

Pemograman Perangkat Bergerak

2023/2024 Genap

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Classroom Rules

SCHEDULE:

PA Jumat, 13.30 – 15.30 Room 302

PB Jumat, 15.45 – 18.30 Room 305

The last 30 minutes of the schedule will be
Q&A for Attendee and Score



Classroom Rules

SCHEDULE:

KA Sabtu, 18.30 – 20.30 Room 303

The last 30 minutes of the schedule will be Q&A for Attendee and Score (No quizzes)

Base on Warek 1 use **BLENDED LEARNING:**

Offline : 4 mettings (2 before Mid exam and 2 after Mid Exam)

Online : 10 mettings (Google Meet on GCalendar)



Classroom Rules

BLANDED LEARNING TOOLS:

Gmett (on GCalendar)
VS Code install Live Share
GITHUB



Classroom Rules

- **ASSESSMENT**
 - Tasks are **individual** or **group**, submission deadline 1 week
 - Midterm Exam (UTS)
- **Final Exam (UAS)**
 - Project's Group
 - 3 times Presentations (Intro, Progress, Final)
 - Individual testing and comprehensive

*Attendee < 12 ineligible

Agenda

01

Introduction

Mobile Devices

02

Mobile Tech

Platform mobile dev

03

Life Cycle

Operation, variable and
passing param

04

UI/UX

Desaining and controlling

05

Storage

Authorizations

06

Resume

Resume material,
Project Group

Agenda

07 Exmination

Midterm Exam

08 Project Phase 1

Topic, Research Method,
UML, Wireframe

09 Project Phase 1

Topic, Research Method,
UML, Wireframe

10 Project Phase 2

Progress
PW & PPB

11 Project Phase 2

Progress
PW & PPB

12 Project Final

Testing and
Comprehensive

Agenda

13

Project Final

Testing and
Comprehensive

14

Final Exam

Final Exam

01

Mobile Device Introduction





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What is **Mobile Device** ?



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What types of
Mobile Device ?



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What role do
Mobile Device
play in **everyday life** ?

A top-down view of a variety of electronic devices scattered on a dark, textured surface. In the center is an open silver laptop with a black keyboard. Surrounding it are numerous smartphones of different sizes and colors, some with Apple logos. There are also several cameras, including a DSLR with a large lens and a compact mirrorless camera. Other items include a smartwatch, a pair of glasses, and various small accessories like a lens cap and a camera strap. The lighting is soft, creating subtle reflections on the devices' surfaces.

Mobile Devices

02

Mobile Apps

Development Platform





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What is **Mobile APPS ?**



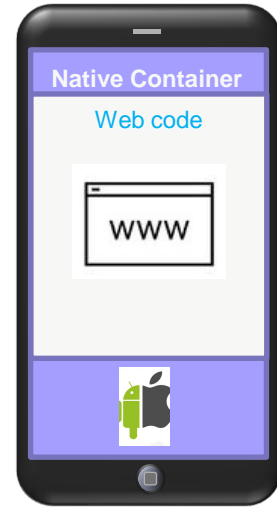
Platform Type Mobile Apps



**Native
Application**



**Website
Application**

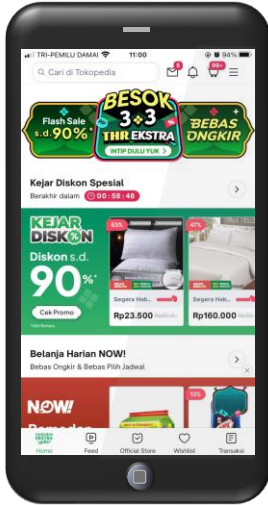


**Hybrid
Application**

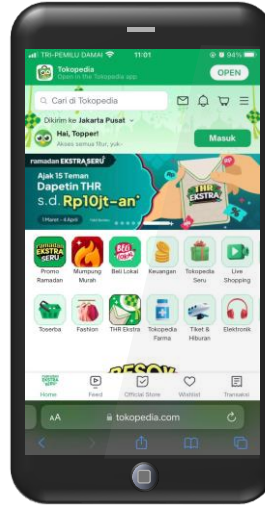


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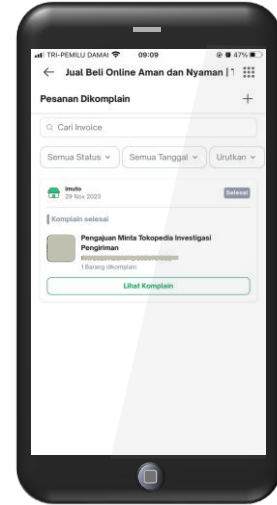
Platform Type Mobile Apps



