

29th July 2025 (Tuesday)

This day was focused on data validation, exception handling, and crash prevention — topics often overlooked but crucial for professional-grade apps. The mentor began by explaining common crash reasons like null pointer exceptions, improper intent handling, and unguarded database access.

During the first hour, I worked on input validation for login, registration, and chat screens. For example, ensuring that email fields contain “@” symbols, passwords have a minimum length, and message boxes aren’t empty before sending. I added conditions and Toast messages to guide the user.

The second hour was dedicated to exception handling using try-catch blocks and error logs in Logcat. I tested multiple failure scenarios — like sending messages with a disconnected network or opening an invalid chat — and handled them gracefully with user-friendly alerts. The trainer emphasized that a crash-free experience reflects professionalism and reliability.

We also learned how to use Firebase Crashlytics to log and analyze runtime errors remotely. This introduced me to app monitoring tools used in production environments. Today’s session strengthened my debugging habits and deepened my respect for quality assurance in software development.