

**TUGAS 02**  
**WIDGET FLUTTER**



Praktikum Pemrograman Berbasis Web - A

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**PROGRAM STUDI S1 TEKNIK INFORMATIKA**

**FAKULTAS TEKNIK**

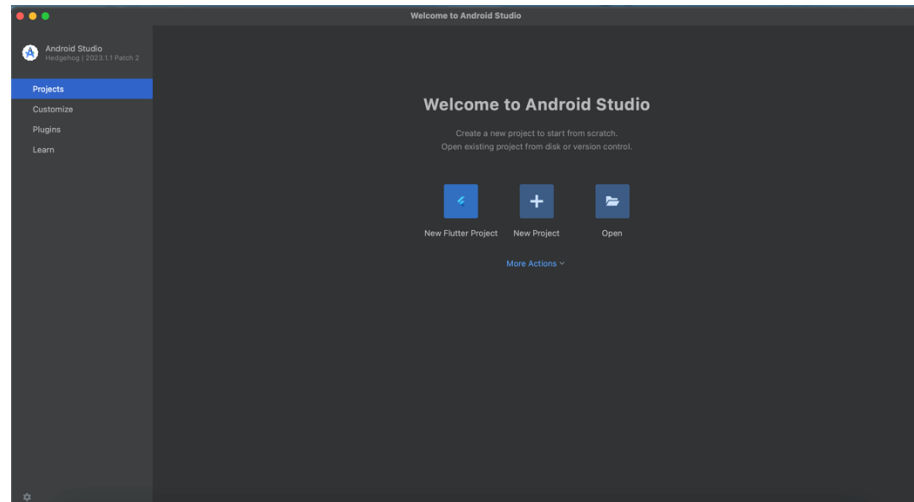
**UNIVERSITAS PANCASILA**

**JAKARTA**

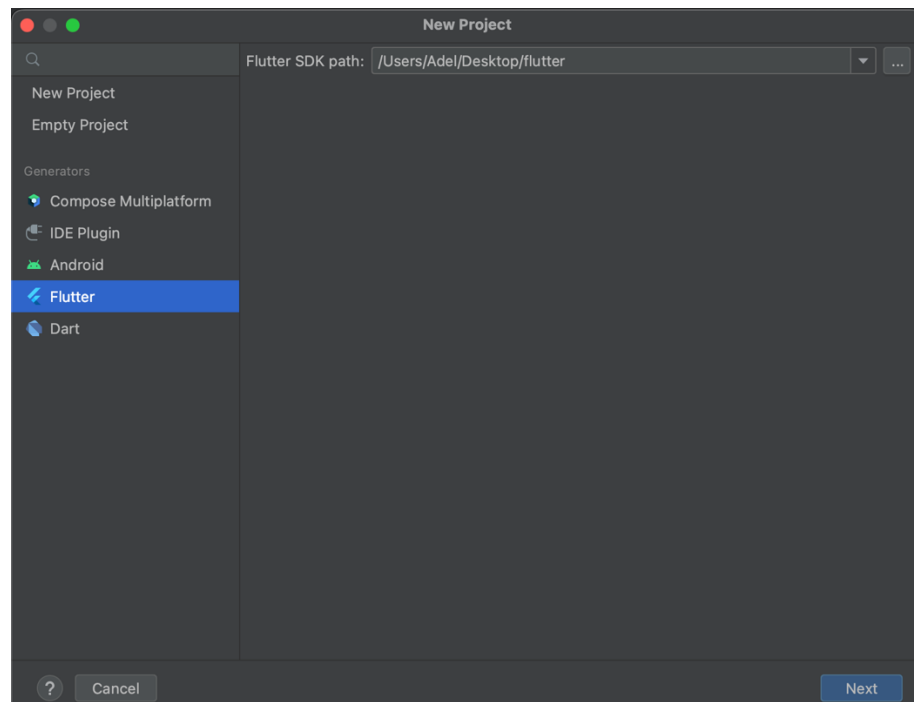
**2024**

## A. Build a Flutter layout

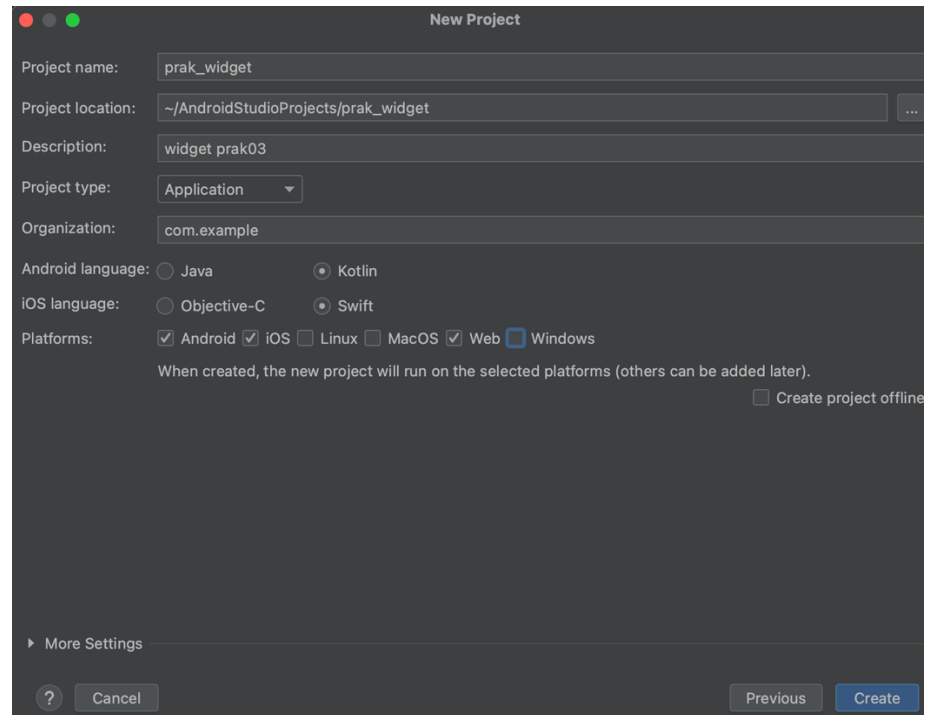
1. Akses web <https://docs.flutter.dev/ui/layout/tutorial>
2. Buka Android Studio



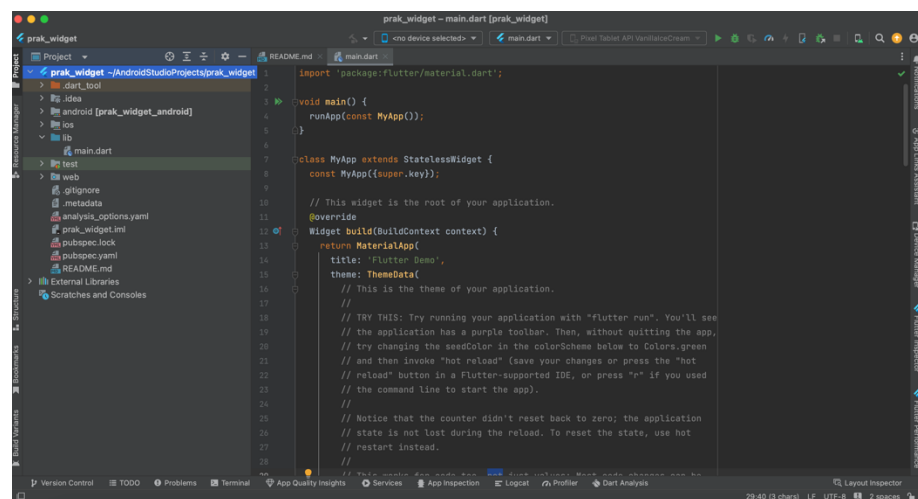
3. Pilih New Flutter Project -> Flutter -> Next



4. Isi form untuk nama project, tempat project, type, bahasa pemrograman, platforms dan lainnya -> Create



5. Tampilan Awal



6. Create the app base code

Import 'package:flutter/material.dart';

```
void main() => runApp(const MyApp());

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

  @override
  Widget build(BuildContext context) {
    const String appTitle = 'Flutter layout demo';
    return MaterialApp(
      title: appTitle,
      home: Scaffold(
        appBar: AppBar(
          title: const Text(appTitle),
        ),
        body: const Center(
          child: Text('Hello World'),
        ),
      ),
    );
  }
}
```

## B. Add the Title Section

### 1. Add the TitleSection Widget

```
class TitleSection extends StatelessWidget {
  const TitleSection({
    super.key,
    required this.name,
    required this.location,
  });
```

```
final String name;
final String location;

@override
Widget build(BuildContext context) {
  return Padding(
    padding: const EdgeInsets.all(32),
    child: Row(
      children: [
        Expanded(
          /*1*/
          child: Column(
            crossAxisAlignment: CrossAxisAlignment.start,
            children: [
              /*2*/
              Padding(
                padding: const EdgeInsets.only(bottom: 8),
                child: Text(
                  name,
                  style: const TextStyle(
                    fontWeight: FontWeight.bold,
                  ),
                ),
              ),
              Text(
                location,
                style: TextStyle(
                  color: Colors.grey[500],
                ),
              ),
            ],
          ),
        ),
      ],
    ),
  );
}
```

```

    ],
  ),
),
/*3*/
Icon(
  Icons.star,
  color: Colors.red[500],
),
const Text('41'),
],
),
);
}
}