**Native
Application**



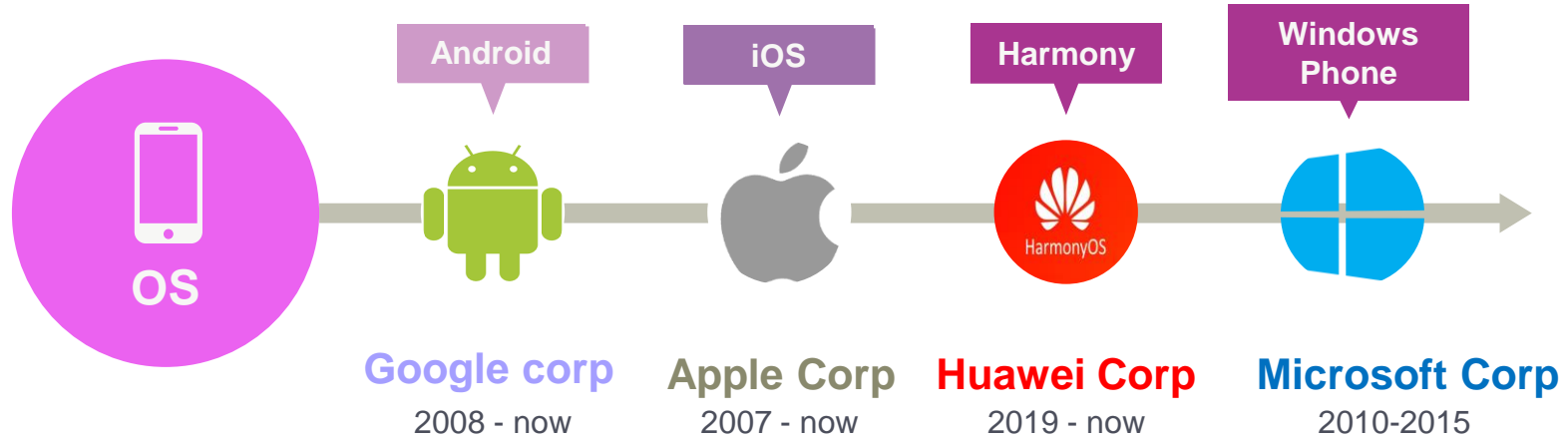
**Website
Application**



**Hybrid
Application**



OS on Mobile Device





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Development Platform



Native Platform



Cross Platform



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Development

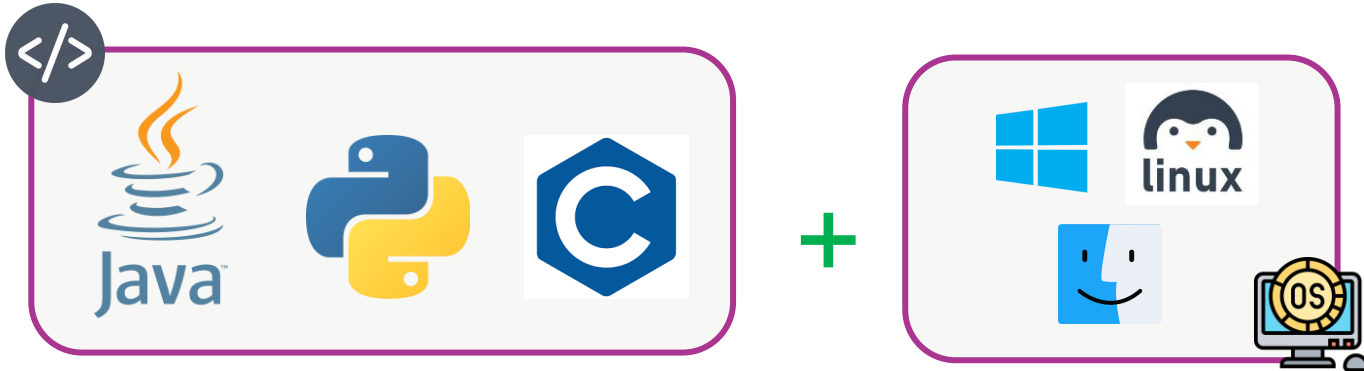
Native Platform



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Development Platform

Native Application





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Development Platform

Native Application



