

## Project Update 4

**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 is being built with a focus on intelligent automation and an interactive user experience through a mobile interface.

**Work Completed:**

This week, we successfully connected the application to Firebase. Both the signup and login pages are now integrated with the Firebase authentication system. Basic communication between the app and the database has been established, marking a significant step toward secure user management.

**Current Challenges:**

Although the Firebase integration was successful, we are currently facing difficulties in writing user data to the database and reading it back within the app. This limits the ability to store and retrieve user-specific information. These issues are being investigated and addressed.

**Next Steps:**

- Resolve the issues related to reading from and writing to the Firebase database.
- Begin integrating a machine learning component to enhance the intelligence of the AI responses.
- Continue improving data handling and ensure seamless user experience during login/signup.

**Tools and References:**

- Flutter (UI), Python (backend), Firebase (authentication & database)
- Firebase official documentation
- OpenAI API and documentation
- ChatGPT (OpenAI, 2025) for development and debugging support
- Online tutorials and community forums for Firebase and Flutter integration

**Conclusion:**

Connecting the app with Firebase is a key achievement in enabling real-time authentication and user data storage. Although data handling is currently limited, we are actively working to resolve these issues. Future efforts will also focus on integrating machine learning models to elevate the intelligence and personalization of the application.