

MORPH•IT SEMINAR

WHY FLUTTER IS THE TOP CHOICE FOR MODERN CROSS-PLATFORM DEVELOPMENT

Erico Darmawan Handoyo



Erico Darmawan Handoyo
Private Training & Online School



Erico Darmawan Handoyo

- Lecturer at Maranatha Christian University
- Content creator:
 - Flutter Tutorial YouTube Channel
 - Online Courses at Udemy
- Flutter Trainer

 **Flutter Tutorial YouTube Channel**
provides **300++** fundamental & tutorial videos
<https://youtube.com/@ericodarmawan>



CROSS-PLATFORM DEVELOPMENT



Internet, Technology, Covid19

- The **evolution of technology** and the **internet** is reshaping human lifestyles.
- Covid 19 has altered the way people work globally.
- People are **more frequently** engaging with systems and each other **via applications**.
- People are more and more **expecting things** to be **simpler** and **quicker**.
- **Handphones/smartphones** and **computers/laptops** are the **most popular** devices.

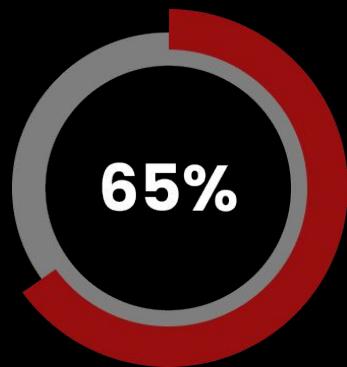


The Implications for Corporations & Business Players

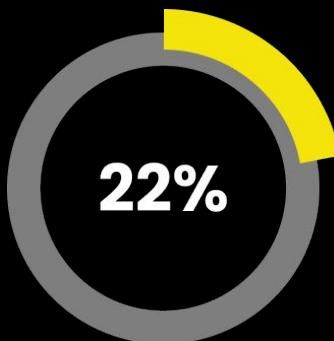
- Companies/institutions **need to digitize** their systems.
- Companies/institutions have to ensure their digital system are available on **as many platforms as possible, accessible** via **smartphones** and **computers/laptops**.
- Companies **need to implement** ideas **faster** to stay ahead of the competition.



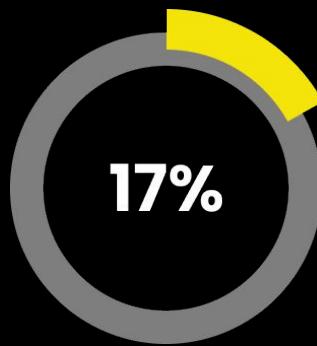
Do you develop cross-platform software?



No.



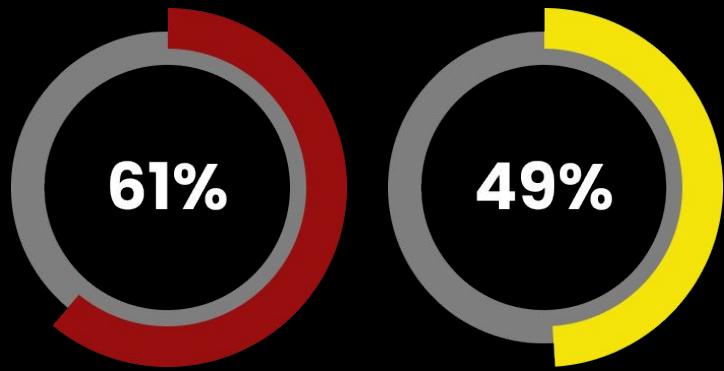
Yes. Mobile Apps.



Yes. Desktop Apps.



How do you develop for mobile operating systems?



I use native tools.

