# Task Guide A04

Introduction and setup project

1. Objective
   Student learn how to make Instagram's home screen story list
2. Requirement
   Hardware:
   - 4 GB RAM minimum, 8 GB RAM recommended
   - 15 GB of available disk space minimum (2 GB for Flutter SDK, 8 GB for Android Studio, 4 GB for AVD, and 1 GB for project's size)
   - 1280 x 800 minimum screen resolution
   - Intel processor with support for Intel VT-x, Intel EM64T (Intel 64), and Execute Disable (XD) Bit functionality

   Software:
   - Microsoft Windows 7/8/10/11 (64-bit)
   - JDK 8
   - Android Studio IDE
   - Git
3. Resource
   Starter project code : https://github.com/chrisdionisius/clone-instagram-login.git
4. Task Description
   In this task, student will be implementing a clone of Instagram's home page post list using Flutter and various widgets such as StatefulWidget, Scaffold, Column, Container, and more. This exercise will help student understand how to structure a Flutter application, utilize different widgets, and build a user interface resembling Instagram's home page post list.

**Specification**

1) Clone project from https://github.com/chrisdionisius/clone-instagram-login/tree/Refactoring (make sure clone it from code-starter branch) or using the manual setup if you encounter error during cloning project, refer to Guide A.01

2) Run flutter pub get in the terminal or if you are using Microsoft Visual Studio Code you could click on **Get Package** button.

3) Using this specification make a list of some widgets below :

   1. Open post_item.dart file under directory lib\app\widgets and make sure if PostItem widget is extended from StatelessWidget

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

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

  @override
  Widget build(BuildContext context) {
    throw UnimplementedError();
  }
}
```

   2. Add this import to post_item.dart file

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

   3. Add this parameter to PostItem class

```dart
final String profileImg;
  final String name;
  final String postImg;
  final String caption;
  final bool isLoved;
  final String likedBy;
  final String viewCount;
  final String dayAgo;
  final String userPhoto;

  const PostItem({
    super.key,
    required this.profileImg,
    required this.name,
    required this.postImg,
    required this.caption,
    required this.isLoved,
    required this.likedBy,
    required this.viewCount,
    required this.dayAgo,
    required this.userPhoto,
```

```
  });
```

```dart
class PostItem extends StatelessWidget {
  final String profileImg;
  final String name;
  final String postImg;
  final String caption;
  final bool isLoved;
  final String likedBy;
  final String viewCount;
  final String dayAgo;
  final String userPhoto;

  const PostItem({
    super.key,
    required this.profileImg,
    required this.name,
    required this.postImg,
    required this.caption,
    required this.isLoved,
    required this.likedBy,
    required this.viewCount,
    required this.dayAgo,
    required this.userPhoto,
  });

  @override
  Widget build(BuildContext context) {
    throw UnimplementedError();
  }
}
```

4. Add Padding widget as a return following this specifications

| No | Widget | Property | Value |
|---|---|---|---|
| 1 | Padding | key | Key('post_item_padding') |
| | | padding | EdgeInsets.only(bottom: 10) |
| | | child | Column( key: const Key('post_item_column') |
| Column(key: const Key('post_item_column') properties : | | | |
| 2 | Column | key | Key('post_item_column') |
| | | crossAxisAlignment | CrossAxisAlignment.start |
| | | children | [] |

```dart
return Padding(

    key: const Key('post_item_padding'),
    padding: const EdgeInsets.only(bottom: 10),
    child: Column(
      key: const Key('post_item_column'),
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [],
    ),
  );
}
```

**ADDING POST'S USER INFO**

5. Check on Column widget with key `post_item_column`, add Container widget as children following this specification:

| No | Widget | Property | Value |
|----|--------|----------|-------|
| 3 | Container | key | Key('post_item_user_info_container') |
| | | padding | EdgeInsets.symmetric(vertical: 10, horizontal: 15) |
| | | margin | EdgeInsets.only(bottom: 12) |
| | | child | Row(<br>  key: const Key('post_item_user_info_row') |
| **Row(key: const Key('post_item_user_info_row') properties :** | | | |
| 4 | Row | key | Key('post_item_user_info_row') |
| | | mainAxisAlignment | MainAxisAlignment.spaceBetween |
| | | children | Container(<br>key: Key('post_item_user_profile_img_container'),<br>Expanded(<br>key: Key('post_item_user_name_expanded'),)<br>Icon(key: Key('post_item_user_more_icon')) |
| **Container(key: Key('post_item_user_profile_img_container') properties :** | | | |
| 5 | Container | key | Key('post_item_user_profile_img_container') |
| | | width | 40 |
| | | height | 40 |
| | | margin | EdgeInsets.only(right: 15) |
| | | decoration | BoxDecoration(<br>  shape: BoxShape.circle,<br>   image: DecorationImage(<br>     image: NetworkImage(profileImg),<br>     fit: BoxFit.cover,),) |
| **Expanded(key: Key('post_item_user_name_expanded')) properties :** | | | |
| 6 | Expanded | key | Key('post_item_user_name_expanded') |
| | | child | Text(key: const Key('post_item_user_name_text') |
| **Text(key: const Key('post_item_user_name_text') properties :** | | | |
| 7 | Text | key | Key('post_item_user_name_text') |
| | | value | name |
| | | style | TextStyle(<br>   color: white,<br>   fontSize: 15,<br>   fontWeight: FontWeight.w500) |
| **Icon(key: Key('post_item_user_more_icon')) properties :** | | | |
| 8 | Icon | key | Key('post_item_user_more_icon') |
| | | value | Icons.more_horiz |
| | | color | white |

