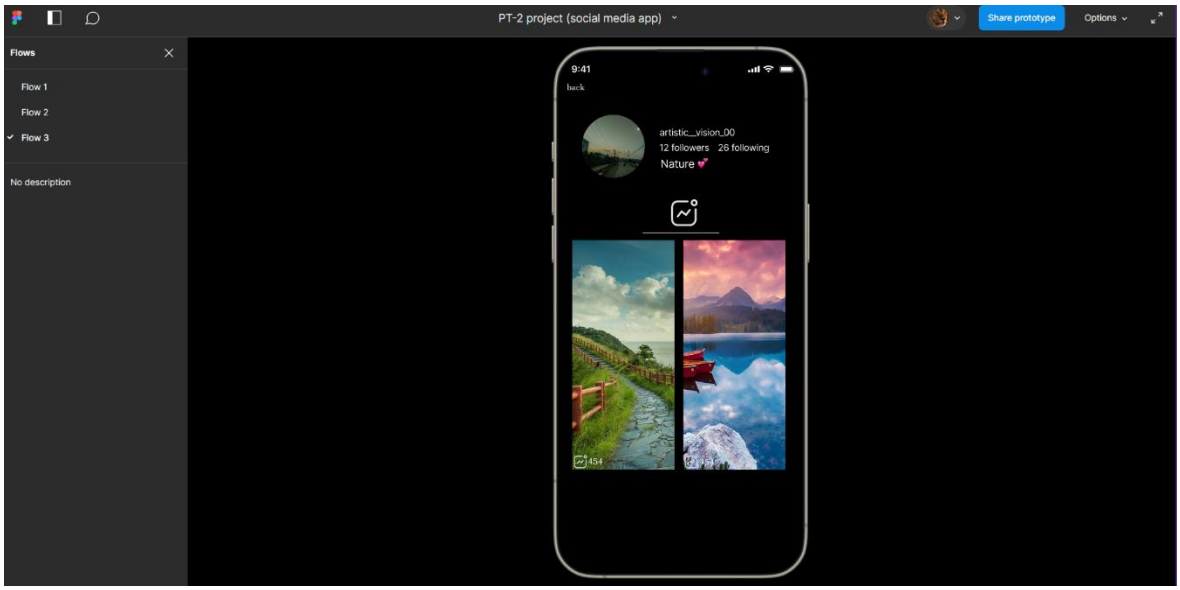

Fig 5.3.9 -> Trill Screen

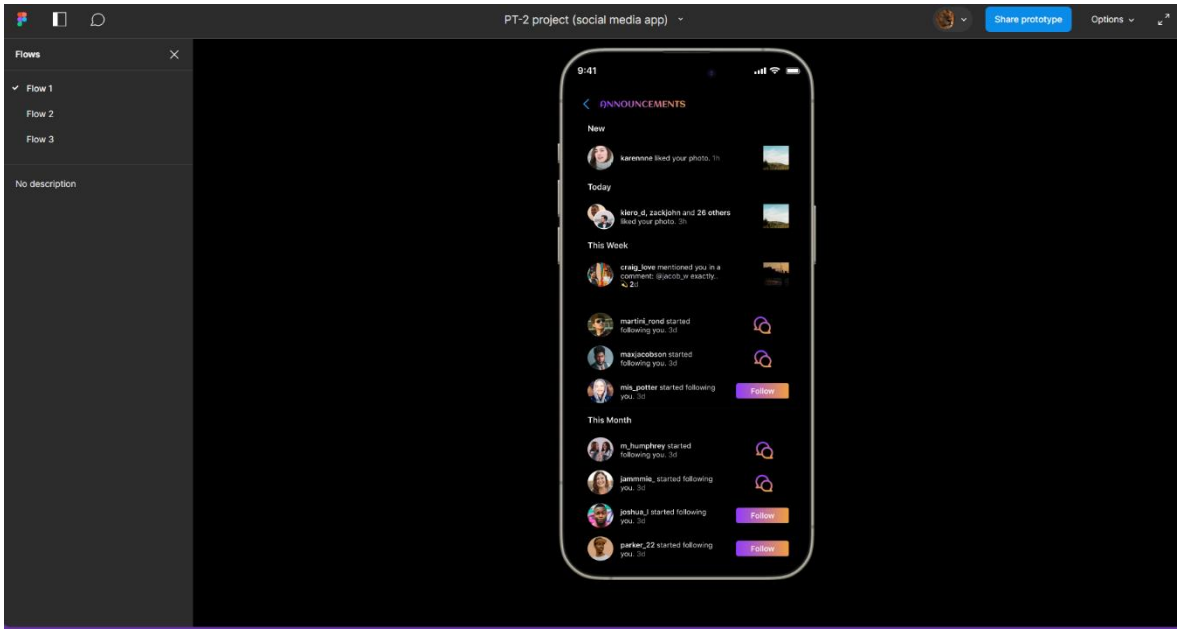

Fig 5.3.10 -> Announcement Screen

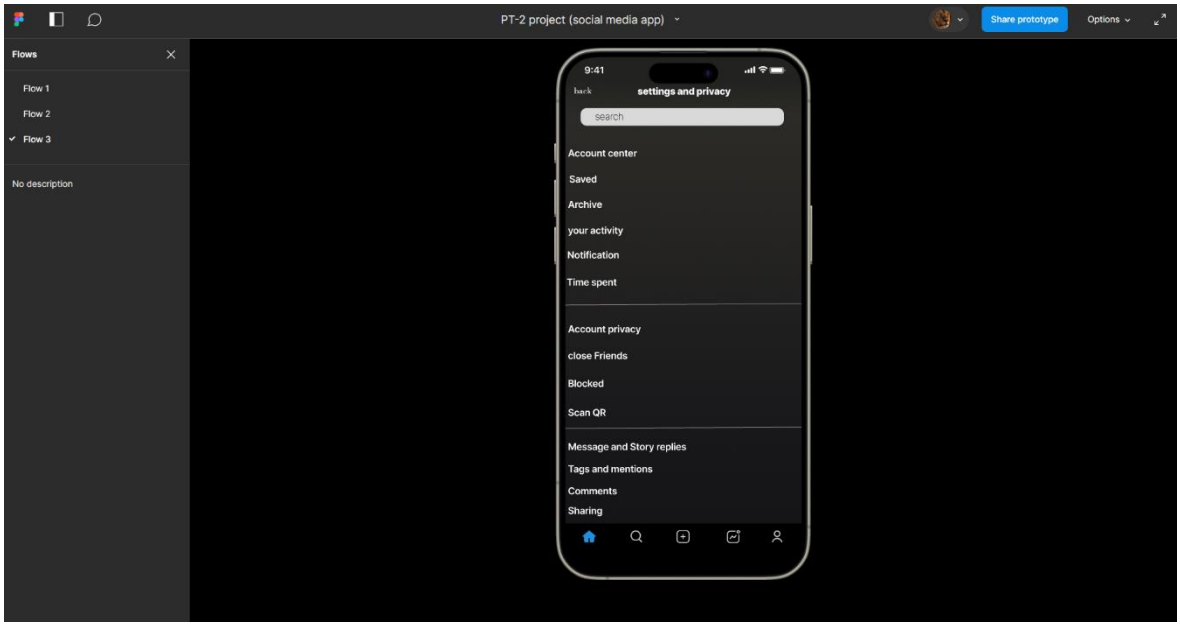

Fig 5.3.11 -> Settings Screen

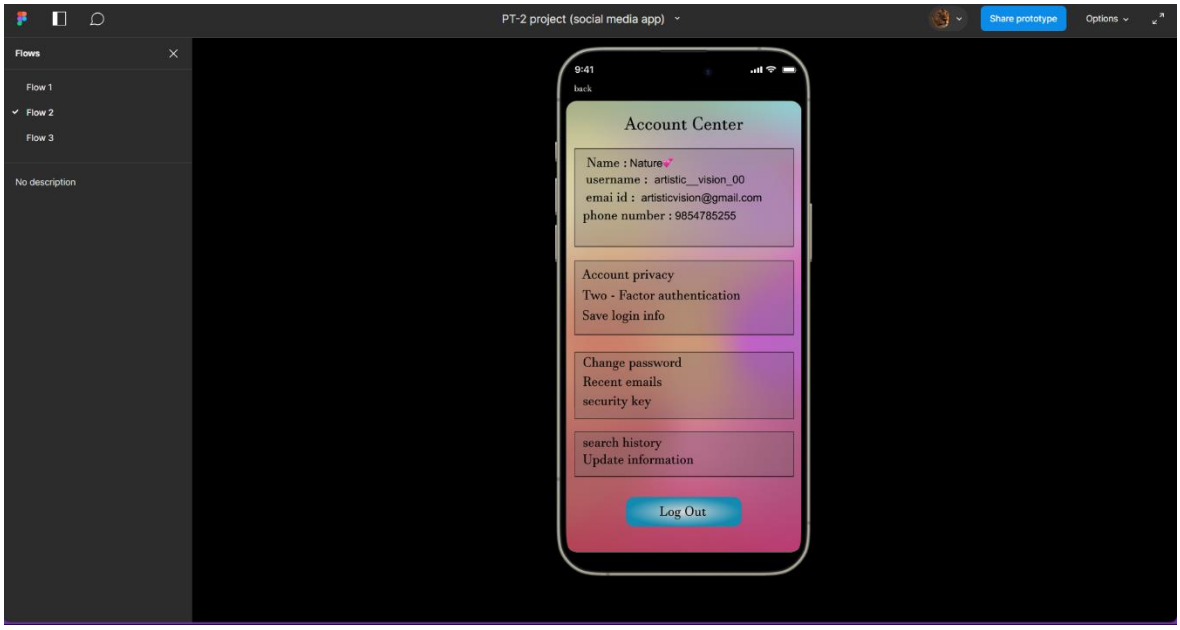

Fig 5.3.12 -> Account Centre Screen

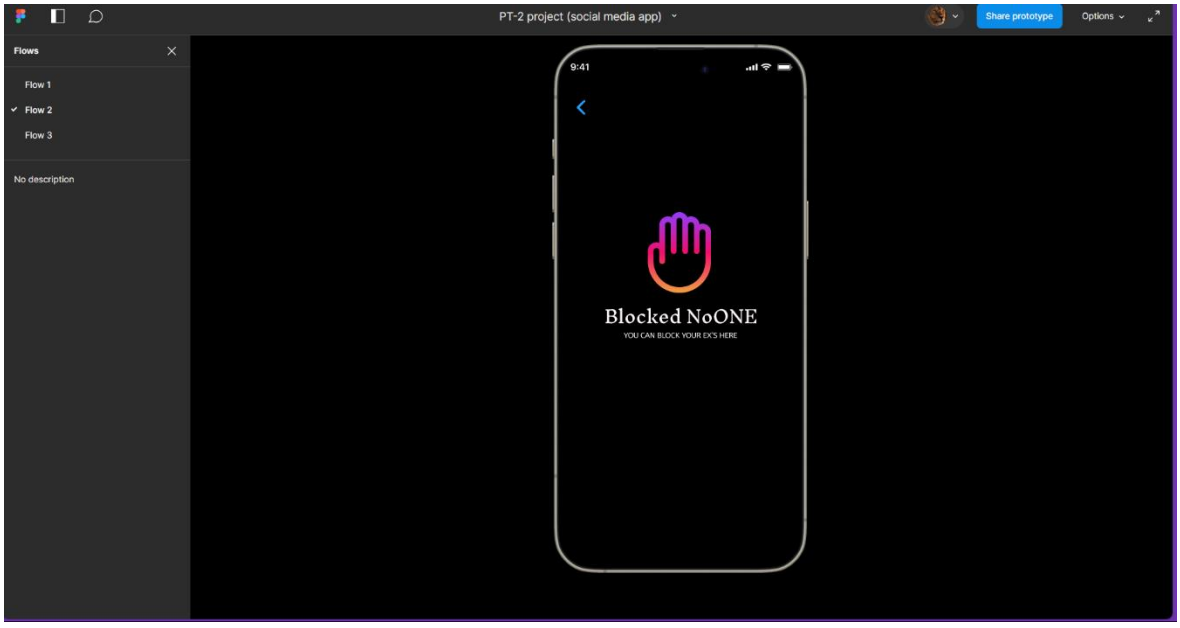

Fig 5.3.13 -> Blocked accounts Screen

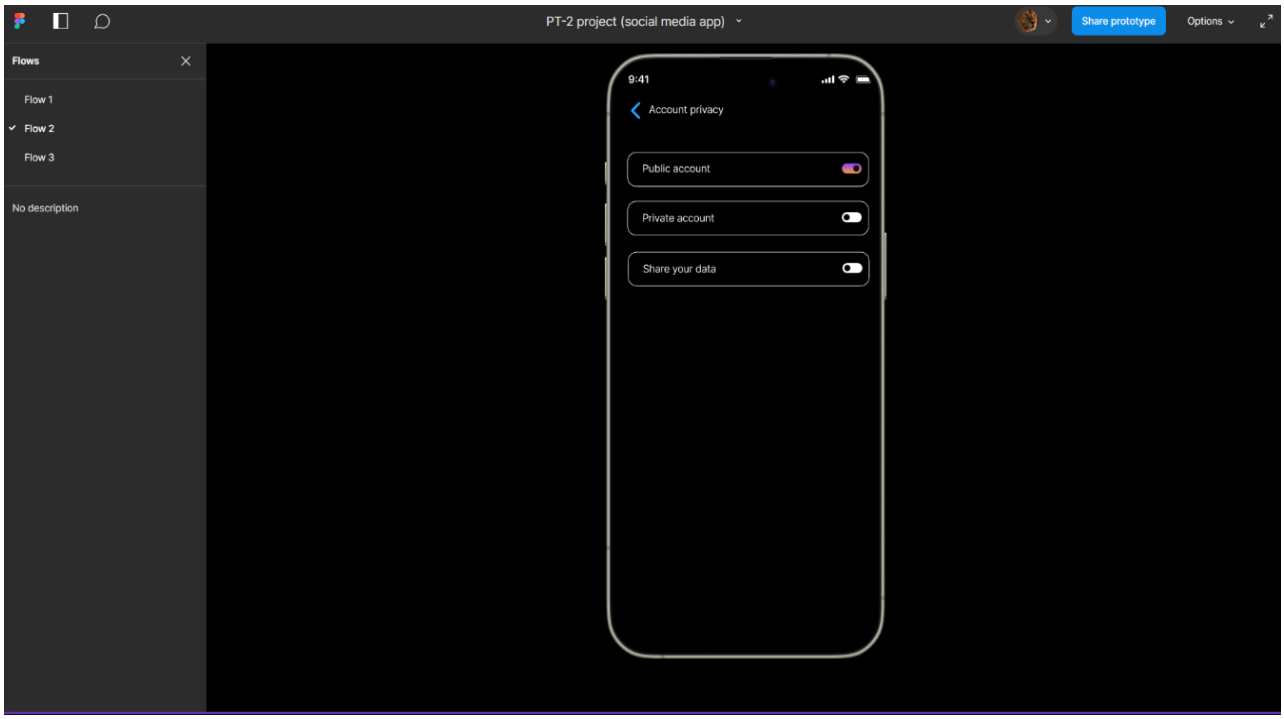

Fig 5.3.14 -> Privacy Screen

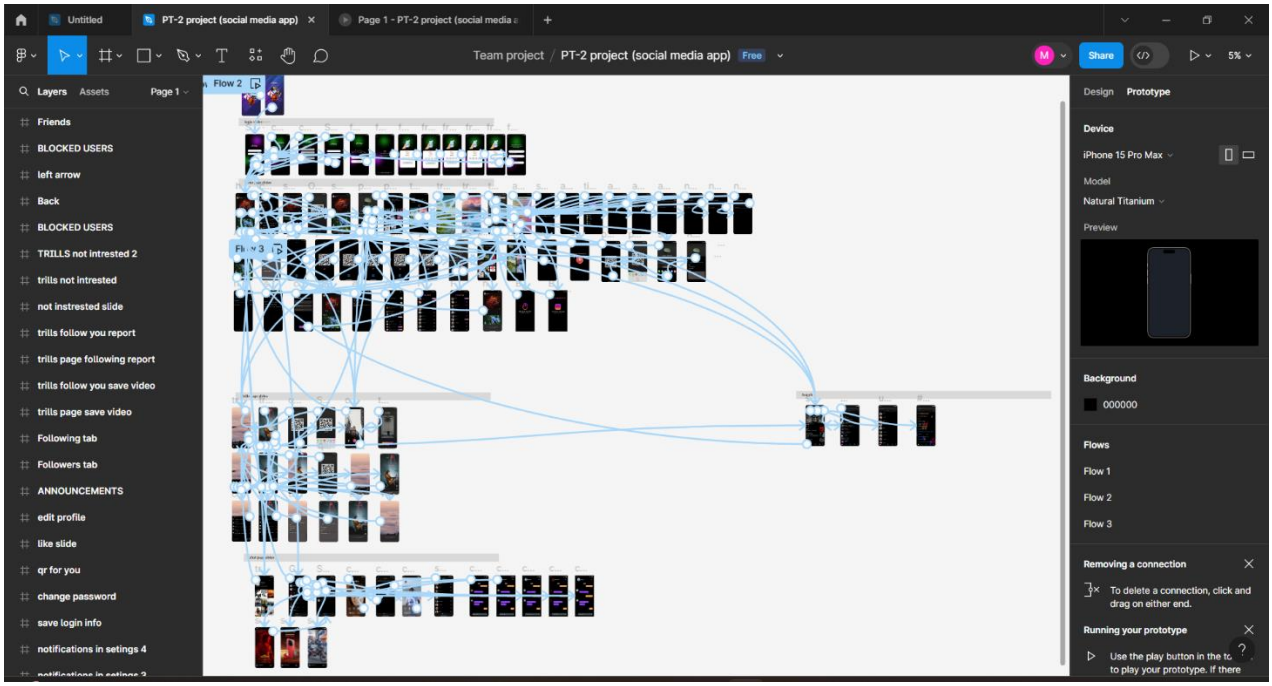