**I use cross-platform
technologies and
frameworks**

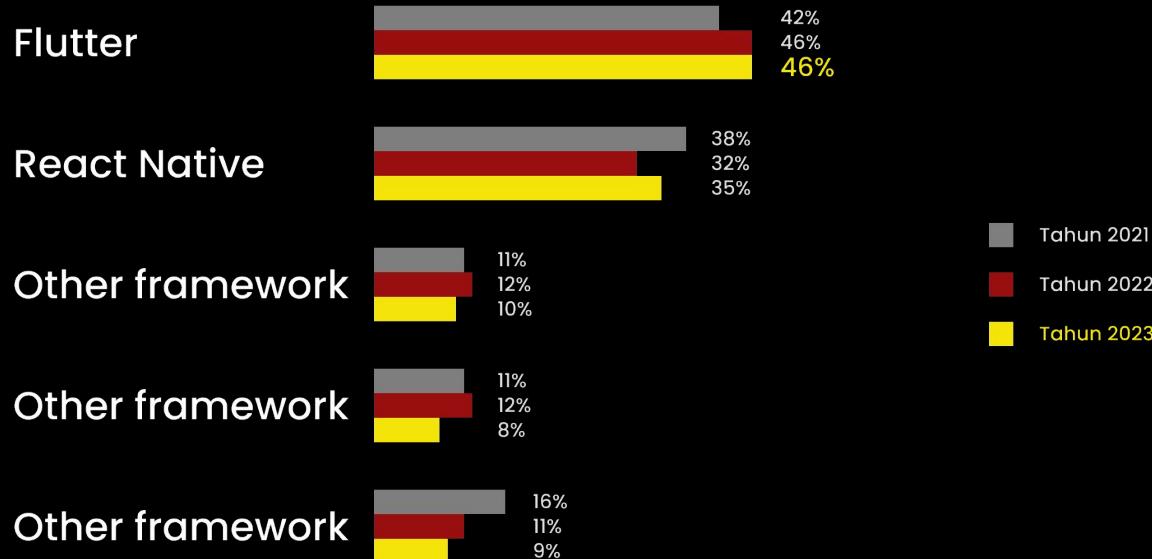


TOP CHOICE CROSS-PLATFORM FRAMEWORK

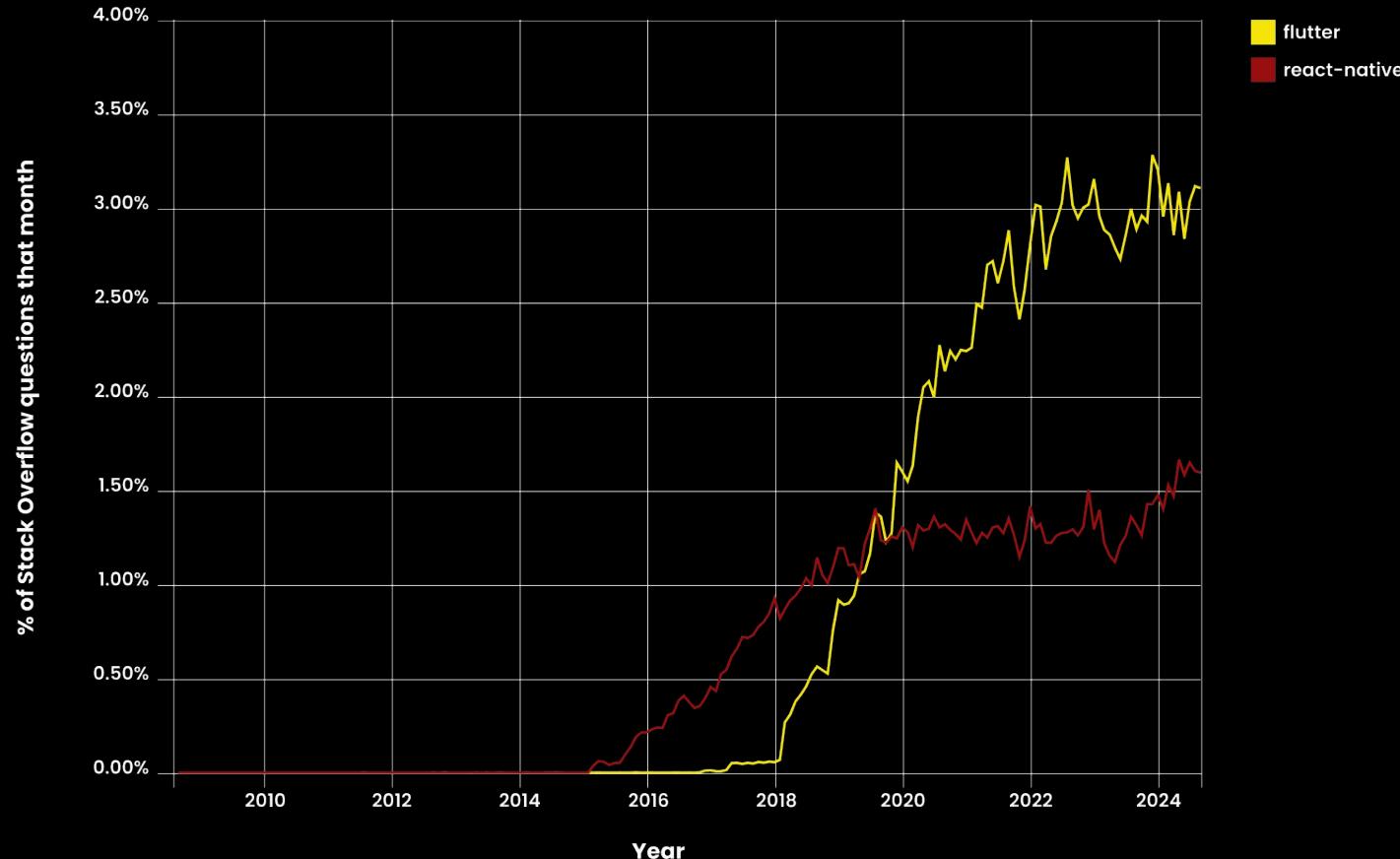


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Which cross-platform mobile frameworks do you use?



Source: <https://www.jetbrains.com/lp/devecosystem-2023/development>
<https://www.jetbrains.com/lp/devecosystem-2022/miscellaneous>



Source: <https://trends.stackoverflow.co/?tags=flutter,react-native>



Top 10 public projects by contributors on GitHub

Project	Contributor count
home-assistant/core	>21K