```
Column(
  key: const Key('post_item_column'),
  crossAxisAlignment: CrossAxisAlignment.start,
  children: <Widget>[
  Container(
    key: const Key('post_item_user_info_container'),
```

```dart
      padding: const EdgeInsets.symmetric(vertical: 10, horizontal: 15),
    margin: const EdgeInsets.only(bottom: 12),
    child: Row(
      key: const Key('post_item_user_info_row'),
      mainAxisAlignment: MainAxisAlignment.spaceBetween,
      children: <Widget>[
        Container(
          key: const Key('post_item_user_profile_img_container'),
          width: 40,
          height: 40,
          margin: const EdgeInsets.only(right: 15),
          decoration: BoxDecoration(
            shape: BoxShape.circle,
            image: DecorationImage(
              image: NetworkImage(profileImg),
              fit: BoxFit.cover,
            ),
          ),
        ),
        Expanded(
          key: const Key('post_item_user_name_expanded'),
          child: Text(
            key: const Key('post_item_user_name_text'),
            name,
            style: const TextStyle(
              color: white,
              fontSize: 15,
              fontWeight: FontWeight.w500,
            ),
          ),
        ),
        const Icon(
          key: Key('post_item_user_more_icon'),
          Icons.more_horiz,
          color: white,
        )
      ],
    ),
  ),
)
```

**ADDING POST'S IMAGE**

6.  Still on Column widget with key `post_item_column`, add another Container widget as children following this specification:

| No | Widget | Property | Value |
|---|---|---|---|
| 9 | Container | key | Key('post_item_image_container') |
| | | height | 400 |

| | | margin | EdgeInsets.only(bottom: 10) |
|---|---|---|---|
| | | decoration | BoxDecoration(<br>        image: DecorationImage(<br>         image: NetworkImage(postImg),<br>         fit: BoxFit.cover,<br>        ),<br>        ) |

```
Column(
        key: const Key('post_item_column'),
        crossAxisAlignment: CrossAxisAlignment.start,
        children: <Widget>[
          ...
          Container(
            key: const Key('post_item_image_container'),
            height: 400,
            margin: const EdgeInsets.only(bottom: 10),
            decoration: BoxDecoration(
              image: DecorationImage(
                image: NetworkImage(postImg),
                fit: BoxFit.cover,
              ),
            ),
          ),
)
```

**ADDING POST'S ITEM ACTION BUTTONS**

7. Still on Column widget with key `post_item_column`, add another Container widget as children following this specifications :

| No | Widget | Property | Value |
|---|---|---|---|
| 10 | Container | key | Key('post_item_actions_container') |
| | | padding | EdgeInsets.fromLTRB(15, 3, 15, 0) |
| | | margin | EdgeInsets.only(bottom: 12) |
| | | child | Row(key: const Key('post_item_actions_row') |
| **Row(key: const Key('post_item_actions_row') properties :** | | | |
| 11 | Row | key | Key('post_item_actions_row') |
| | | mainAxisAlignment | MainAxisAlignment.spaceBetween |
| | | children | Row(<br>  key: const Key('post_item_actions_left_row')),<br>SvgPicture.asset(<br>  "assets/images/save_icon.svg",<br>  key: const Key('post_item_actions_save_icon'),<br>  width: 27,) |
| **Row(key: const Key('post_item_actions_left_row')) properties :** | | | |
| 12 | Row | key | Key('post_item_actions_left_row') |
| | | children | SvgPicture.asset(<br>  key: const Key('post_item_actions_love_icon'), |

| | | | width: 27<br>isLoved? "assets/images/loved_icon.svg"<br>  : "assets/images/love_icon.svg"),<br>SizedBox(width:20),<br>SvgPicture.asset(<br>  "assets/images/comment_icon.svg",<br>   key: const<br>Key('post_item_actions_comment_icon'),<br> width: 27),<br>SizedBox(width: 20),<br>SvgPicture.asset(<br>  "assets/images/message_icon.svg",<br> key: const<br>Key('post_item_actions_message_icon'),<br> width: 27), |
|---|---|---|---|