```

## 2. Change the app body to a scrolling view

```

body: const SingleChildScrollView(
  child: Column(
    children: [

```

## 3. Update the app to display the section

```

TitleSection(
  name: 'Oeschinen Lake Campground',
  location: 'Kandersteg, Switzerland',
),

```

## C. Add the Button Section

### 1. Add the ButtonSection Widget

```

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

```

```

@Override
Widget build(BuildContext context) {
  final Color color = Theme.of(context).primaryColor;
  // ...
}

```

## 2. Create a widget to make buttons

```

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

class ButtonWithText extends StatelessWidget {
  const ButtonWithText({
    super.key,
    required this.color,
    required this.icon,
    required this.label,
  });

  final Color color;
  final IconData icon;
  final String label;

  @override
  Widget build(BuildContext context) {
    return Column(
      mainAxisAlignment: MainAxisAlignment.min,
      mainAxisAlignment: MainAxisAlignment.center,
      children: [

```

```

Icon(icon, color: color),
Padding(
  padding: const EdgeInsets.only(top: 8),
  child: Text(
    label,
    style: TextStyle(
      fontSize: 12,
      fontWeight: FontWeight.w400,
      color: color,
    ),
  ),
),
],
);
}

```

### 3. Position the buttons with a Row widget

```

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

  @override
  Widget build(BuildContext context) {
    final Color color = Theme.of(context).primaryColor;
    return SizedBox(
      child: Row(
        mainAxisAlignment: MainAxisAlignment.spaceEvenly,
        children: [
          ButtonWithText(
            color: color,
            icon: Icons.call,
            label: 'CALL',

```



```

    ),
    ButtonWithText(
      color: color,
      icon: Icons.near_me,
      label: 'ROUTE',
    ),
    ButtonWithText(
      color: color,
      icon: Icons.share,
      label: 'SHARE',
    ),
  ],
),
);
}
}

class ButtonWithText extends StatelessWidget {
  const ButtonWithText({
    super.key,
    required this.color,
    required this.icon,
    required this.label,
  });

  final Color color;
  final IconData icon;
  final String label;

  @override
  Widget build(BuildContext context) {

```

```

    return Column(
      // ...
    );
  }
}

```

#### 4. Update the app to display the button section

```

TitleSection(
  name: 'Oeschinen Lake Campground',
  location: 'Kandersteg, Switzerland',
),
ButtonSection(),

```

### D. Add the Text Section

#### 1. Add the TextSection widget

```

class TextSection extends StatelessWidget {
  const TextSection({
    super.key,
    required this.description,
  });

  final String description;

  @override
  Widget build(BuildContext context) {
    return Padding(
      padding: const EdgeInsets.all(32),
      child: Text(
        description,
        softWrap: true,
      ),
    ),
  }
}

```

```
);
}
}
```

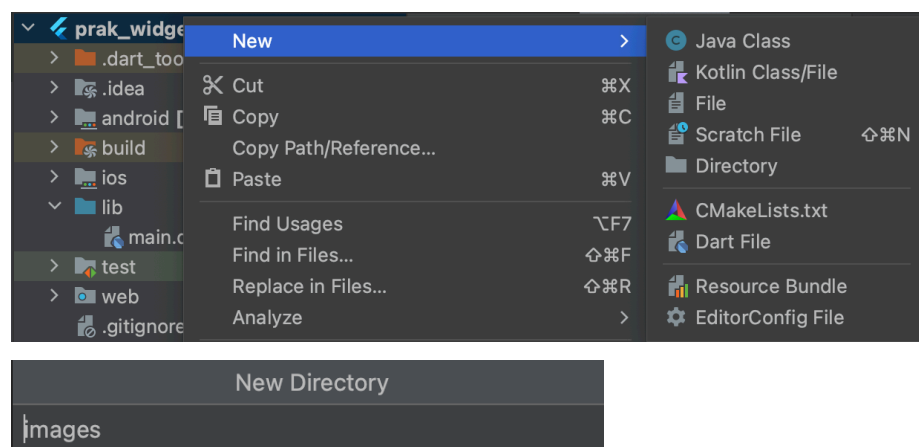
## 2. Update the app to display the text section