microsoft/vscode	>20K
ProvableHQ/leo	>20K
firstcontributions/first-contributions	>13k
flutter/flutter	>10K
NixOS/nixpkgs	>9K
vercel/next.js	>9K
langchain-ai/langchain	>8K
godotengine/godot	>7K
ollama/ollama	>7K

Source:

<https://github.blog/news-insights/octoverse/octoverse-2024/#the-most-popular-programming-languages>



The Most Popular Development SDKs

Type: Development

Category: Apps



App Store



Google Play



Flutter

13%



Flutter

22%



React Native

13%



React Native

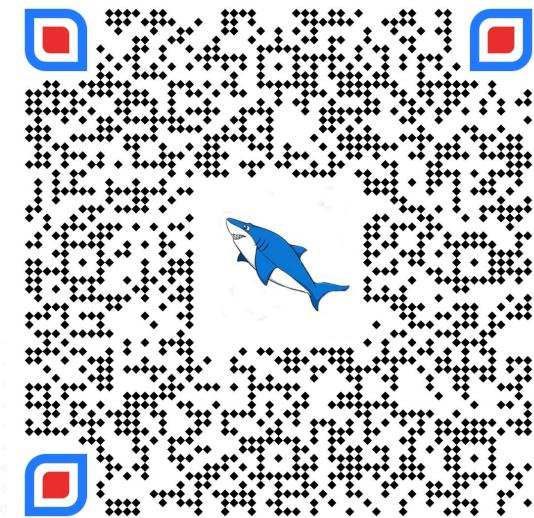
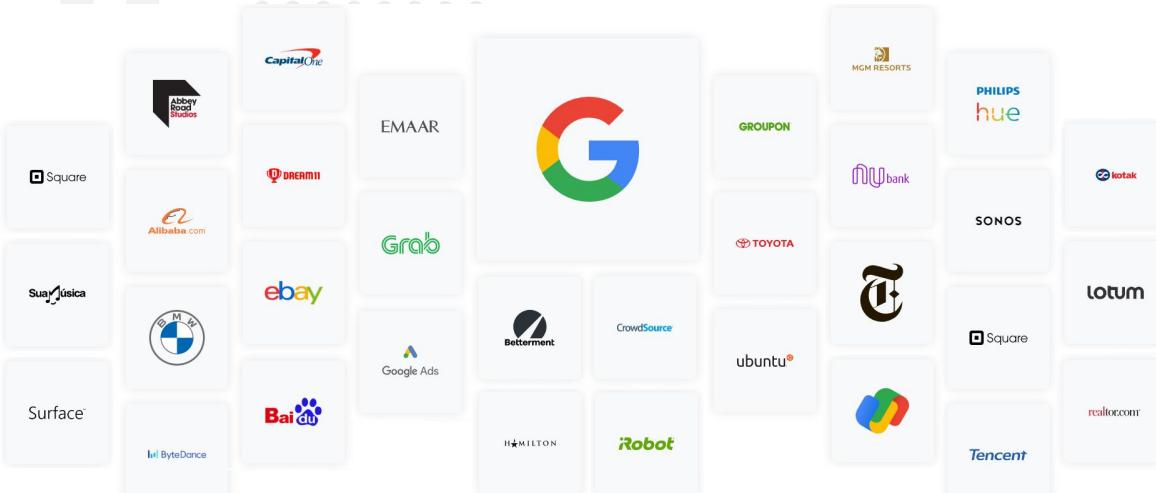
17%