Objective C



Dart





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Development Platform

Native Application





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Native-Platform Dev

Benefits

Pros

- + Top-notch operation
- + Fewer errors
- + Superior interactiveness
- + Feature access
- + Security

Cons

- ✗ Higher expenses
- ✗ Complex support
- ✗ Lower speed/bigger teams





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Cross-Platform Apps

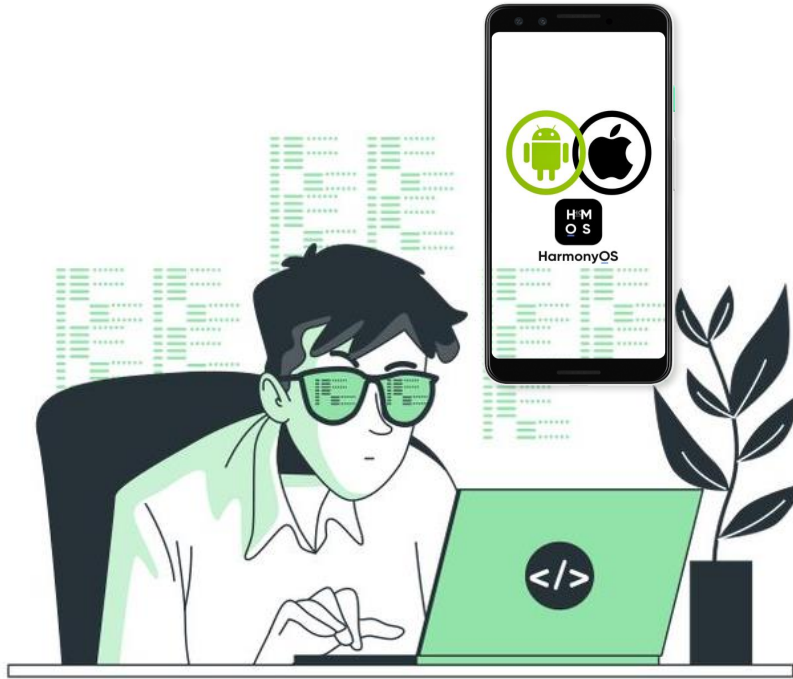
Affordable and Efficient
Solution for Business
Complexities