```
Column(
  key: const Key('post_item_column'),
  crossAxisAlignment: CrossAxisAlignment.start,
  children: <Widget>[
    ...
    Container(
      key: const Key('post_item_actions_container'),
      padding: const EdgeInsets.fromLTRB(15, 3, 15, 0),
      margin: const EdgeInsets.only(bottom: 12),
      child: Row(
        key: const Key('post_item_actions_row'),
        mainAxisAlignment: MainAxisAlignment.spaceBetween,
        children: <Widget>[
          Row(
            key: const Key('post_item_actions_left_row'),
            children: <Widget>[
              SvgPicture.asset(
                key: const Key('post_item_actions_love_icon'),
                isLoved
                    ? "assets/images/loved_icon.svg"
                    : "assets/images/love_icon.svg",
                width: 27,
              ),
              const SizedBox(width: 20),
              SvgPicture.asset(
                "assets/images/comment_icon.svg",
                key: const Key('post_item_actions_comment_icon'),
                width: 27,
              ),
              const SizedBox(width: 20),
              SvgPicture.asset(
                "assets/images/message_icon.svg",
                key: const Key('post_item_actions_message_icon'),
```

```
              width: 27,
            ),
          ],
        ),
        SvgPicture.asset(
          "assets/images/save_icon.svg",
          key: const Key('post_item_actions_save_icon'),
          width: 27,
        ),
      ],
    ),
  ),
),
)
```

**ADDING POST'S ITEM LIKES INFORMATION**

8.  Still on Column widget with key `post_item_column`, add another Container widget as children following this specifications :

| No | Widget | Property | Value |
|----|--------|----------|-------|
| 19 | Container | key | Key('post_item_likes_container') |
|    |        | padding | EdgeInsets.symmetric(horizontal: 15) |
|    |        | margin | EdgeInsets.only(bottom: 12) |
|    |        | child | RichText(key: const Key('post_item_likes_rich_text') |
| 20 | RichText | key | Key('post_item_likes_rich_text') |
|    |        | text | TextSpan(<br>    children: [<br>     TextSpan(<br>      text: "Liked by $likedBy and Other",<br>      style: const TextStyle(<br>       fontSize: 15,<br>       fontWeight: FontWeight.w500,<br>      ),<br>     ),<br>    ],<br>  ) |

```
Column(
      key: const Key('post_item_column'),
      crossAxisAlignment: CrossAxisAlignment.start,
      children: <Widget>[
       ...
        Container(
          key: const Key('post_item_likes_container'),
          padding: const EdgeInsets.symmetric(horizontal: 15),
          margin: const EdgeInsets.only(bottom: 12),
          child: RichText(
            key: const Key('post_item_likes_rich_text'),
            text: TextSpan(
```

```
            children: [
              TextSpan(
                text: "Liked by $likedBy and Other",
                style: const TextStyle(
                  fontSize: 15,
                  fontWeight: FontWeight.w500,
                ),
              ),
            ],
          ),
        ),
      ),
    ],
  ),
```

**ADDING POST'S CAPTION**

9. Still on Column widget with key post_item_column, add another Container widget as children following this specifications :

| No | Widget | Property | Value |
|---|---|---|---|
| 21 | Container | key | Key('post_item_caption_container') |
| | | padding | EdgeInsets.symmetric(horizontal: 15) |
| | | margin | EdgeInsets.only(bottom: 12) |
| | | child | RichText(<br> key: const Key('post_item_caption_rich_text') |
| **RichText(key: const Key('post_item_caption_rich_text') properties :** | | | |
| 22 | RichText | key | Key('post_item_caption_rich_text') |
| | | text | TextSpan(<br>  children: [<br>        TextSpan(<br>         text: "$name ",<br>         style: const TextStyle(<br>            fontSize: 15,<br>            fontWeight: FontWeight.w700)),<br>        TextSpan(<br>         text: caption,<br>         style: const TextStyle(<br>            fontSize: 15,<br>            fontWeight: FontWeight.w500),<br>        ),<br>      ],<br>    ) |

