



Flutter Framework Revolutionizing App Development

Housseem Eddin Ben Massoud

Scientific advisor: Ph.D. associated professor

Fakhertdinova D.I.



Казанский федеральный
УНИВЕРСИТЕТ

Flutter Framework Revolutionizing App Development

Author of the report:

Housseem Eddin BenMassoud

group No. 20-2113B of the preparatory faculty for foreign students

Scientific supervisor:

Fakhertdinova Dinara Ilgizarovna

Associate Professor, PhD (Associate Professor), KFU / Preparatory Faculty for Foreign Students / Department of General Education Disciplines



Flutter Framework Revolutionizing App Development

What is Flutter?

- An open-source mobile application development framework created by Google. released in May 2017
- uses the Dart programming language
- allows developers to build high-performance, natively compiled applications for mobile, web, and desktop platforms from a single codebase.

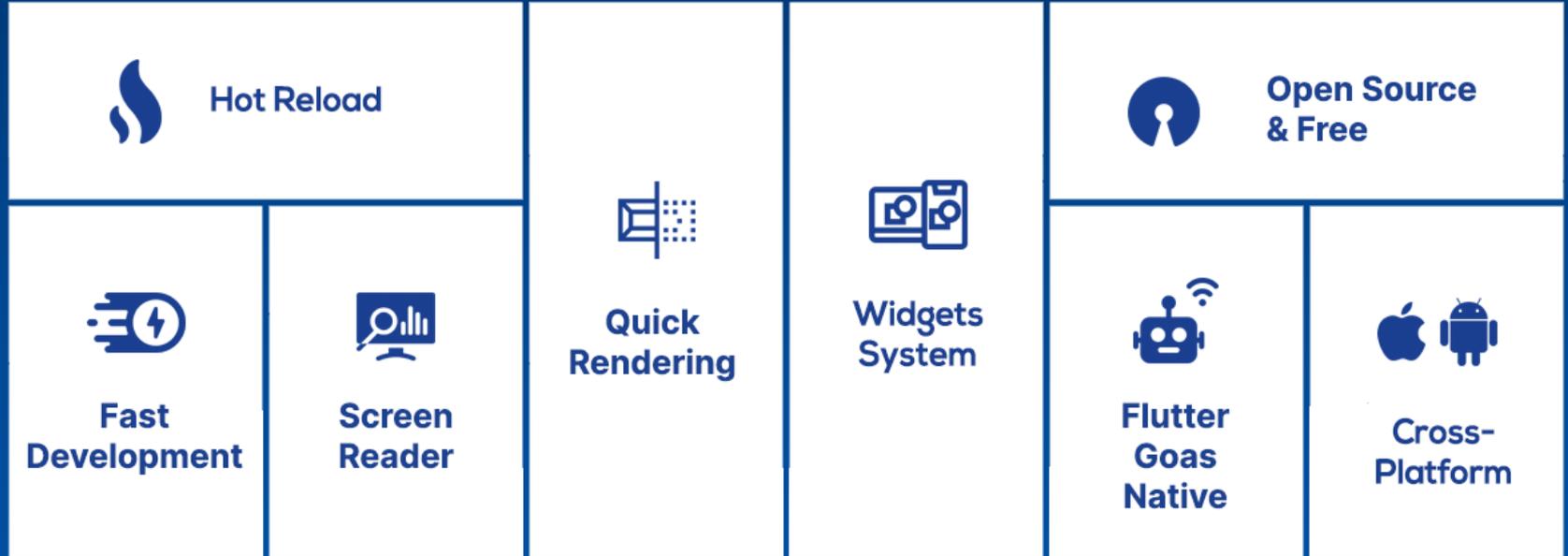


Flutter



Flutter Framework Revolutionizing App Development

Features and Concepts of Flutter



The screenshot displays the IntelliJ IDEA IDE interface. The main editor window shows the Dart code for a Flutter application. The code includes a `main` function, a `MyApp` class, and a `MyHomePage` class. The `MyApp` class is a `StatefulWidget` that uses `MaterialApp` and `ThemeData`. The `MyHomePage` class is a `StatefulWidget` that uses `MaterialPage` and `MaterialState`. The code is annotated with comments explaining the stateful widget and the stateful page.

```
void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(),
      // This is the theme of your application.
      //
      // Try running your application with "flutter run". You'll see the
      // application has a blue toolbar. Then, without quitting the app, try
      // changing the primarySwatch below to Colors.green and then invoke
      // "hot reload" (press "r" in the console where you run "flutter run",
      // or simply save your changes to "hot reload" in a Flutter IDE).
      // Notice that the counter didn't reset back to zero; the application
      // is not restarted.
      primarySwatch: Colors.blue, // ThemeData
      home: MyHomePage(title: 'Blog Example'),
    );
  }
}

class MyHomePage extends StatefulWidget {
  MyHomePage({Key key, this.title}) : super(key: key);

  // This widget is the home page of your application. It is stateful, meaning
  // that it has a State object (defined below) that contains fields that affect
  // how it looks.

  // This class is the configuration for the state. It holds the values (in this
  // case the title) provided by the parent (in this case the App widget) and
  // used by the build method of the State. Fields in a Widget subclass are
  // always marked "final".

  final String title;

  @override
  _MyHomePageState createState() => _MyHomePageState();
}
```