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Cross Platform Dev





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Cross-Platform Dev

Benefits



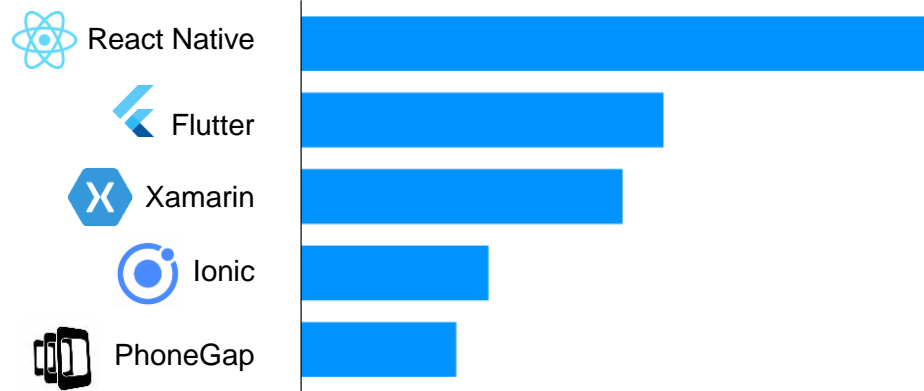




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Cross Platform – Popularity

April 2023



03

Basic Concepts

Mobile Development





Concepts of Mobile Dev

1. Choosing the Platform



OS



Code



Tool Chains



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Concepts of Mobile Dev

1. Choosing the Platform



OS



Code



Expo

Tool Chains



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Concepts of Mobile Dev

2. Desain UI/UX



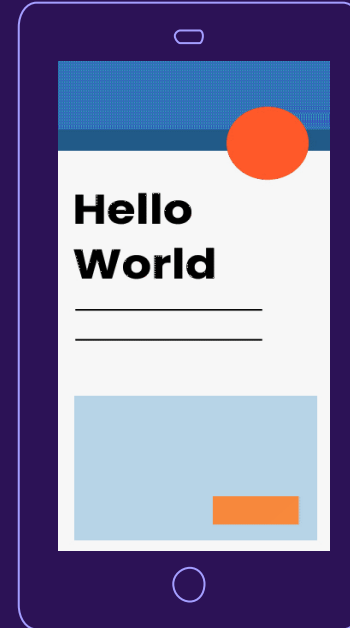
UI

Principles

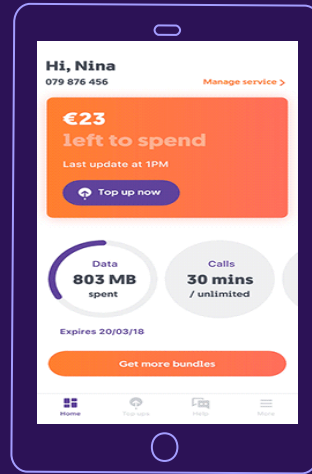
UI Principles

COLORS

Learn the basics of color and color psychology. Colors in applications are usually divided into three categories namely **Primary**, **Secondary** and **Tertiary** Colors.



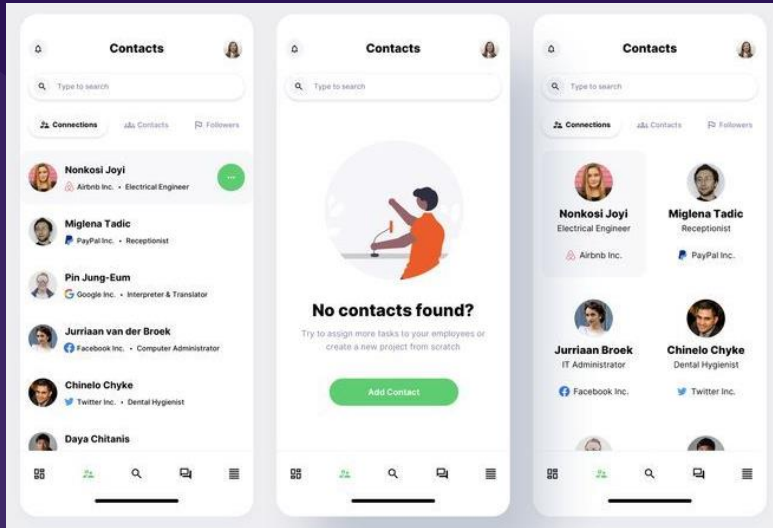
UI Principles



BALANCE

Create a balanced design by paying attention to CONTRAST and TYPOGRAPHY as well as choosing fonts that are easy to read.

UI Principles



CONSISTENT

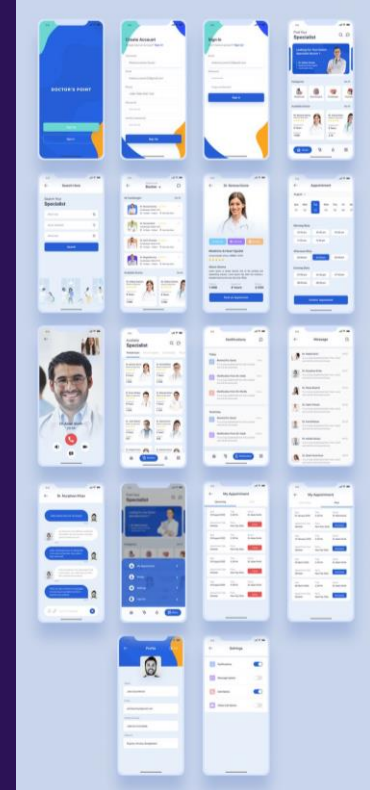
Consistent with the shape of the layout component from one frame to another. And consistent with the framework / library used