```
Column(
    key: const Key('post_item_column'),
    crossAxisAlignment: CrossAxisAlignment.start,
    children: <Widget>[
      ...
```

```
    Container(
        key: const Key('post_item_caption_container'),
        padding: const EdgeInsets.symmetric(horizontal: 15),
        margin: const EdgeInsets.only(bottom: 12),
        child: RichText(
          key: const Key('post_item_caption_rich_text'),
          text: TextSpan(
            children: [
              TextSpan(
                text: "$name ",
                style: const TextStyle(
                    fontSize: 15, fontWeight: FontWeight.w700),
              ),
              TextSpan(
                text: caption,
                style: const TextStyle(
                    fontSize: 15, fontWeight: FontWeight.w500),
              ),
            ],
          ),
        ),
      ),
]),
```

**ADDING POST'S COMMENTS COUNT**

10. Still on Column widget with key post_item_column, add another Container widget as children following this specifications :

| No | Widget | Property | Value |
|----|--------|----------|-------|
| 23 | Container | key | Key('post_item_view_comments_container') |
|    |        | padding | EdgeInsets.symmetric(horizontal: 15) |
|    |        | margin | EdgeInsets.only(bottom: 12) |
|    |        | child | Text(key: const Key('post_item_view_comments_text') |
| 24 | Text   | key | Key('post_item_view_comments_text') |
|    |        | value | "View $viewCount comments" |
|    |        | style | TextStyle(<br>    color: white.withOpacity(0.5),<br>    fontSize: 15,<br>    fontWeight: FontWeight.w500)) |

```
Column(
      key: const Key('post_item_column'),
      crossAxisAlignment: CrossAxisAlignment.start,
      children: <Widget>[
        ...
        Container(
          key: const Key('post_item_view_comments_container'),
```

```
            padding: const EdgeInsets.symmetric(horizontal: 15),
            margin: const EdgeInsets.only(bottom: 12),
            child: Text(
              key: const Key('post_item_view_comments_text'),
              "View $viewCount comments",
              style: TextStyle(
                  color: white.withOpacity(0.5),
                  fontSize: 15,
                  fontWeight: FontWeight.w500),
            ),
          ),
        ]),
),
```

**ADDING POST'S ADD-COMMENTS**

11. Still on Column widget with key post_item_column, add another Container widget as children following this specifications :

| No | Widget | Property | Value |
|----|--------|----------|-------|
| 24 | Container | key | Key('post_item_add_comment_container') |
|    |           | padding | EdgeInsets.symmetric(horizontal: 15) |
|    |           | margin | EdgeInsets.only(bottom: 12) |
|    |           | child | Row(<br>  key: const Key('post_item_add_comment_row') |
| **Row(key: const Key('post_item_add_comment_row') properties :** | | | |
| 25 | Row | key | Key('post_item_add_comment_row') |
|    |     | mainAxisAlignment | MainAxisAlignment.spaceBetween |
|    |     | children | Row(<br>  key: const<br>Key('post_item_add_comment_left_row'),)<br>Row(<br>  key: const<br>Key('post_item_add_comment_right_row'),) |
| **Row(key: const Key('post_item_add_comment_left_row') properties :** | | | |
| 26 | Row | key | Key('post_item_add_comment_left_row') |
|    |     | children | Container(<br>  key:<br>Key('post_item_add_comment_avatar_container'))<br>Text (key:Key('post_item_add_comment_text')) |
| **Container(key:  Key('post_item_add_comment_avatar_container')) properties :** | | | |
| 27 | Container | key | Key('post_item_add_comment_avatar_container') |
|    |           | width | 30 |
|    |           | height | 30 |
|    |           | margin | EdgeInsets.only(right: 15) |
|    |           | decoration | BoxDecoration(<br>   shape: BoxShape.circle,<br>   image: DecorationImage(<br>      image: NetworkImage(userPhoto),<br>      fit: BoxFit.cover)) |
| **Text (key:Key('post_item_add_comment_text')) properties :** | | | |

| 28 | Text | key | Key('post_item_add_comment_text') |
| | | value | "Add a comment..." |
| | | style | TextStyle( color: white.withOpacity(0.5), fontSize: 15, fontWeight: FontWeight.w500) |

**Row(key: const Key('post_item_add_comment_right_row')) properties :**

| 29 | Row | key | Key('post_item_add_comment_right_row') |
| | | children | Text(key: Key('post_item_add_laugh_emoji_text'), SizedBox(width: 10), Text(key: Key('post_item_add_love_emoji_text')) SizedBox(width: 10), Icon(key: Key('post_item_add_circle_icon')) |

**Text(key: Key('post_item_add_laugh_emoji_text')) properties :**

| 30 | Text | key | Key('post_item_add_laugh_emoji_text') |
| | | value | "😂" |
| | | style | TextStyle(fontSize: 20) |

**Text(key: Key('post_item_add_love_emoji_text')) properties :**

| 32 | Text | key | Key('post_item_add_love_emoji_text') |
| | | value | "😍" |
| | | style | TextStyle(fontSize: 20) |

**Icon(key: Key('post_item_add_circle_icon')) properties :**

| 34 | Icon | key | Key('post_item_add_circle_icon') |
| | | value | Icons.add_circle |
| | | color | white.withOpacity(0.5) |
| | | size | 18 |

