Project 7 - Final Report

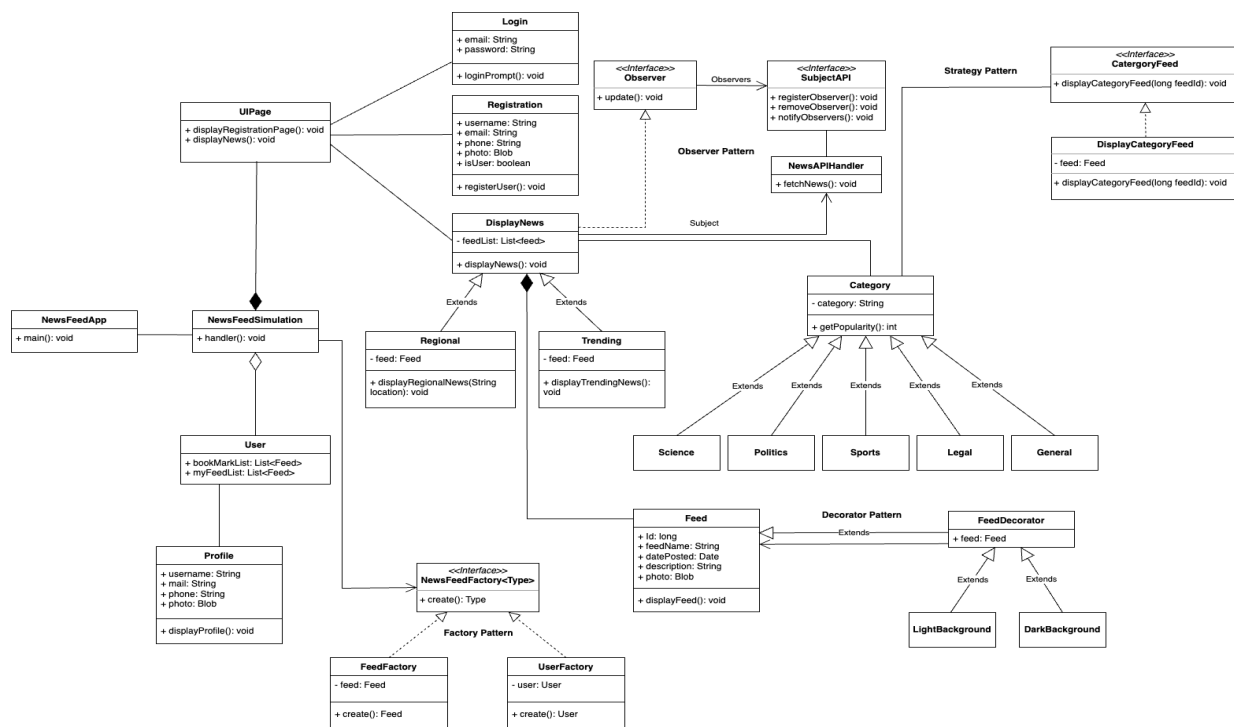**Project Title**: NewsApp Mobile Application