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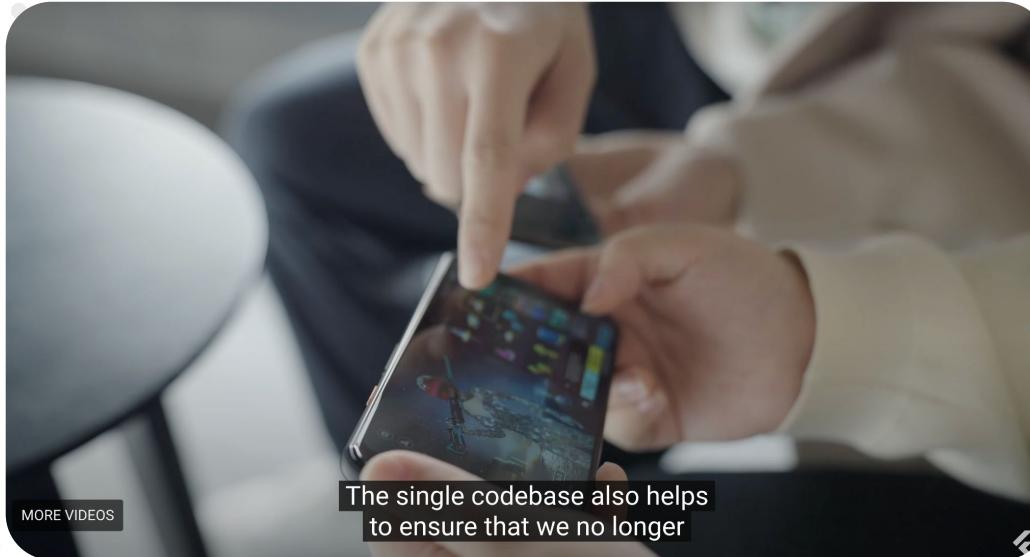
Source: <https://appfigures.com/top-sdks/development/apps>

Who use Flutter?



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Community Module of PUBG Mobile



PUBG MOBILE (Flutter Dev Story)

<https://youtu.be/03ETVuWZiBc>

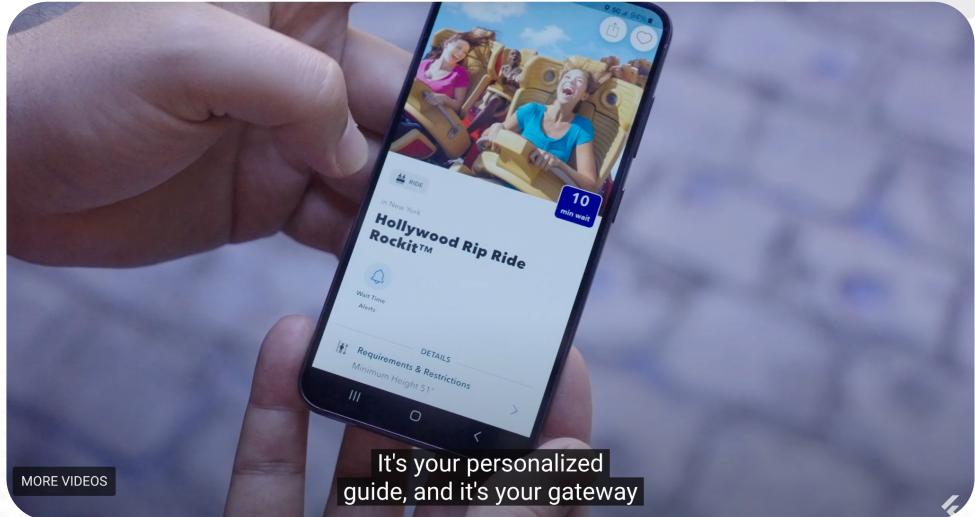


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Universal Studios build next generation experiences with Flutter

 How Universal Destinations & Experiences build next generation experiences with Flutter

<https://youtu.be/JTk2Exr7FO4>



Who use Flutter?



