

**TUGAS PENDAHULUAN / TUGAS UNGUIDED
PEMROGRAMAN PERANGKAT BERGERAK**

**MODUL XII
MAPS PLACES FIREBASE NOTIFIKASI**



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**PROGRAM STUDI S1 SOFTWARE ENGINEERING
FAKULTAS INFORMATIKA
TELKOM UNIVERSITY PURWOKERTO
2025**

TUGAS PENDAHULUAN / TUGAS UNGUIDED

A. SOAL

B. JAWABAN

Source code

```
import 'package:flutter/material.dart';
import 'package:google_maps_flutter/google_maps_flutter.dart';
import 'place_picker.dart';

class MapsPage extends StatefulWidget {
    const MapsPage({super.key});

    @override
    State<MapsPage> createState() => _MapsPageState();
}

class _MapsPageState extends State<MapsPage> {
    static const LatLng _initialPosition =
        LatLng(-7.4305826, 109.2492681);

    Set<Marker> _markers = {
        const Marker(
            markerId: MarkerId("initial"),
            position: _initialPosition,
            infoWindow: InfoWindow(title: "Lokasi Awal"),
        )
    };

    String lokasiInfo = "Belum memilih lokasi";

    Future<void> _openPlacePicker() async {
        final result = await Navigator.push(
            context,
            MaterialPageRoute(
                builder: (_) => const PickPlacePage(),
            ),
        );

        if (result != null) {
            setState(() {
                lokasiInfo =
                    "${result['name']}]\n${result['address']}\nLat:
${result['lat']}, Lng: ${result['lng']}";

                _markers = {
                    Marker(
                        markerId: const MarkerId("picked"),
                        position: LatLng(result['lat'], result['lng']),
                        infoWindow: InfoWindow(title: result['name']),
                    )
                };
            });
        }
    }
}
```

```
        )
    );
});
}
}

@Override
Widget build(BuildContext context) {
    return Scaffold(
        appBar: AppBar(
            title: const Text("Maps & Places"),
        ),
        body: Column(
            children: [
                Expanded(
                    child: GoogleMap(
                        initialCameraPosition: const CameraPosition(
                            target: _initialPosition,
                            zoom: 14,
                        ),
                        myLocationEnabled: true,
                        markers: _markers,
                    ),
                ),
                Padding(
                    padding: const EdgeInsets.all(12),
                    child: Column(
                        children: [
                            ElevatedButton(
                                onPressed: _openPlacePicker,
                                child: const Text("Pilih Lokasi"),
                            ),
                            const SizedBox(height: 10),
                            Text(
                                lokasiInfo,
                                textAlign: TextAlign.center,
                            ),
                            ],
                        ),
                ),
            ],
        );
    );
}

import 'package:flutter/material.dart';
import 'package:place_picker_google/place_picker_google.dart';
import 'package:google_maps_flutter/google_maps_flutter.dart';

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

    static const LatLng _defaultLocation =
```

```
LatLng(-7.4305826, 109.2492681);

@Override
Widget build(BuildContext context) {
    return Scaffold(
        appBar: AppBar(title: const Text("Place Picker")),
        body: PlacePicker(
            apiKey: "API_KEY_KAMU",
            initialLocation: _defaultLocation,
            onPlacePicked: (result) {
                Navigator.pop(context, {
                    "name": result.name,
                    "address": result.formattedAddress,
                    "lat": result.latLng!.latitude,
                    "lng": result.latLng!.longitude,
                });
            },
        ),
    );
}

import 'package:flutter/material.dart';
import 'package:google_maps_flutter/google_maps_flutter.dart';

class RenderMaps extends StatefulWidget {
    const RenderMaps({super.key});

    @override
    State<RenderMaps> createState() => _RenderMapsState();
}

class _RenderMapsState extends State<RenderMaps> {
    static final LatLng _defaultLocation = const LatLng(-7.417404,
109.251143);
    static final CameraPosition _cameraPosition = CameraPosition(
        target: _defaultLocation,
        zoom: 14.0,
    );

    Set<Marker> _createMarker() {
        return {
            Marker(
                markerId: const MarkerId('Gor Satria'),
                position: _defaultLocation,
            ),
            Marker(
                markerId: const MarkerId('Marker 2'),
                position: LatLng(-7.403080, 109.259509),
            ),
        };
    }

    @override
```

```
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(title: const Text('Render Maps API')),
    body: GoogleMap(initialCameraPosition: _cameraPosition,
      markers: _createMarker(),
      myLocationEnabled: true,),
  );
}

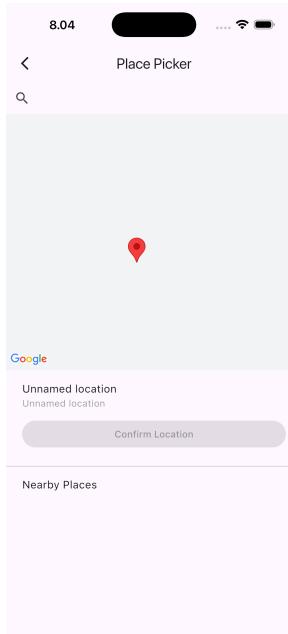
import 'package:flutter/material.dart';
import 'maps_page.dart';

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

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

  @override
  Widget build(BuildContext context) {
    return const MaterialApp(
      debugShowCheckedModeBanner: false,
      home: MapsPage(),
    );
  }
}
```

Screenshot Output



Deskripsi Program

Program ini merupakan aplikasi mobile berbasis Flutter yang mengintegrasikan **Google Maps dan Place Picker**. Aplikasi menampilkan peta digital dengan marker lokasi awal, kemudian pengguna dapat memilih lokasi lain melalui fitur Place Picker. Setelah lokasi dipilih, aplikasi menampilkan informasi lokasi berupa nama tempat, alamat, serta koordinat latitude dan longitude, dan marker pada peta akan berpindah sesuai lokasi yang dipilih.