```
Column(
      key: const Key('post_item_column'),
      crossAxisAlignment: CrossAxisAlignment.start,
      children: <Widget>[
        ...
       Container(
          key: const Key('post_item_add_comment_container'),
          padding: const EdgeInsets.symmetric(horizontal: 15),
          margin: const EdgeInsets.only(bottom: 12),
          child: Row(
            key: const Key('post_item_add_comment_row'),
            mainAxisAlignment: MainAxisAlignment.spaceBetween,
            children: <Widget>[
              Row(
                key: const Key('post_item_add_comment_left_row'),
                children: <Widget>[
                  Container(
                    key: const
Key('post_item_add_comment_avatar_container'),
                    width: 30,
                    height: 30,
```

```dart
                  margin: const EdgeInsets.only(right: 15),
                  decoration: BoxDecoration(
                    shape: BoxShape.circle,
                    image: DecorationImage(
                      image: NetworkImage(userPhoto),
                      fit: BoxFit.cover,
                    ),
                  ),
                ),
                Text(
                  key: const Key('post_item_add_comment_text'),
                  "Add a comment...",
                  style: TextStyle(
                    color: white.withOpacity(0.5),
                    fontSize: 15,
                    fontWeight: FontWeight.w500,
                  ),
                ),
              ],
            ),
            Row(
              key: const Key('post_item_add_comment_right_row'),
              children: <Widget>[
                const Text(
                  key: Key('post_item_add_laugh_emoji_text'),
                  "😂",
                  style: TextStyle(fontSize: 20),
                ),
                const SizedBox(width: 10),
                const Text(
                  key: Key('post_item_add_love_emoji_text'),
                  "😍",
                  style: TextStyle(fontSize: 20),
                ),
                const SizedBox(width: 10),
                Icon(
                  key: const Key('post_item_add_circle_icon'),
                  Icons.add_circle,
                  color: white.withOpacity(0.5),
                  size: 18,
                )
              ],
            )
          ],
        ),
      ),
]),
```

**ADDING POST'S DAY AGO**

12. Still on Column widget with key post_item_column, add Padding widget as children following this specifications :

| No | Widget | Property | Value |
|---|---|---|---|
| 35 | Padding | key | Key('post_item_day_ago_padding') |
| | | padding | EdgeInsets.symmetric(horizontal: 15) |
| | | child | Text(key: const Key('post_item_day_ago_text') |
| **Text(key: const Key('post_item_day_ago_text') properties :** | | | |
| 36 | Text | key | Key('post_item_day_ago_text') |
| | | value | dayAgo |
| | | style | TextStyle( |
| | | |   color: white.withOpacity(0.5), |
| | | |   fontSize: 15, |
| | | |   fontWeight: FontWeight.w500) |

```dart
Column(
  key: const Key('post_item_column'),
  crossAxisAlignment: CrossAxisAlignment.start,
  children: <Widget>[
    ...
    Padding(
      key: const Key('post_item_day_ago_padding'),
      padding: const EdgeInsets.symmetric(horizontal: 15),
      child: Text(
        key: const Key('post_item_day_ago_text'),
        dayAgo,
        style: TextStyle(
          color: white.withOpacity(0.5),
          fontSize: 15,
          fontWeight: FontWeight.w500,
        ),
      ),
    )
  ])
```

13. Move to home_page.dart file and add this import so that PostItem widget will be accessible from this page

