

## Assignment 7

### Improve App Stability: Error Handling, Loading States, and Guest/User Access Control

Week: 8

Points: 15

Lecture Covered: Assets and Providers

Deadline: in Moodle

**Defense: Individually**

Submission: Continue in the same GitHub repo used for Assignment 6

- Submit screenshots-only report

Objective:

Improve the existing app you built in Assignment 6 by adding:

- Proper error handling
- Progress indicators during async operations
- Clear role-based behavior for guest vs authenticated user

This is not a separate project — just an improvement of the current app.

What You Must Add to Your Existing App:

1. Error Handling:

- o Catch login/registration errors using try-catch
- o Show meaningful error messages using:
  - SnackBar, AlertDialog, or inline widgets
- o Handle invalid input (e.g., empty fields, weak password)

2. Progress Indicators:

- o Show CircularProgressIndicator or similar while:
  - Logging in / registering
  - Communicating with Firebase
- o Disable buttons during these operations

3. Prevent Duplicate Actions:

- o Prevent users from clicking login/register buttons multiple times while loading

4. Guest vs User Access (Required Roles):

- o If the user is not logged in (guest):
  - Hide or disable access to Profile, Settings, and other private areas
  - Show a message like “Please log in to access this feature”
- o If the user is logged in:
  - Allow access to all features

- Guest trying to access restricted feature
- Logged-in user with full access
- Optional: third role in action (if added)
- Portrait and landscape layouts
- Screens from 3 different screen sizes

Submit:

- GitHub link (same repo as Assignment 6)
- Report file via LMS or by instructor's instructions