PEMROGRAMAN PERANGKAT BERGERAK

MODUL IX

Disusun Oleh :

Ilham Lii Assidaq

2311104068

Asisten Praktikum :

Yoga Eka Pratama

Zulfa Mustafa Akhyar Iswahyudi

Dosen Pengampu :

Yudha Islami Sulistya, S.Kom., M.Cs.

PROGRAM STUDI S1 SOFTWARE ENGINEERING

FAKULTAS INFORMATIKA

TELKOM UNIVERSITY PURWOKERTO

2025

TUGAS PENDAHULUAN

A. SOAL

(Soal) Modifikasi project pemilihan gambar yang telah dikerjakan pada Tugas Pendahuluan Modul 09 agar fungsionalitas tombol dapat berfungsi untuk mengunggah gambar.

- Ketika tombol Gallery ditekan, aplikasi akan mengambil gambar dari galeri, dan setelah gambar dipilih, gambar tersebut akan ditampilkan di dalam container.
- Ketika tombol Camera ditekan, aplikasi akan mengambil gambar menggunakan kamera, dan setelah pengambilan gambar selesai, gambar tersebut akan ditampilkan di dalam container.
- Ketika tombol Hapus Gambar ditekan, gambar yang ada pada container akan dihapus.

B. SOURCE CODE

1. Main.dart

```
import 'package:camera/camera.dart';
import 'package:flutter/material.dart';
import 'package:image_picker/image_picker.dart';
import 'package:modulsembilanpraktik/camera.dart';
import 'package:modulsembilanpraktik/image_picker.dart';

void main() {
  runApp(const MainApp());
}

class MainApp extends StatelessWidget {
  const MainApp({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      title: 'API Perangkat Keras',
      theme: ThemeData(
        primarySwatch: Colors.blueGrey,
        scaffoldBackgroundColor: const Color.fromRGBO(245, 245, 245, 1),
        elevatedButtonTheme: ElevatedButtonThemeData(
          style: ElevatedButton.styleFrom(
```

```
            padding: const EdgeInsets.symmetric(horizontal: 24, vertical: 14),
            backgroundColor: Colors.blueGrey[700],
            foregroundColor: Colors.white,
            textStyle: const TextStyle(
              fontSize: 16,
              fontWeight: FontWeight.w600,
            ),
            shape: RoundedRectangleBorder(
              borderRadius: BorderRadius.circular(12),
            ),
          ),
        ),
      ),
      home: const HomePage(),
    );
  }
}

class HomePage extends StatelessWidget {
  const HomePage({super.key});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text("API Perangkat Keras"),
        centerTitle: true,
        elevation: 2,
      ),
      body: Center(
        child: Padding(
          padding: const EdgeInsets.all(24.0),
          child: Column(
            mainAxisAlignment: MainAxisAlignment.center,
            children: [
              const Icon(
                Icons.settings_applications_rounded,
                size: 80,
                color: Colors.blueGrey,
              ),
              const SizedBox(height: 30),
              ElevatedButton(
                onPressed: () {
                  Navigator.push(
                    context,
                    MaterialPageRoute(builder: (context) => CameraApp()),
```

```
                  );
                },
                child: const Text("Buka Kamera"),
              ),
              const SizedBox(height: 16),
              ElevatedButton(
                onPressed: () {
                  Navigator.push(
                    context,
                    MaterialPageRoute(
                      builder: (context) =>
                          ImageFromGalleryEx(ImageSourceType.gallery
  ),
                    ),
                  );
                },
                child: const Text("Pilih Gambar dari Galeri"),
              ),
              const SizedBox(height: 16),
              ElevatedButton(
                onPressed: () {
                  Navigator.push(
                    context,
                    MaterialPageRoute(
                      builder: (context) =>
                          ImageFromGalleryEx(ImageSourceType.camera)
  ,
                    ),
                  );
                },
                child: const Text("Ambil Gambar dari Kamera"),
                 ),
               ],
            ),
          ),
        ),
      );
    }
  }
```

2. picker.dart

```
import 'dart:io';
import 'package:flutter/material.dart';
import 'package:image_picker/image_picker.dart';

enum ImageSourceType { camera, gallery }
```

```
class ImageFromGalleryEx extends StatefulWidget {
 final ImageSourceType type;
 ImageFromGalleryEx(this.type);
 @override
 ImageFromGalleryExState createState() =>
ImageFromGalleryExState(this.type);
}

class ImageFromGalleryExState extends State<ImageFromGalleryEx> {
 File? _image;
 late ImagePicker imagePicker;
 final ImageSourceType type;
 ImageFromGalleryExState(this.type);

 @override
 void initState() {
  super.initState();
  imagePicker = ImagePicker();
 }

 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
    title: Text(
     type == ImageSourceType.camera
       ? "Image from Camera"
       : "Image from Gallery",
    ),
   ),
   body: Column(
    children: <Widget>[
     SizedBox(height: 52),
```

```
Center(
  //mengambil gambar dari camera atau gallery
  child: GestureDetector(
    onTap: () async {
      //operasi ternary untuk memilih sumber gambar
      var source = type == ImageSourceType.camera
          ? ImageSource.camera
          : ImageSource.gallery;

      //menyimpan gambar pada variabel image
      XFile? image = await imagePicker.pickImage(
        source: source,
        imageQuality: 50,
        preferredCameraDevice: CameraDevice.front,
      );

      if (image != null) {
        setState(() {
          _image = File(image.path);
        });
      }
    },
    child: Container(
      width: 200,
      height: 200,
      decoration: BoxDecoration(color: Colors.red[200]),

      // menampilkan gambar dari camera atau gallery
      child: _image != null
          ? Image.file(
              _image!,
              width: 200.0,
              height: 200.0,
              fit: BoxFit.fitHeight,
```

```
                  )
                // jika tidak ada gambar yang dipilih
                : Container(
                   decoration: BoxDecoration(color: Colors.red[200]),
                   width: 200,
                   height: 200,
                   child: Icon(Icons.camera_alt, color: Colors.grey[800]),
                  ),
            ),
          ),
        ),
       ],
     ),
   );
 }
}
```