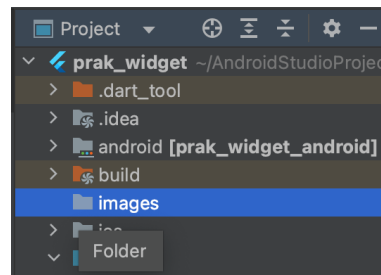
```
TextSection(
  description:
    'Lake Oeschinen lies at the foot of the Blüemlisalp in the '
    'Bernese Alps. Situated 1,578 meters above sea level, it '
    'is one of the larger Alpine Lakes. A gondola ride from '
    'Kandersteg, followed by a half-hour walk through pastures '
    'and pine forest, leads you to the lake, which warms to 20 '
    'degrees Celsius in the summer. Activities enjoyed here '
    'include rowing, and riding the summer toboggan run.',
),
```

## E. Add the image section

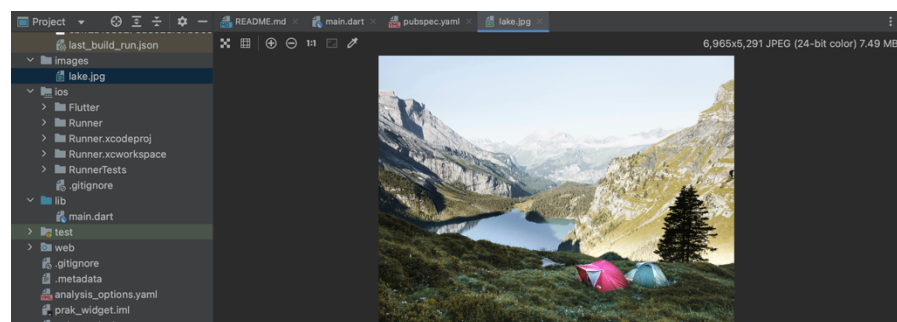
1. Download image
2. Create Directory in project folder

Klik kanan project -> New -> Directory





### 3. Copy image to folder



### 4. Create the ImageSection widget

```
class ImageSection extends StatelessWidget {
  const ImageSection({super.key, required this.image});

  final String image;

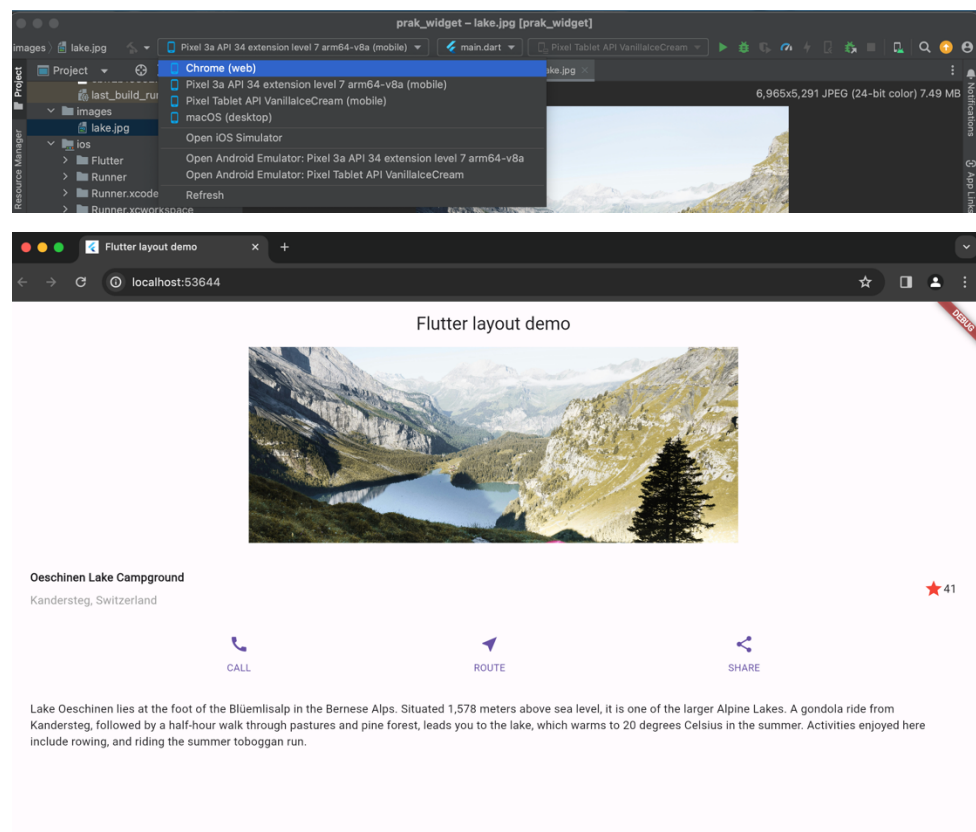
  @override
  Widget build(BuildContext context) {
    return Image.asset(
      image,
      width: 600,
      height: 240,
      fit: BoxFit.cover,
    );
  }
}
```

