



## **Usman Institute of Technology**

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**Fourth Semester Computer Science (Software Engineering)**

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**Human Computer Interaction CS411**

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# Table Of Content

<b>Assignment Description:</b>	<b>2</b>
<b>Assignment Requirements:</b>	<b>2</b>
Research and Analysis:	2
Information Architecture:	3
Interface Design:	4
Interaction Design:	5
Accessibility Considerations:	5
Evaluation and Testing:	6
Final Deliverables:	6

## **Assignment Description:**

In this assignment, we aimed to redesign a social media platform to prioritise user well-being, mental health, and positive interactions. Our goal was to create a prototype that promotes a healthy online environment through features such as content moderation, user feedback mechanisms, privacy controls, and an interface design that supports these objectives.

## **Assignment Requirements:**

### **Research and Analysis:**

a. We conducted a thorough analysis of existing social media platforms, focusing on their strengths, weaknesses, and potential usability issues. This research helped us understand the current landscape and identify areas for improvement.

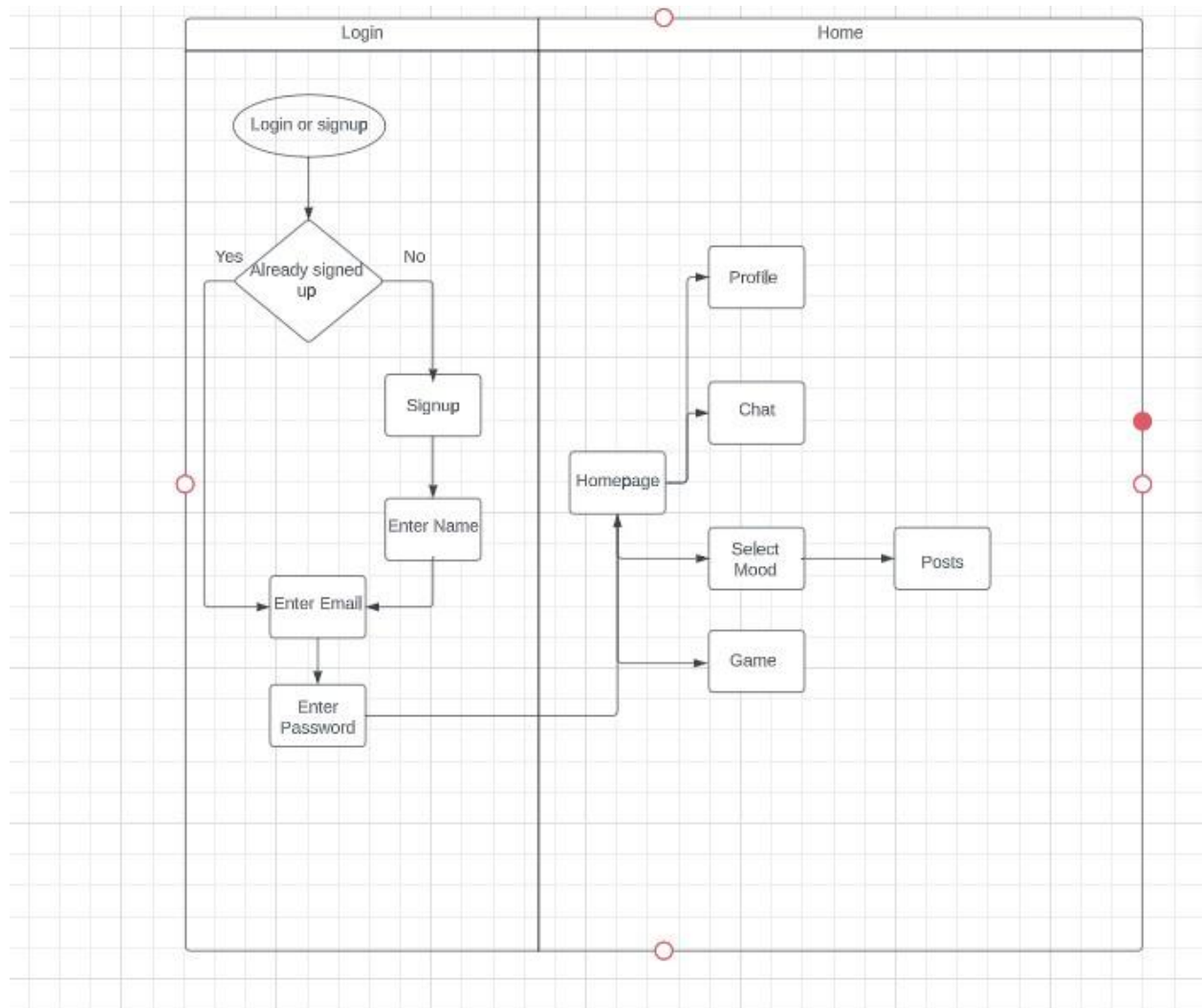
For example, we analyzed Instagram, which excelled in providing a seamless user experience and strongly emphasised visual content. However, it lacked effective content moderation mechanisms, leading to issues with inappropriate or harmful content. On the other hand, Twitter prioritized user privacy and had robust content moderation tools but struggled with user engagement due to a complex user interface.

b. By studying these existing applications, we were able to identify opportunities for improvement in our redesign. We aimed to address the shortcomings observed in the market by incorporating features such as content moderation, user feedback mechanisms, and privacy controls into our prototype. This analysis laid the foundation for understanding the current landscape and informed our decision-making process throughout the design phase.

