Design and Implementation of Mobile Applications

CommUNIty





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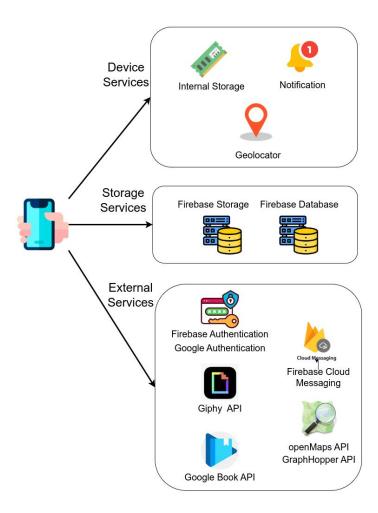
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Main Features

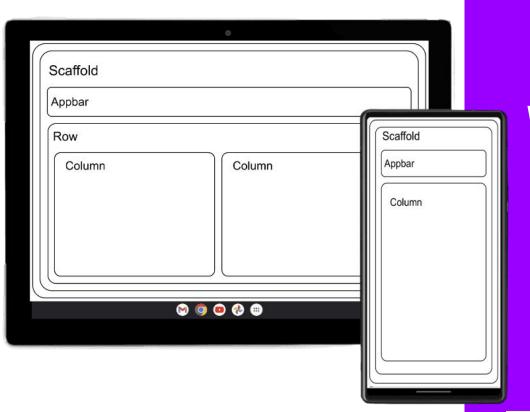
- Login and Registration
- Subscribe to course
- Write and share notes or reviews
- Search book information
- Share your position
- Chat with colleagues



Application Architecture

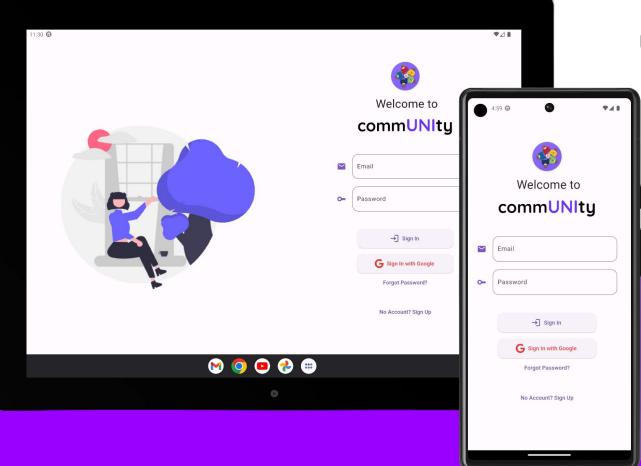
- Flutter framework
- MVC pattern
- Firebase back-end
- Document-based data structure

- Map provided by OpenMaps
- Book data provided by Google Books

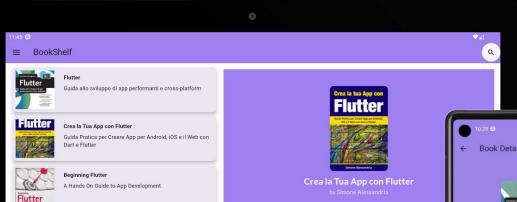


Widget Architecture

- 2 different layouts
- LayoutBuilder implementation for dynamic layout switch



UI Design



UI Design



What's it about?

programmare. L'approccio scelto in questa guida è estremamente pratico: la magg capitoli contiene un progetto, che costruisce una app da zero. In ciascun progetto illustrate alcune caratteristiche fondamentali di Flutter: widget, State, programm asincrona, connessione a servizi web, utilizzo di un database e molte altre. Questo pensato per programmatori che si avvicinano a Flutter per la prima volta, per acci lettore da un livello base ad un livello intermedio. Contenuti del libro: Capitolo 1: FlutterII primo capitolo contiene un'introduzione al linguaggio di programmazion comincia con variabili e funzioni, per poi prendere in considerazione i vari cicli (fo

Il modo migliore di studiare un nuovo linguaggio di programmazione o framework

Flutter: Zero to App

Sviluppare applicazioni con Flutter No Description Available

A hands-on, fast-paced guide to get you started with crossplatform mobile application development with Google's ...



Flutter For Dummies

Create awesome iOS and Android apps with a single tool! Flutter is an app developer's dream come true. With ...

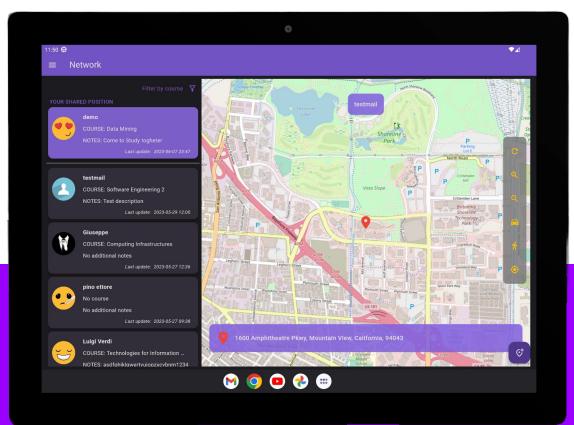












UI Design



Testing environments

- Mocking environment: all the external
 APIs are replaced with a mock version
- **Deploy environment:** real device



Testing campaign*

- Widget test
- Integration test
- User test

Code coverage analysis is performed with the following results: 91% lines coverage on over 50 tests for tablet and smartphone views (100 tests in total).

Manual analysis ensured the irrelevance of uncovered code for these tests.

^{*} Flutter Unit tests are limited due to mock environment constraints and heavy reliance on external services, making meaningful testing impractical in this scenario.