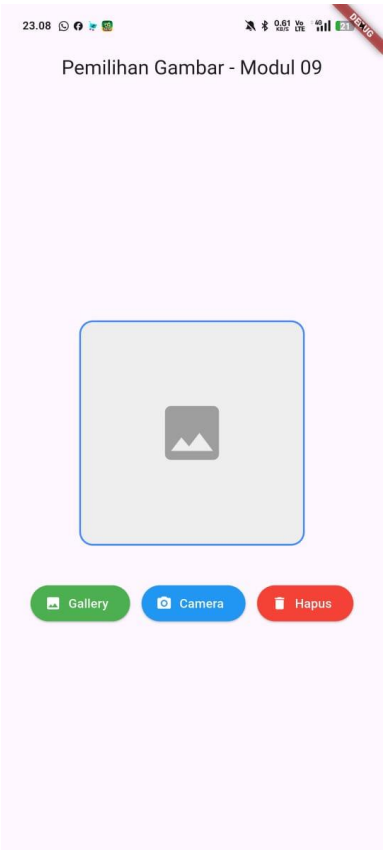
3.camera.dart

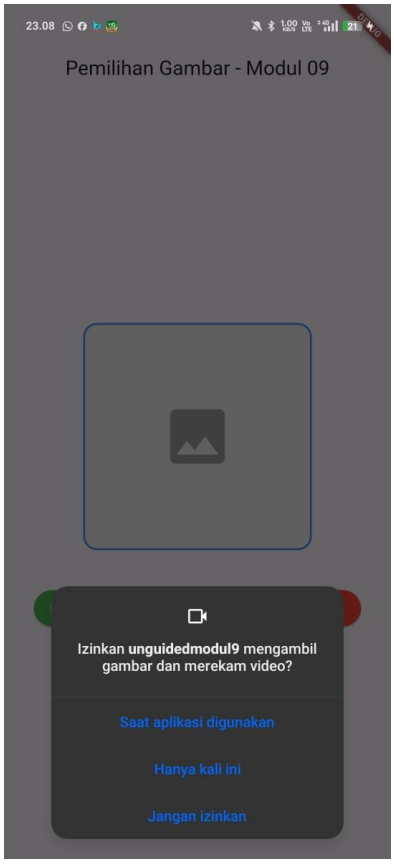
```
import 'dart:async';
import 'package:flutter/material.dart';
import 'package:camera/camera.dart';

List<CameraDescription>? cameras;

class CameraApp extends StatefulWidget {
 @override
 _CameraAppState createState() => _CameraAppState();
}

class _CameraAppState extends State<CameraApp> {
 CameraController? controller;

 Future<void> initCamera() async {
   WidgetsFlutterBinding.ensureInitialized();
```

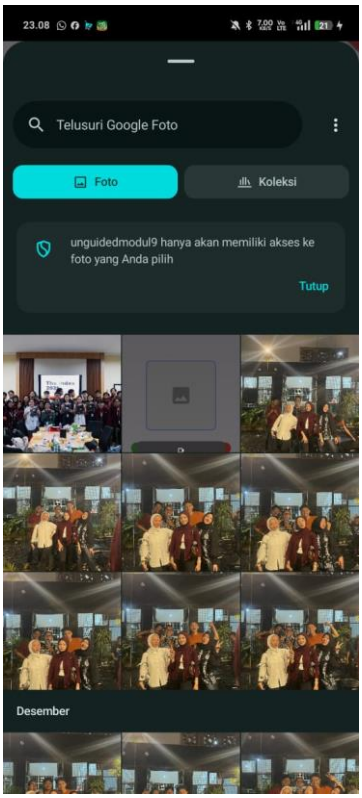
```
  cameras = await availableCameras();

  if (cameras != null && cameras!.isNotEmpty) {
    print(cameras);

    controller = CameraController(cameras![0], ResolutionPreset.max);
    controller?.initialize().then((_) {
      if (!mounted) {
        return;
      }
      setState(() {});
    });
  }
}

@override
void initState() {
  super.initState();
  initCamera();
}

@override
void dispose() {
  controller?.dispose();
  super.dispose();
}

@override
Widget build(BuildContext context) {
  if (controller == null || !controller!.value.isInitialized) {
    return Container();
  }
  return MaterialApp(home: Scaffold(body: CameraPreview(controller!)));
}
```

}

SCREENSHOT


23.08
Pemilihan Gambar - Modul 09
Gallery
Camera
Hapus


23.08
Pemilihan Gambar - Modul 09
Izinkan unguidedmodul9 mengambil gambar dan merekam video?
Saat aplikasi digunakan
Hanya kali ini
Jangan izinkan


23.08
Telusuri Google Foto
Foto
Koleksi
unguidedmodul9 hanya akan memiliki akses ke foto yang Anda pilih
Tutup
Desember