Laporan praktikum Monbile apps

Membuat scanner barcode

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A. Tujuan

Membangun aplikasi scanner QR code yang berteknologi flutter

B. Studi Kasus

1. Melakukan setting dependenci pada pubspec.yaml

```yaml
29 ∨ dependencies:
30 ∨   flutter:
31         sdk: flutter
32
33     # The following adds the Cupertino Icons font to your application.
34     # Use with the CupertinoIcons class for iOS style icons.
35     cupertino_icons: ^1.0.2
36     qr_code_scanner: ^0.1.0
37
38
39 ∨ dev_dependencies:
40 ∨   flutter_test:
41         sdk: flutter
42
```

2. Memanggil assets gambar di pubspec.yaml

```yaml
61     # To add assets to your application, add an assets section, like this:
62     assets:
63       - assets/frame.png
```

3. Melakukan konfigurasi ijin di AndroidManifest.xml

```xml
android > app > src > main >  🔊 AndroidManifest.xml
1    <manifest xmlns:android="http://schemas.android.com/apk/res/android"
2        package="com.example.barcode_0051">
3        <uses-permission android:name="android.permission.CAMERA"/>
```

4. Melakukan sedikit konfigurasi perubahan minimal sdk di build.grandl

```
44     defaultConfig {
45         // TODO: Specify your own unique Application ID (https://developer.android.com/studio/build/application-id.htm
46         applicationId "com.example.barcode_0051"
47         minSdkVersion 20
48         targetSdkVersion 29
49         versionCode flutterVersionCode.toInteger()
50         versionName flutterVersionName
51     }
52
```

5. membuat main.dart

```dart
import 'package:flutter/material.dart';
import 'home.dart';


Run | Debug | Profile
void main(){
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({Key? key}) : super (key: key);


  @override

  Widget build(BuildContext context){
    return const MaterialApp(
      debugShowCheckedModeBanner: false,
      home: Home(),
    ); // MaterialApp
  }
}
```

6. membuat home.dart

```dart
import 'package:flutter/material.dart';
import 'scan.dart';

class Home extends StatefulWidget {
  const Home({ Key? key }) : super(key: key);

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

```dart
}

class _HomeState extends State<Home>{
  @override
  Widget build(BuildContext context){
    return MaterialApp(
      home: Scaffold(
        appBar: AppBar(
          title: const Text('Tugas Barcodescanner 0051'),
        ), // AppBar
        body: const Center(
          child: Image(image: AssetImage("assets/frame.png")),
        ), // Center
        floatingActionButton: FloatingActionButton(
          child: const Icon(Icons.camera_alt_sharp),
          onPressed: (){
            Navigator.push(
              context, MaterialPageRoute(
                builder: (context) => const Scan(),
              ), // MaterialPageRoute
            );
          },
        ), // FloatingActionButton
      ), // Scaffold
    ); // MaterialApp
  }
}
```

7. membuat scan.dart

```dart
import 'package:flutter/material.dart';
import 'package:qr_code_scanner/qr_code_scanner.dart';

class Scan extends StatefulWidget {
  const Scan ({ Key? key }) : super(key: key);

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

```dart
class _ScanState extends State<Scan> {
  final GlobalKey qrKey = GlobalKey();
  String qr = "";

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home: Scaffold(
        appBar: AppBar(
          title: const Text('Tugas 3 - Barcode Scanner 0051'),
        ), // AppBar
        body: Column(
          children: <Widget>[
            Expanded(
              child: QRView(
                key: qrKey,
                onQRViewCreated: (controller) {
                  controller.scannedDataStream.listen((value){
                    setState(() {
                      qr = value;
                    });
                  });
                },
              ), // QRView
            ), // Expanded
            Expanded(
              child: Center(
                child: Text('Result: $qr'),
              ), // Center
            ), // Expanded
          ], // <Widget>[]
        ), // Column
      ), // Scaffold
    ); // MaterialApp
  }
}
```

8. cara running. Buka terminal dan ketikkan flutter run --no-sound-null-safety

```
PROBLEMS 1    OUTPUT    TERMINAL    DEBUG CONSOLE

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\DEVELOPMENT\android\barcode\barcode_0051> flutter run --no-sound-null-safety
```

9. output aplikasi

Tugas Barcodescanner 0051

Tugas 3 - Barcode Scanner 0051

Result: Nama : Nasrul Hakim - 19.240.0051