```dart
import 'package:example_widget_testing/app/widgets/post_item.dart';
```

14. Move to Column widget with key home_page_column, add another Column widget as it's children following this specifications:

| No | Widget | Property | Value |
|---|---|---|---|
| 15 | Column | Key | Key('posts_column') |
| | | children | List.generate( |
| | | |   widget.posts.length, |
| | | |   (index) { |
| | | |    return PostItem( |
| | | |     key: Key('post_item_$index'), |

| | | | |
|---|---|---|---|
| | | | postImg: widget.posts[index]['postImg'], |
| | | | profileImg: widget.posts[index]['profileImg'], |
| | | | name: widget.posts[index]['name'], |
| | | | caption: widget.posts[index]['caption'], |
| | | | isLoved: widget.posts[index]['isLoved'], |
| | | | viewCount: widget.posts[index]['commentCount'], |
| | | | likedBy: widget.posts[index]['likedBy'], |
| | | | dayAgo: widget.posts[index]['timeAgo'], |
| | | | userPhoto: profile.profilePic!, |
| | | | ); |
| | | | }, |
| | | | ) |

```dart
Column(
  key: const Key('home_page_column'),
  children: <Widget>[
    ...
    Column(
      key: const Key('posts_column'),
      children: List.generate(
        widget.posts.length,
        (index) {
          return PostItem(
            key: Key('post_item_$index'),
            postImg: widget.posts[index]['postImg'],
            profileImg: widget.posts[index]['profileImg'],
            name: widget.posts[index]['name'],
            caption: widget.posts[index]['caption'],
            isLoved: widget.posts[index]['isLoved'],
            viewCount: widget.posts[index]['commentCount'],
            likedBy: widget.posts[index]['likedBy'],
            dayAgo: widget.posts[index]['timeAgo'],
            userPhoto: profile.profilePic!,
          );
        },
      ),
    )
  ],
)
```

15. Run the project and check if there's no error it will return login page similar like this.
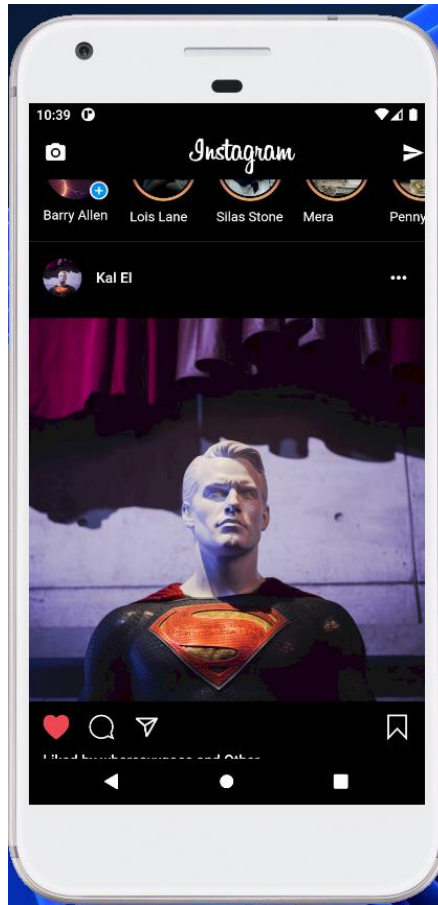
# Testing

1) Open home_page_test.dart file under test folder
2) Find main method it will look similar like this

```
24
      Run | Debug
25    void main() {
        Run | Debug
26      testWidgets('Check if home page is present', (WidgetTester tester) async {
27        FlutterError.onError = ignoreOverflowErrors;
28
29        await mockNetworkImagesFor(
30          () => tester.pumpWidget(
31            MaterialApp(
32              home: HomePage(
33                  posts: posts, profileData: profileJson, stories: stories), // HomePage
34            ), // MaterialApp
```

3) Click Run
4) If there's an error while running the test, especially around line 1013 onward simply press close to remove the warning

```
      Run | Debug
1013 >  testWidgets('Check if Bottom Navbar is present', (WidgetTester tester) async {      'package:flutter_t

 'package:flutter_test/src/binding.dart': Failed assertion: line 903 pos 14: '_pendingExceptionDetails != null': A ...  Check if ...  ↑ ↓ ⟳ | 🗑 ☐ ×
      or had unexpected additional errors that it could not handle. Typically, this is caused by using expect
      () before restoring FlutterError.onError.
      dart:core                                        _AssertionError._throwNew
      package:flutter_test/src/binding.dart 903:14     TestWidgetsFlutterBinding._runTest.
      handleUncaughtError
      package:flutter_test/src/binding.dart 908:9      TestWidgetsFlutterBinding._runTest.<fn>
      dart:async                                       CustomZone.runUnarv
```

5) At the moment not all test are passed since we've not finished implementing home page, just make sure these 7 test are passed