UX Principles

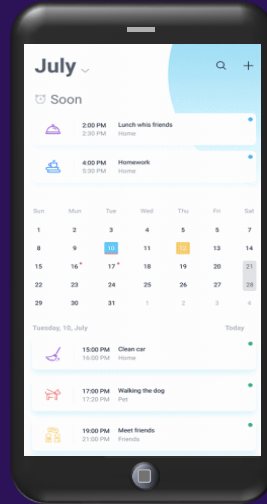
UX Principles

Hierarchy

1. Information architecture
2. Visual hierarchy



UX Principles



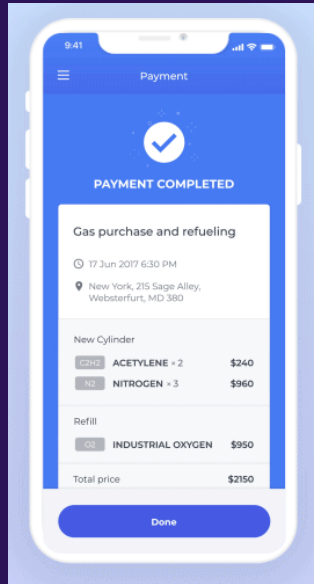
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CONSISTENCY

Have a standard layout pattern between products.

UX Principles



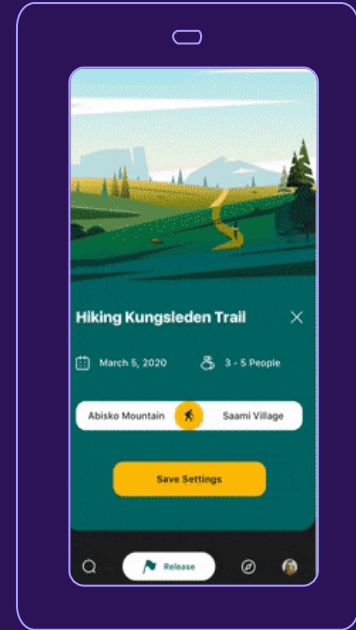
CONFIRMATION

Preventing misinformation in applications is one of the main goals of UX

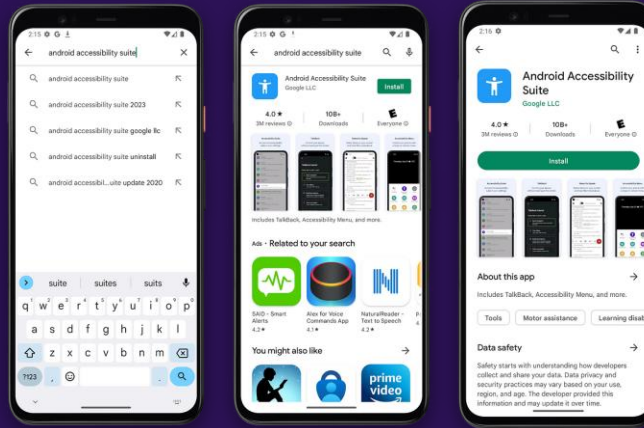
UX Principles

User Control

Membantu pengguna dengan mudah untuk mundur atau kembali ke halaman awal atau tidak jadi melakukan transaksi.