## 5. Update the app to display the image section

```
ImageSection(
  image: 'images/lake.jpg',
),
```

## F. Run App

Pilih simulator -> Klik Icon Run



## G. Push Code to GitHub [https://github.com/adelianurlinap/Prak\\_PBM.git](https://github.com/adelianurlinap/Prak_PBM.git)

### a. Clone Repository yang telah dibuat :

```
git clone https://github.com/adelianurlinap/Prak_PBM.git
```

## b. Add dan commit

```
git add .
git commit -m "Tugas2"
```

## c. Push code

```
git push
```

```
Prak_PBM — -bash — 130x53
create mode 100644 Tugas2/prak_widget/ios/Runner.xcworkspace/xcsdshareddata/IDEWorkspaceChecks.plist
create mode 100644 Tugas2/prak_widget/ios/Runner.xcworkspace/xcsdshareddata/WorkspaceSettings.xcsettings
create mode 100644 Tugas2/prak_widget/ios/Runner/AppDelegate.swift
create mode 100644 Tugas2/prak_widget/ios/Runner/Assets.xcassets/AppIcon.appiconset/Contents.json
create mode 100644 Tugas2/prak_widget/ios/Runner/Assets.xcassets/AppIcon.appiconset/Icon-App-1024x1024@1x.png
create mode 100644 Tugas2/prak_widget/ios/Runner/Assets.xcassets/AppIcon.appiconset/Icon-App-20x20@1x.png
create mode 100644 Tugas2/prak_widget/ios/Runner/Assets.xcassets/AppIcon.appiconset/Icon-App-20x20@2x.png
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create mode 100644 Tugas2/prak_widget/ios/Runner/Base.lproj/LaunchScreen.storyboard
create mode 100644 Tugas2/prak_widget/ios/Runner/Base.lproj/Main.storyboard
create mode 100644 Tugas2/prak_widget/ios/Runner/Info.plist
create mode 100644 Tugas2/prak_widget/ios/Runner/Runner-Bridging-Header.h
create mode 100644 Tugas2/prak_widget/ios/RunnerTests/RunnerTests.swift
create mode 100644 Tugas2/prak_widget/lib/main.dart
create mode 100644 Tugas2/prak_widget/pubspec.lock
create mode 100644 Tugas2/prak_widget/pubspec.yaml
create mode 100644 Tugas2/prak_widget/test/widget_test.dart
create mode 100644 Tugas2/prak_widget/web/favicon.png
create mode 100644 Tugas2/prak_widget/web/icons/icon-192.png
create mode 100644 Tugas2/prak_widget/web/icons/icon-512.png
create mode 100644 Tugas2/prak_widget/web/icons/icon-maskable-192.png
create mode 100644 Tugas2/prak_widget/web/icons/icon-maskable-512.png
create mode 100644 Tugas2/prak_widget/web/index.html
create mode 100644 Tugas2/prak_widget/web/manifest.json
create mode 100644 Tugas2/~$ak03_PBM_A_4521210059_Adelia Nurlina Putri.docx
ans:Prak_PBM Adel$ git push
Enumerating objects: 122, done.
Counting objects: 100% (122/122), done.
Delta compression using up to 8 threads
Compressing objects: 100% (95/95), done.
Writing objects: 100% (118/118), 23.72 MiB | 112.00 KiB/s, done.
Total 118 (delta 8), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (8/8), completed with 1 local object.
To https://github.com/adelianurlinap/Prak_PBM.git
 a829f0b..5189d22 main -> main
You have new mail in /var/mail/Adel
ans:Prak_PBM Adel$
```

Name	Last commit message	Last commit date
..	Tugas2	4 minutes ago
.DS_Store	Tugas2	4 minutes ago
Prak03_PBM_A_4521210059_Adelia Nurlina Putri.docx	Tugas2	4 minutes ago
~\$ak03_PBM_A_4521210059_Adelia Nurlina Putri.docx	Tugas2	4 minutes ago

#### H. Kesimpulan

Pada tugas 2 ini, telah dilakukan praktek untuk membuat widget flutter dasar. Aplikasi berbentuk 1 page dengan beberapa button, text, dan 1 gambar. Terakhir yaitu melakukan push code ke GitHub.

#### I. Referensi

- <https://docs.flutter.dev/ui/layout/tutorial>