```
✓ Check if home page is present
✓ Check if Home page Appbar is present
✓ Check if Story is present
✓ Check if StoryItem rendered correctly
✓ Check if divider is present
✓ Check if Posts Column is present
Ignored Error
✓ Check if PostItem rendered correctly
```

6) If there is an error try to check the message and fix the error usually It's because of wrong key name or missing property of specific widget

**FULL CODE**

**PostItem**

```dart
import 'package:example_widget_testing/core/theme/colors.dart';
import 'package:flutter/material.dart';
import 'package:flutter_svg/flutter_svg.dart';
// import 'package:line_icons/line_icons.dart';

class PostItem extends StatelessWidget {
  final String profileImg;
  final String name;
  final String postImg;
  final String caption;
  final bool isLoved;
  final String likedBy;
  final String viewCount;
  final String dayAgo;
  final String userPhoto;

  const PostItem({
    super.key,
    required this.profileImg,
    required this.name,
    required this.postImg,
    required this.caption,
    required this.isLoved,
    required this.likedBy,
    required this.viewCount,
    required this.dayAgo,
    required this.userPhoto,
  });

  @override
  Widget build(BuildContext context) {
    return Padding(
      key: const Key('post_item_padding'),
      padding: const EdgeInsets.only(bottom: 10),
      child: Column(
        key: const Key('post_item_column'),
        crossAxisAlignment: CrossAxisAlignment.start,
        children: <Widget>[
          Container(
            key: const Key('post_item_user_info_container'),
            padding: const EdgeInsets.symmetric(vertical: 10, horizontal: 15),
            margin: const EdgeInsets.only(bottom: 12),
            child: Row(
              key: const Key('post_item_user_info_row'),
              mainAxisAlignment: MainAxisAlignment.spaceBetween,
```

```dart
            children: <Widget>[
              Container(
                key: const Key('post_item_user_profile_img_container'),
                width: 40,
                height: 40,
                margin: const EdgeInsets.only(right: 15),
                decoration: BoxDecoration(
                  shape: BoxShape.circle,
                  image: DecorationImage(
                    image: NetworkImage(profileImg),
                    fit: BoxFit.cover,
                  ),
                ),
              ),
              Expanded(
                key: const Key('post_item_user_name_expanded'),
                child: Text(
                  key: const Key('post_item_user_name_text'),
                  name,
                  style: const TextStyle(
                    color: white,
                    fontSize: 15,
                    fontWeight: FontWeight.w500,
                  ),
                ),
              ),
              const Icon(
                key: Key('post_item_user_more_icon'),
                Icons.more_horiz,
                color: white,
              )
            ],
          ),
        ),
        Container(
          key: const Key('post_item_image_container'),
          height: 400,
          margin: const EdgeInsets.only(bottom: 10),
          decoration: BoxDecoration(
            image: DecorationImage(
              image: NetworkImage(postImg),
              fit: BoxFit.cover,
            ),
          ),
        ),
        Container(
          key: const Key('post_item_actions_container'),
          padding: const EdgeInsets.fromLTRB(15, 3, 15, 0),
```

```dart
        margin: const EdgeInsets.only(bottom: 12),
        child: Row(
          key: const Key('post_item_actions_row'),
          mainAxisAlignment: MainAxisAlignment.spaceBetween,
          children: <Widget>[
            Row(
              key: const Key('post_item_actions_left_row'),
              children: <Widget>[
                SvgPicture.asset(
                  key: const Key('post_item_actions_love_icon'),
                  isLoved
                      ? "assets/images/loved_icon.svg"
                      : "assets/images/love_icon.svg",
                  width: 27,
                ),
                const SizedBox(
                    key: Key('post_item_actions_left_row_sized_box_1'),
                    width: 20),
                SvgPicture.asset(
                  "assets/images/comment_icon.svg",
                  key: const Key('post_item_actions_comment_icon'),
                  width: 27,
                ),
                const SizedBox(
                    key: Key('post_item_actions_left_row_sized_box_2'),
                    width: 20),
                SvgPicture.asset(
                  "assets/images/message_icon.svg",
                  key: const Key('post_item_actions_message_icon'),
                  width: 27,
                ),
              ],
            ),
            SvgPicture.asset(
              "assets/images/save_icon.svg",
              key: const Key('post_item_actions_save_icon'),
              width: 27,
            ),
          ],
        ),
      ),
      Container(
        key: const Key('post_item_likes_container'),
        padding: const EdgeInsets.symmetric(horizontal: 15),
        margin: const EdgeInsets.only(bottom: 12),
        child: RichText(
          key: const Key('post_item_likes_rich_text'),
          text: TextSpan(
```