UX Principles



ACCESSIBILITY

Designing a product that can be used by many people including people with disabilities very easily



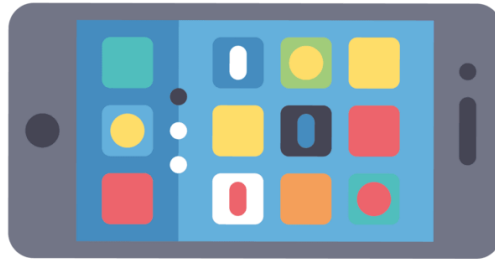
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Concepts of Mobile Dev

3. Database and Storage Management



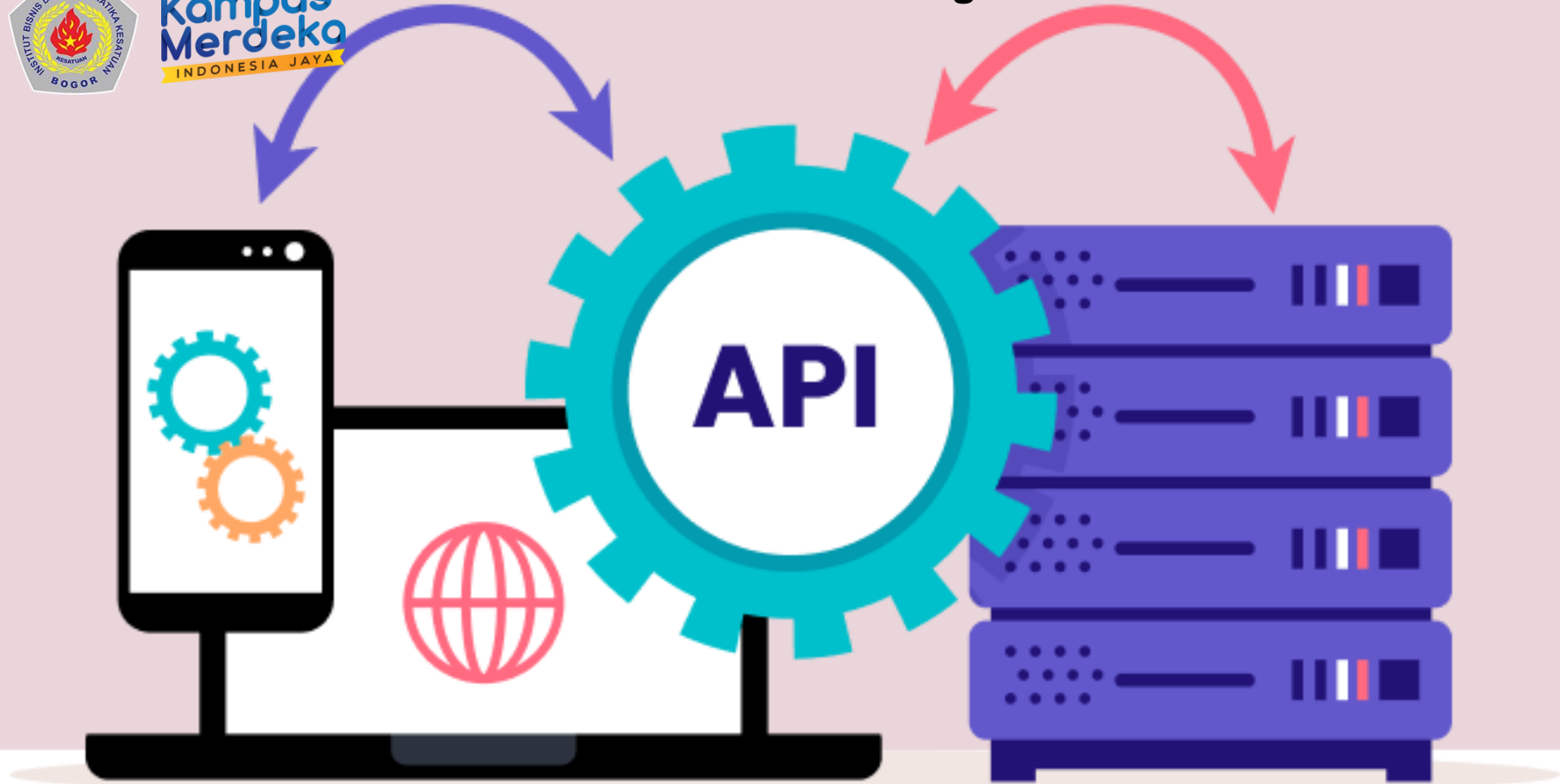
Firebase





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4. API and Network Integration



Thanks