Project Update 5

Course Code & Section: CSE299.4   **Project Group No:** 2
Group Members:
Akram Hossain Apu Khan – 2231090642
Mehedi Hasan Dip – 2232167042
Hacibull Hashan Tosher – 2111626642

Project Overview:
ModifAI is a mobile application that uses Artificial Intelligence to assist users in interior decorating. Users can upload a photo of their room and receive design suggestions generated by an AI model. The app integrates both AI-driven design suggestions and a social chat system to enhance user engagement.

Work Completed:
This week, we successfully implemented Firebase Authentication and Firebase Firestore into the app. Both the signup and login pages are fully connected to Firebase, allowing for secure user authentication. Additionally, we updated the user-to-user chat system, allowing users to communicate with each other within the app. This brings us one step closer to a fully interactive user experience.

Current Challenges:
We are currently facing an issue with fetching user data to the user-to-user homepage. The data retrieval process from Firebase Firestore is not working as expected, which prevents users from seeing relevant data on their homepage. This is a critical issue as it impacts the flow of the user experience.

Next Steps:

- Resolve the issue related to fetching user data from Firestore and ensuring it displays correctly on the user homepage.
- Successfully connect the user-to-user chat system to enable real-time communication.
- Continue to optimize Firebase Firestore queries for better performance and reliability.

Tools and References:

- Flutter (UI), Firebase (Authentication & Firestore)
- Firebase official documentation
- OpenAI API
- ChatGPT (OpenAI, 2025) for coding support
- Firebase and Flutter community tutorials for chat system implementation

Conclusion:
The integration of Firebase Authentication and Firestore has greatly enhanced the app's functionality, especially with the addition of the user-to-user chat system. Although we are encountering challenges with data fetching, we are working towards resolving these issues. The focus for the upcoming week will be on improving data flow and ensuring smooth real-time communication between users.