### **Information Architecture:**

a. We developed an intuitive information architecture and navigation system, prioritizing easy access to core features and functionalities. Our goal was to ensure a seamless and user-friendly experience.

b. user flow diagram illustrating the logical progression of tasks within the application.



### Interface Design:

a. In the redesign of our social media platform, we created a visually appealing and consistent user interface. We employed a soothing white and purple color scheme to promote a calming atmosphere. The white color represents purity and simplicity, while the purple color adds a touch of vibrancy and creativity.

We carefully selected typography that is easy to read and visually pleasing. The chosen fonts provide a balance between professionalism and friendliness, enhancing the overall user experience.

Iconography played a crucial role in our interface design. We used intuitive and recognizable icons to ensure users can quickly understand and navigate through the platform's features.

b.To enhance usability and familiarity, we incorporated appropriate design patterns and guidelines into our interface. We followed established UI design principles, such as consistent layout structures and navigation patterns, to ensure a seamless user experience.

By adhering to familiar design patterns, users can easily understand and navigate the platform without the need for extensive learning. We also maintained consistency in the placement of buttons, menus, and interactive elements across different screens, promoting intuitive interactions.

c.We created interactive wireframes and mockups to showcase our interface design. These wireframes and mockups provide a visual representation of the interface's layout, interaction flow, and visual elements. Users can navigate through the screens, experience the interactions, and get a clear understanding of the platform's functionality and user interface design.

[WellMind-Prototype](#)

### **Interaction Design:**

a. For our redesigned social media platform, we focused on defining clear and intuitive interaction patterns for common tasks. We aimed to provide users with a seamless and straightforward experience when performing actions such as logging in, signing up, chatting with friends, viewing the feed, and uploading posts. The goal was to minimize user effort and confusion by ensuring that the interaction flow was logical and easy to follow.

b. Throughout the research phase, we gathered user feedback and suggestions to improve the interaction design. We carefully considered the feedback and incorporated relevant

suggestions to enhance the user experience. By incorporating user perspectives, we aimed to create a platform that meets the needs and expectations of our target users.

c. To justify our design decisions, we relied on HCI principles such as learnability, efficiency, and user satisfaction. We evaluated the design choices based on how easily users could learn and navigate the platform, the efficiency of completing tasks, and the overall satisfaction users would experience when interacting with the platform. By adhering to these principles, we aimed to create an intuitive and user-friendly social media platform that prioritized user well-being, mental health, and positive interactions.

### **Accessibility Considerations:**

a. In our design, we ensured that accessibility guidelines and standards, such as [WCAG 2.1](#), were addressed. This allowed us to accommodate users with disabilities and provide an inclusive experience.

b. To enhance accessibility, we implemented features such as text-to-speech support, enabling users with visual impairments to have content read aloud. We also incorporated color contrast adjustments to improve readability for users with color vision deficiencies. Additionally, alternative input methods were implemented to cater to users with different interaction needs.

### **Evaluation and Testing:**

a. We conducted usability testing with representative users (family members and friends) to evaluate the effectiveness and efficiency of our design. Through the testing process, we observed how users interacted with the redesigned social media platform. Users were given specific tasks to perform, such as creating an account, posting content, and navigating through different sections. We carefully observed their actions, recorded their feedback, and noted any difficulties or challenges they encountered.

b. After conducting the usability testing, we documented and analyzed the test results. We reviewed the observations, user feedback, and performance data to identify any usability issues or areas for improvement. This analysis helped us gain insights into the strengths and weaknesses of our design, allowing us to prioritize necessary enhancements.

c. Based on the evaluation findings, we proposed iterative design enhancements. We took into account the identified usability issues and user feedback to refine the interface, interaction patterns, and overall user experience. These enhancements aimed to address

the identified problems and improve the platform's usability, user well-being, and positive interactions. We iterated on the design, making necessary adjustments and optimizations to create an improved version of the social media platform.

**Final Deliverables:**

a. We prepared this detailed report documenting our design process, including research findings, design rationale, and usability testing results. This report provides an overview of our research on existing social media platforms, user requirements gathering, information architecture, interface design, interaction design, accessibility considerations, and evaluation findings. It also includes our design decisions based on HCI principles and user-centered design, highlighting how we prioritized user well-being, mental health, and positive interactions.

b. We created interactive prototypes or mockups using Figma, showcasing the application's interface and interaction design. The prototypes demonstrate the login and sign-up pages, the chat option for connecting with friends, the feed section displaying posts based on selected moods (happy, sad, confused), the mood line chart showing previous month's moods, the right section for viewing feeds of followed users, the post upload feature, the ability to follow other users, and the option to view stories. The prototypes provide a visual representation of our design concepts and allow for an interactive exploration of the platform's functionality. [WellMind-Prototype](#)