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WHY FLUTTER?



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What is Flutter?

Flutter is an [open source framework](#) by [Google](#) for building beautiful, natively compiled, multi-platform applications from a [single codebase](#).

 More information

<https://flutter.dev>



Multiplatform

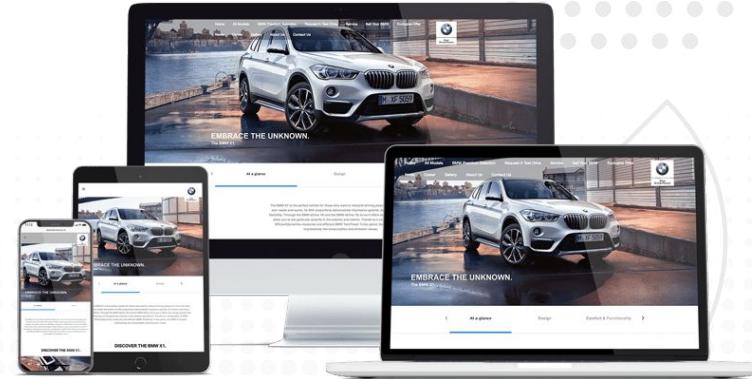
Flutter app can be deployed on Android, iOS, Web, Mac, Windows, Linux.

- Reduce development/maintenance time.
- Reduce development/maintenance cost.
- Same feels on all platforms.

Tencent

When using Flutter, 90% of the code became multi-platform and only needed to be updated once.

Fei Song
Senior Software Engineer, Tencent



Open Source

- Everyone can contribute on Flutter development.
- There are many useful packages (49K+) on pub.dev.

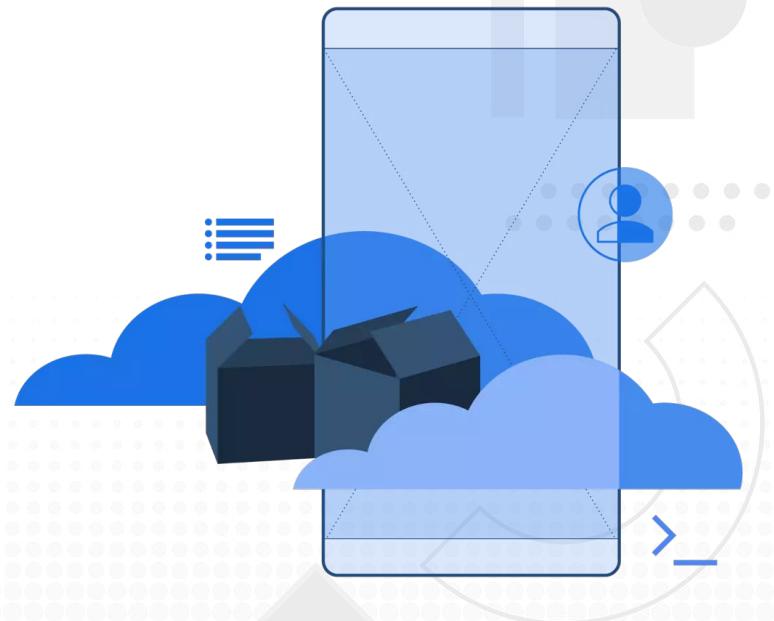


Flutter Repository

<https://github.com/flutter/flutter>

Flutter & Dart packages

<https://pub.dev>



Strong Ecosystem

- Numerous contributors to Flutter.
- Many Flutter events are hosted globally and locally.

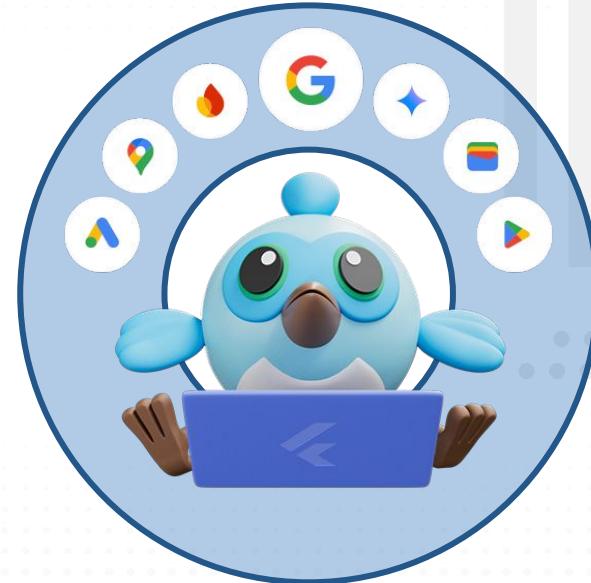


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Google Services Integration

Seamless integration with:

- Firebase
- Google Ads
- Google Play
- Google Pay
- Google Wallet
- Google Maps, and more.