Team Members: Krishna Sandeep Reddy Chittiepu & Dheeraj Reddy Inugula

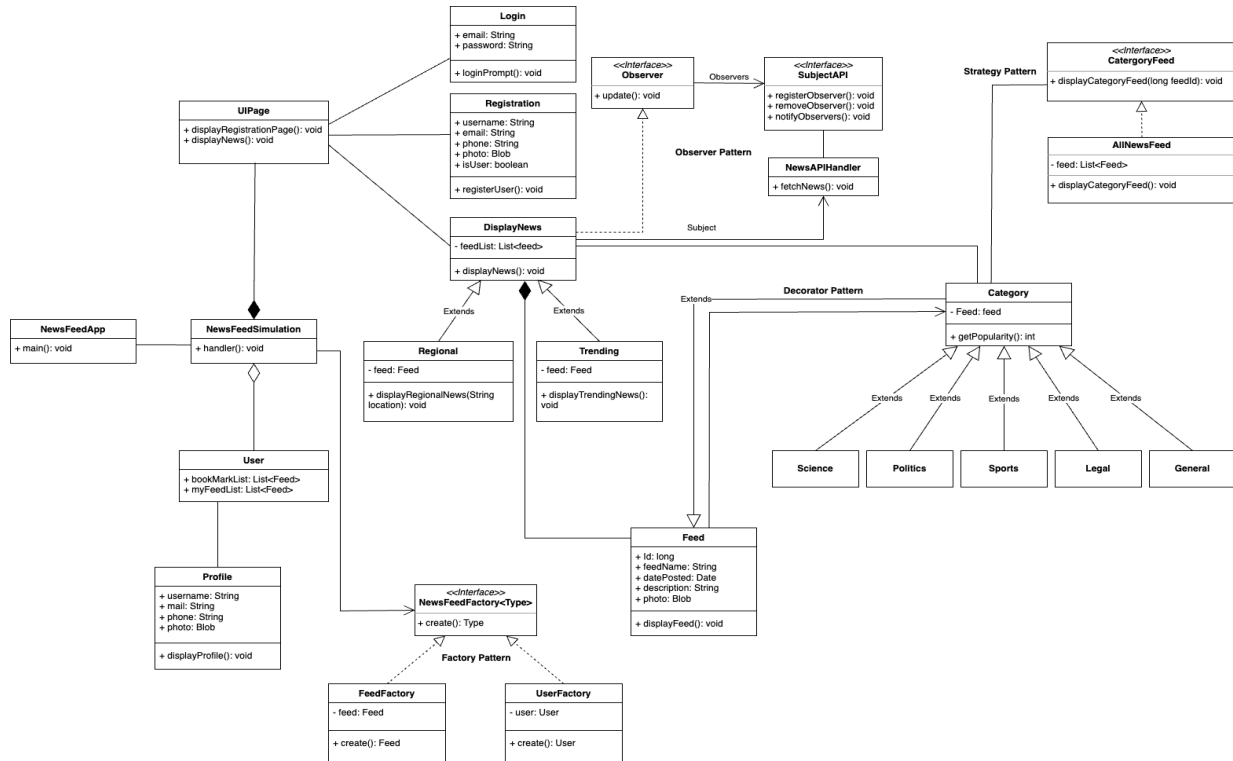## Final State of System Statement

This news mobile application has been designed to allow users to log in and sign up using the Firebase Auth module. To provide users with flexibility, OAuth has been utilized to enable logging in through Facebook and Google. Furthermore, the newsapi.org API has been integrated into the application to fetch and present the latest news on the Home Screen post-login. Users have the option to select their preferred news categories like Sports, Science, Political, and General, among others. Search and Subscribe functionalities were added after Project 6.

Final Class Diagram and Comparision Statement

Project 5 Class Diagram

Project 7 Class Diagram

Key Changes from Projects 5 & 6: We were not able to implement the background theme functionality using the Decorator pattern. So, we made the Category class extend the Feed class to make the subclasses of Category as decorators. No major changes apart from this.

Third-Party Code vs Original Code Statement

Several third-party packages and modules were installed from the pub.dev community. We encountered several errors while running the application on an ios simulator. These were resolved by taking help from StackOverflow and Reddit.

Some youtube tutorials and Udemy courses we referred to for developing the login & signup functionality, API calls, and firebase OAuth were,

https://www.youtube.com/watch?v=hy0NtR0NW4Q&list=PLlvRDpXh1Se4wZWOWs8yapI8AS_fwDHzf

https://www.youtube.com/watch?v=c09XiwOZKsI&ab_channel=CodeX

https://www.udemy.com/course/learn-flutter-dart-to-build-ios-android-apps/

Statement on the OOAD process for your overall Semester Project

- Coming up with the design template (The nav bar, positioning of scaffold widget, the app color theme) was difficult initially. But, once we were able to do that, building things on top of it was very easy.

- We also faced issues with the Flutter project setup for Mac as it involved downloading several applications and packages like Xcode, Mason, Command Line Tools, etc.

- Implementing the Design Patterns with the Dart language was a challenge as most of the classes already extend some inbuilt ones.