Fig 5.3.15 ->prototype

Fig 5.3.16 -> QR Screen

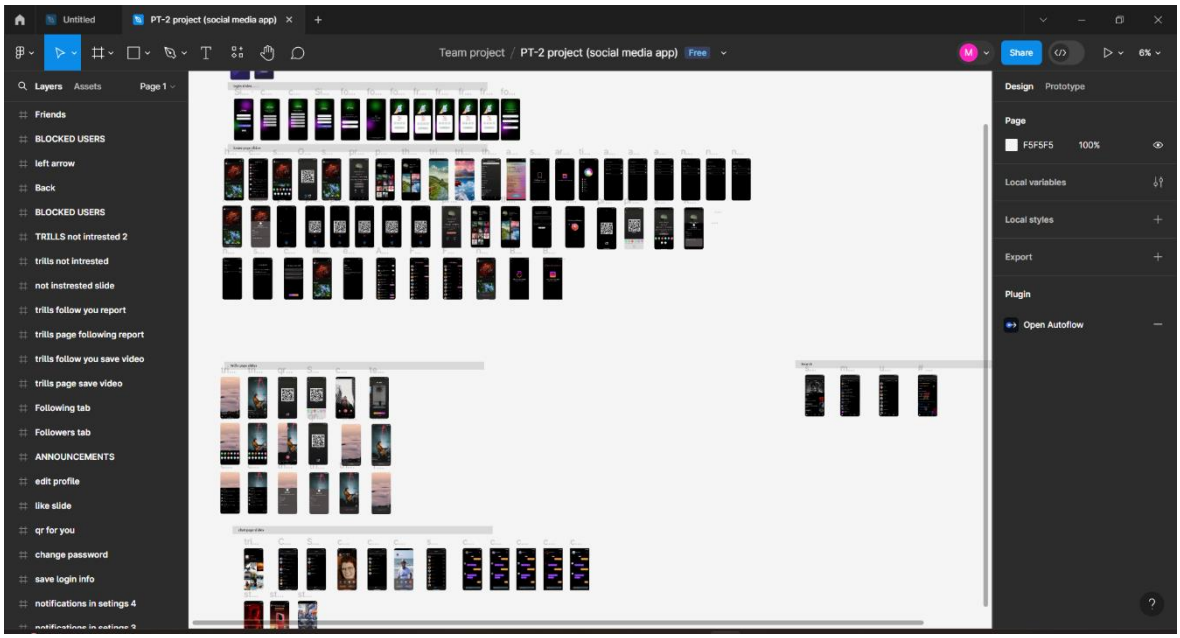

FIG 5.3.17 -> Desiged slides

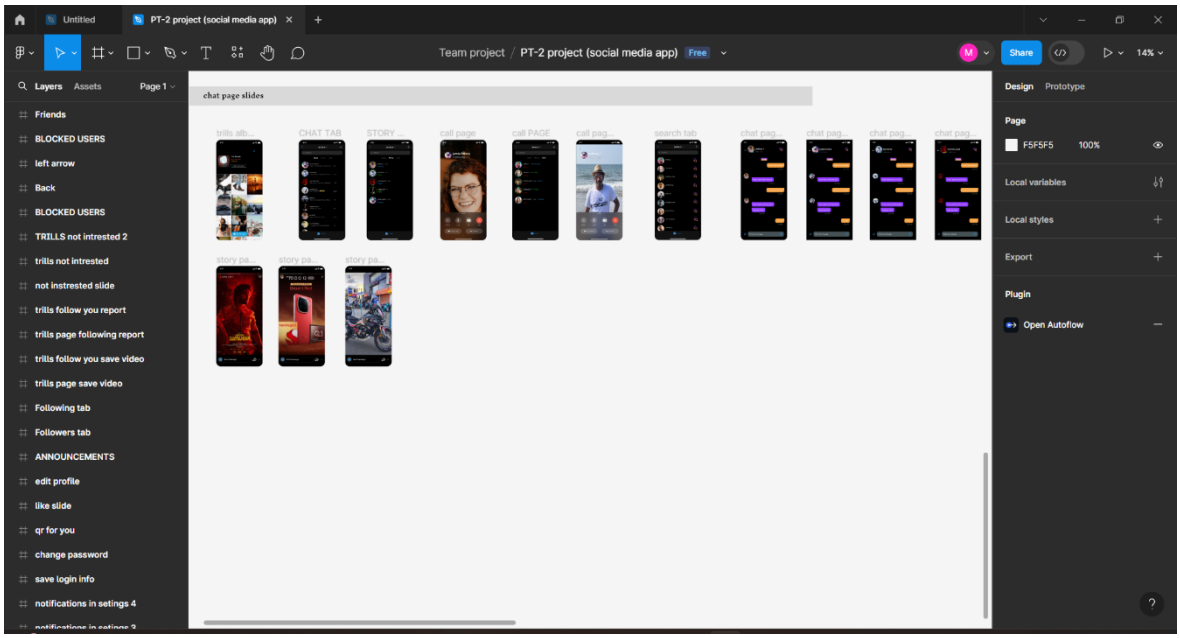

Fig 5.3.18 -> Design Chat

For Complete Project:

https://www.figma.com/file/Hasny5PqrbMtVVR5NFbkjx/PT-2-project-(social-media-app)?type=design&node-id=0%3A1&mode=design&t=Pyz2duZxn5T8rfdF-1

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

6.1 CONCLUSION