The bottom panel shows the Run console with the following output:

```
Info: Performing hot reload...
Info: Syncing files to device Android SDK built for x86...
Info: Reloading 1 of 419 libraries in 74ms.
```

On the right side, a mobile emulator is shown displaying the application. The emulator screen shows a blue header with the text "Blog Example" and a white body with a blue circular button containing a plus sign. The emulator is set to a resolution of 1080x1920.



Flutter Framework Revolutionizing App Development

Impact of Flutter on the Technology Field



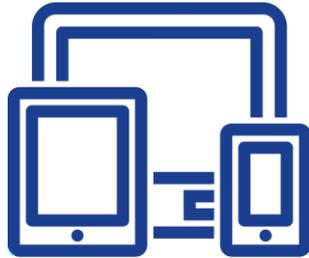
**Reduced the time and costs
of developing native
applications**



**Faster delivery of mobile
applications to the
market**



**creating equal opportunities for all,
especially small businesses, to compete with larger
companies in the market.**



**Visually attractive and
responsive mobile
applications**



**Increase in user engagement
and satisfaction,**



Flutter Framework Revolutionizing App Development

How Using Flutter Can Develop International Cooperation

- Easier for developers to create applications for different languages and cultures
- Flutter can help companies expand their reach to international markets, creating new business opportunities and partnerships.



- Flutter is an open-source framework with a global community of developers who contribute to its development and improvement.



Flutter Framework Revolutionizing App Development

Showcase - Flutter apps in production



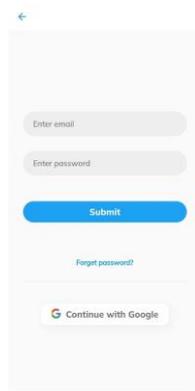
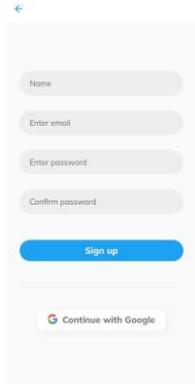
GOOGLE ADS



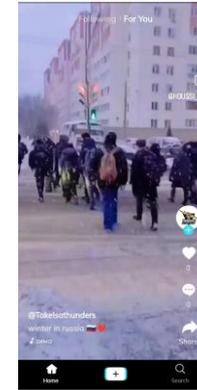
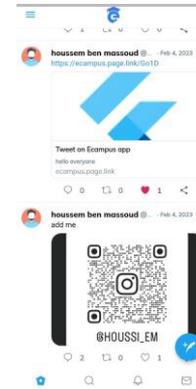
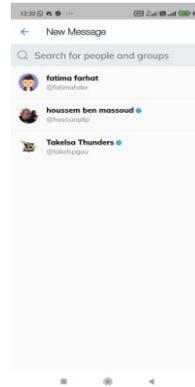
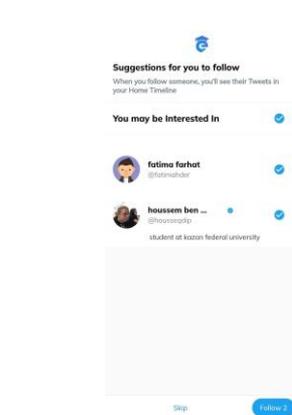
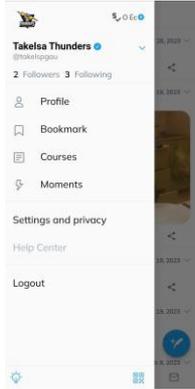
Reflectly

an AI-powered personal journaling application





Flutter Testing Project Social Media Platform "Ecampus"





Flutter Framework Revolutionizing App Development

Informations resources

Materials from websites were used to prepare this work:

Flutter.dev

<https://flutter.dev/>

Google Developers

<https://developers.google.com/flutter>

TechCrunch.

<https://techcrunch.com/2019/12/11/flutterwave-raises-35m-to-build-out-its-payments-platform-in-africa/>



Flutter Framework Revolutionizing App Development

Thanks for your attention!
Спасибо за внимание!

Author of the report:

Houssein Eddin BenMassoud

group No. 20-2113B of the preparatory faculty for foreign students

Scientific supervisor:

Fakhertdinova Dinara Ilgizarovna

Associate Professor, PhD (Associate Professor), KFU / Preparatory Faculty for Foreign Students /
Department of General Education Disciplines