

Testing a Flutter App: Widget Tests



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Overview



Widget test introduction

Flutter widget test basic

Write widget tests for a screen
containing several widgets

Widget interaction

Golden tests

Best practices



Testing Flutter Apps

Integration Test

Widget Test

Unit Test





Widget Test

Component test

Test a single widget

Involves several classes

Requires a test environments

Widget's UI looks and interacts as expected

Slow execution compare to unit test

High maintenance cost



Packages

flutter_test

Writing widget tests

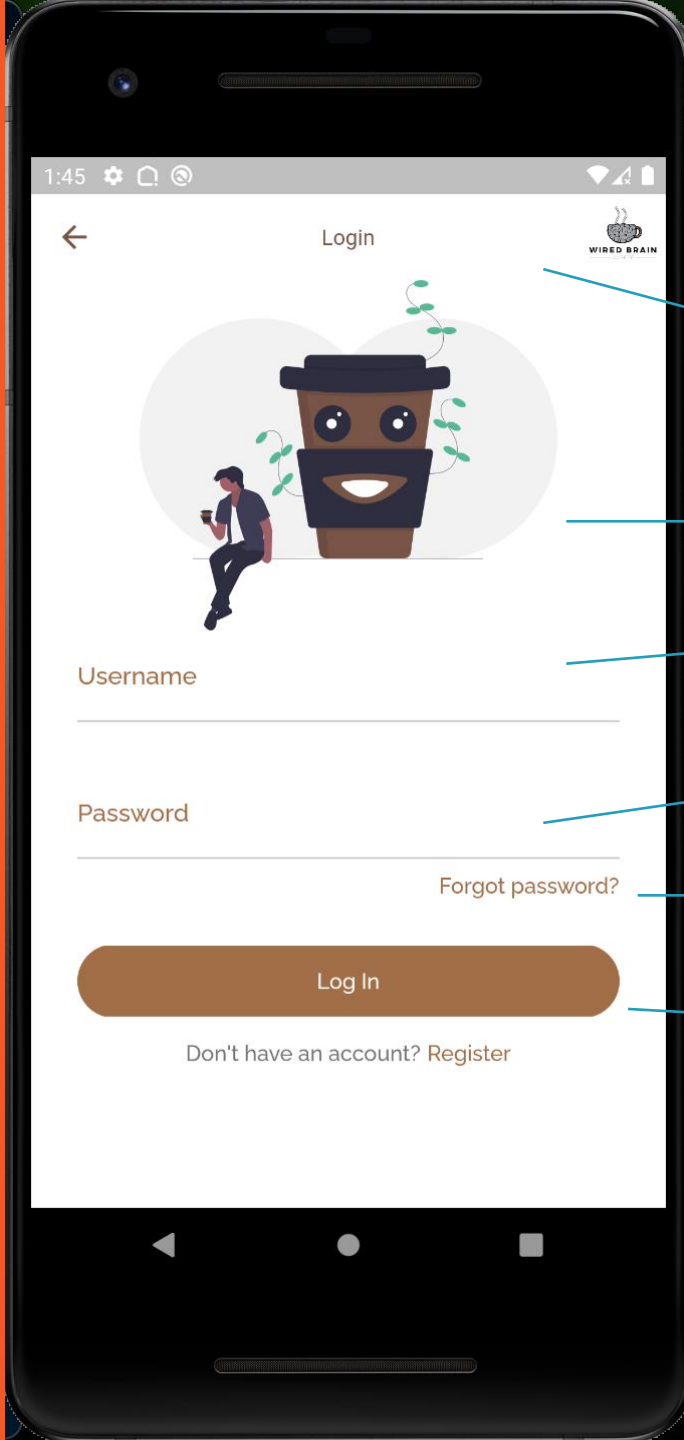
mockito

Mocking dependencies



Widget Test





App bar

Image

Username text form field

Password text form field

Text

Login button



Demo



Login screen widget

Wrapper widget for test

TestWidgets() and WidgetTester

New matchers in expect()

- findsOneWidget
- findsNWidgets
- findsNothing
- findsWidgets



Widget Interaction



Demo



`pump()`

`pumpAndSettle()`

`enterText()`

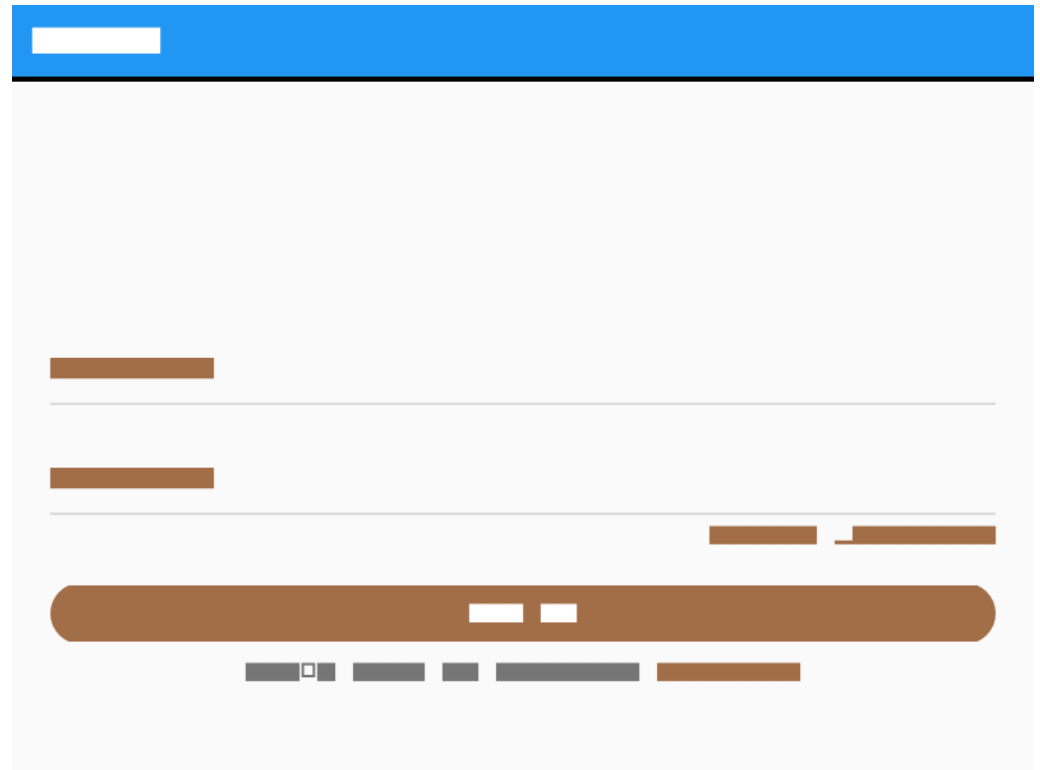
`tap()`



Golden Test



Widget test
Special matcher
Golden files



Demo



Write login page golden test

- expectLater
- matchesGoldenFile



Summary



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Widget test introduction

Flutter widget test basic

Write widget tests for a screen containing several widgets

- testWidgets
- WidgetTester

Widget interaction

- tab
- enterText
- Pump
- pumpAndSettle

Golden tests