Dart Language

- Learning Flutter & Dart is easy for Java, Python, or C# devs.
- Flutter & Dart has excellent documentation.
- Dart keeps evolving:
 - Null Safety: prevents null errors.
 - Enhanced enum: allow enum to have additional features.
 - Dart 3 new class modifiers: mixin, final, seal, base, & interface.
 - Macros

- Dart backends



Dart Frog



Serverpod



Bandung

- Sabtu, 7 Desember 2024
- Maranatha Christian University

gdgbandung.com/devfest



WANT TO LEARN FLUTTER



Flutter Roadmap

FUNDAMENTALS

- Basic Programming Dart for Newbies
- Pemrograman Berorientasi Objek dart

FRONTEND (FLUTTER)

- Flutter Essentials
- Flutter Tutorial Part 1
- Flutter Tutorial Part 2

BACKEND

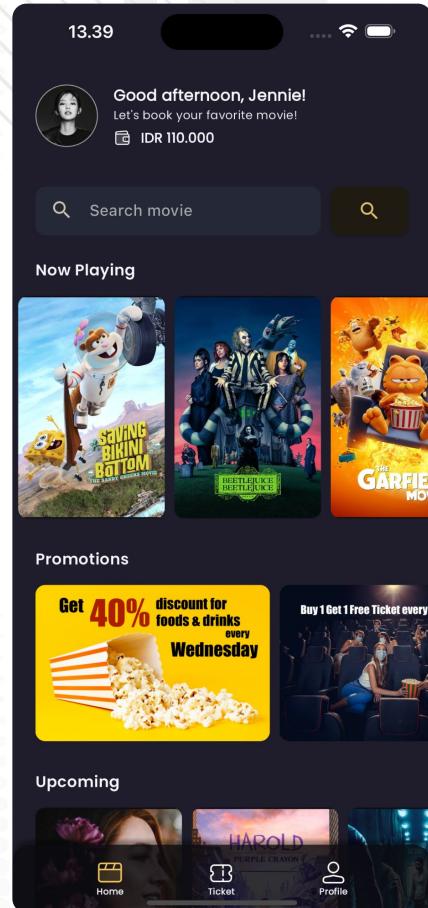
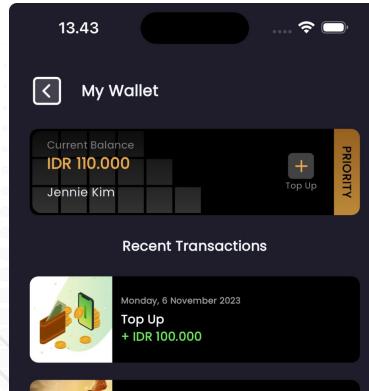
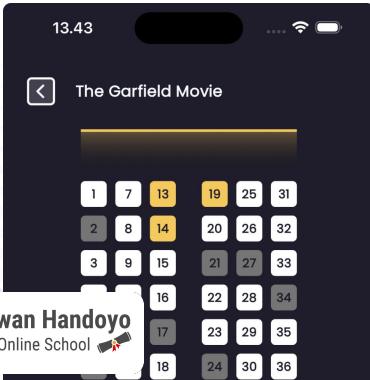
- Dart Frog (A fast, minimalistic backend framework for Dart)

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Full Stack Flutter: FlixID

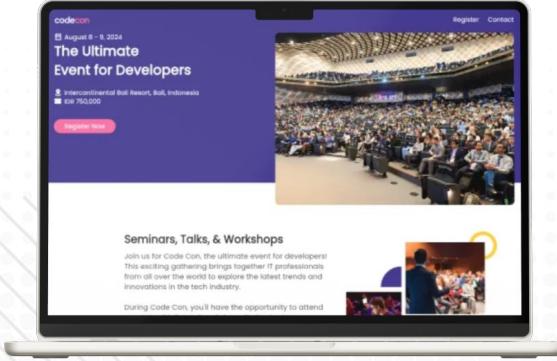
- Separation of Concerns
- Clean Architecture
- Riverpod State Management
- Firebase Auth, Storage, & Firestore
- GoRouter Navigation