In conclusion, developing a social media platform using Figma tools represents a significant advancement in the digital landscape, providing users with a convenient and accessible platform to connect, share, and engage with content from anywhere, at any time. By offering a user-friendly interface and streamlined interaction process, the platform enhances the overall social media experience, benefiting both users and content creators alike. The social media platform contributes to fostering meaningful connections and facilitating content discovery in the digital age.

6.2 Future Enhancement

6.2.1 Mobile App Development: Creating a dedicated mobile app for iOS and Android platforms would improve accessibility and user convenience, enabling seamless social interaction and content sharing on the go. Users can access the platform from their mobile devices, enhancing engagement and expanding the platform's reach.

6.2.2 Integration with Payment Gateways*:* Integrating popular payment gateways into the platform would offer users a wider range of secure payment options for in-app purchases or transactions, enhancing transaction efficiency and user trust.

6.2.3 Real-Time Updates: Implementing real-time updates for content availability, new posts, and user interactions would ensure users receive timely notifications and stay informed about relevant activities on the platform. This feature enhances user engagement and encourages active participation within the social media community.

6.2.4 Personalized Recommendations: Leveraging machine learning algorithms to analyze user interactions, content preferences, and engagement patterns could provide personalized content recommendations tailored to each user's interests. This feature enhances user satisfaction and encourages continued usage by delivering relevant and engaging content to users' feeds

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