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Full Stack Flutter: CodeCon

- Payment Gateway Integration
- Fullstack using Dart
- Flutter Web, iOS, Android, Mac OS
- Responsive Design
- Airtable as data storage



codecon

13.55

codecon

Register Contact

13.56

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WHO'S SPEAKING

Speakers & Panelists

Koen Van Looveren
Senior Developer at Google

Mary Cruz
Software Engineer at Facebook

Lawrence Smith
Tech Lead at Amazon

Jessamine Mumtaz
CTO at Microsoft

Amir Khan
Software Developer at Apple

Lynn Chang
Software Engineer at Netflix

codecon

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August 8 - 9, 2024

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Intercontinental Bali Resort, Bali, Indonesia

IDR 750,000

Register Now

Seminars, Talks, & Workshops



BONUS MATERIAL

WHAT'S NEXT

Elevate Your Expertise

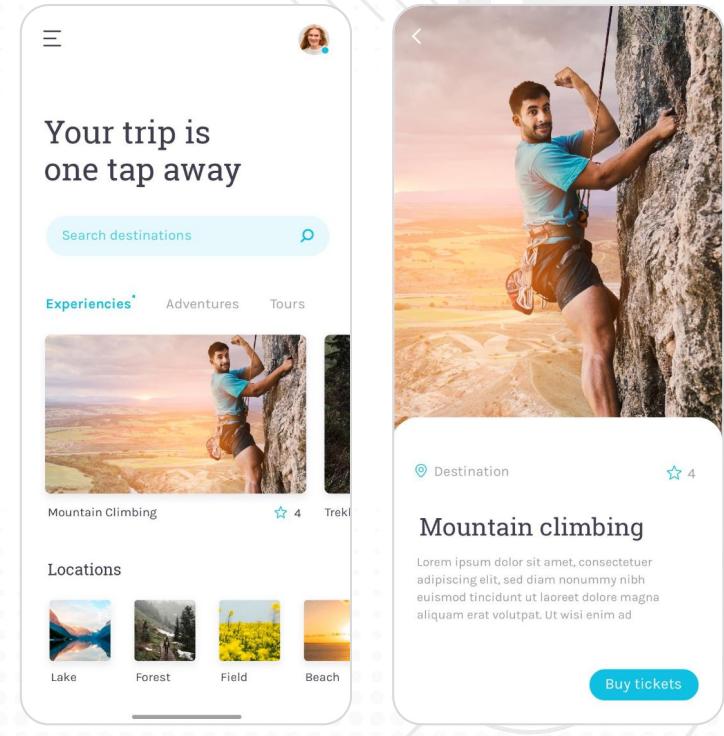
- Upgrade your technical skill & knowledge.
- Continue digging deeper into the subject being studied.
- Avoid slacking off on fundamental things.
- Don't depend completely on AI.
- Take every opportunity to gain more experience.

“ I hear, I forget
I see, I remember
I do, I understand ”



Developing Credible Portfolios

- Do all your academic tasks with dedication.
- Put all your programming assignments in a public repository such as GitHub.
- Release the applications you develop on the Play Store.

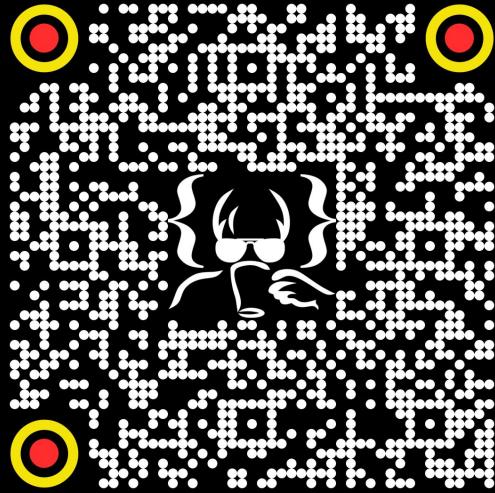


Actively Contribute to the Community

- Sharing your knowledge/experience/works.
- Provide answers to questions in the community.
- Develop packages usable by other Flutter devs.
- Becoming part of the committee for community activities.
 - Meeting a wide range of extraordinary individuals.
 - Expanding your perspective.
 - Building up a range of experiences.



Thank You



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s.id/komunitas-flutter



s.id/kelas-online-erico



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