```dart
              children: [
                TextSpan(
                  text: "Liked by $likedBy and Other",
                  style: const TextStyle(
                    fontSize: 15,
                    fontWeight: FontWeight.w500,
                  ),
                ),
              ],
            ),
          ),
        ),
        Container(
          key: const Key('post_item_caption_container'),
          padding: const EdgeInsets.symmetric(horizontal: 15),
          margin: const EdgeInsets.only(bottom: 12),
          child: RichText(
            key: const Key('post_item_caption_rich_text'),
            text: TextSpan(
              children: [
                TextSpan(
                  text: "$name ",
                  style: const TextStyle(
                      fontSize: 15, fontWeight: FontWeight.w700),
                ),
                TextSpan(
                  text: caption,
                  style: const TextStyle(
                      fontSize: 15, fontWeight: FontWeight.w500),
                ),
              ],
            ),
          ),
        ),
        Container(
          key: const Key('post_item_view_comments_container'),
          padding: const EdgeInsets.symmetric(horizontal: 15),
          margin: const EdgeInsets.only(bottom: 12),
          child: Text(
            key: const Key('post_item_view_comments_text'),
            "View $viewCount comments",
            style: TextStyle(
                color: white.withOpacity(0.5),
                fontSize: 15,
                fontWeight: FontWeight.w500),
          ),
        ),
        Container(
```

```dart
              key: const Key('post_item_add_comment_container'),
              padding: const EdgeInsets.symmetric(horizontal: 15),
              margin: const EdgeInsets.only(bottom: 12),
              child: Row(
                key: const Key('post_item_add_comment_row'),
                mainAxisAlignment: MainAxisAlignment.spaceBetween,
                children: <Widget>[
                  Row(
                    key: const Key('post_item_add_comment_left_row'),
                    children: <Widget>[
                      Container(
                        key: const
Key('post_item_add_comment_avatar_container'),
                        width: 30,
                        height: 30,
                        margin: const EdgeInsets.only(right: 15),
                        decoration: BoxDecoration(
                          shape: BoxShape.circle,
                          image: DecorationImage(
                            image: NetworkImage(userPhoto),
                            fit: BoxFit.cover,
                          ),
                        ),
                      ),
                      Text(
                        key: const Key('post_item_add_comment_text'),
                        "Add a comment...",
                        style: TextStyle(
                          color: white.withOpacity(0.5),
                          fontSize: 15,
                          fontWeight: FontWeight.w500,
                        ),
                      ),
                    ],
                  ),
                  Row(
                    key: const Key('post_item_add_comment_right_row'),
                    children: <Widget>[
                      const Text(
                        key: Key('post_item_add_laugh_emoji_text'),
                        "😂",
                        style: TextStyle(fontSize: 20),
                      ),
                      const SizedBox(width: 10),
                      const Text(
                        key: Key('post_item_add_love_emoji_text'),
                        "😎",
                        style: TextStyle(fontSize: 20),
```

```
                ),
                const SizedBox(width: 10),
                Icon(
                  key: const Key('post_item_add_circle_icon'),
                  Icons.add_circle,
                  color: white.withOpacity(0.5),
                  size: 18,
                )
              ],
            )
          ],
        ),
      ),
      Padding(
        key: const Key('post_item_day_ago_padding'),
        padding: const EdgeInsets.symmetric(horizontal: 15),
        child: Text(
          key: const Key('post_item_day_ago_text'),
          dayAgo,
          style: TextStyle(
            color: white.withOpacity(0.5),
            fontSize: 15,
            fontWeight: FontWeight.w500,
          ),
        ),
      )
    ],
  ),
);
  }
}
```

**HomePage**

```
import
'package:example_widget_testing/app/modules/home/components/user_story.dart';
import 'package:example_widget_testing/app/widgets/post_item.dart';
import
'package:example_widget_testing/app/modules/home/components/story_item.dart';
import 'package:flutter/material.dart';


import '../../../core/theme/colors.dart';
import '../../data/models/profile.dart';
import '../../widgets/bottom_navbar.dart';


class HomePage extends StatefulWidget {
  const HomePage({
```

```dart
      super.key,
      required this.posts,
      required this.stories,
      required this.profileData,
    });
    final List posts;
    final List stories;
    final Map<String, dynamic> profileData;

    @override
    HomePageState createState() => HomePageState();
}

class HomePageState extends State<HomePage> {
  @override
  Widget build(BuildContext context) {
    final Profile profile = Profile.fromJson(widget.profileData);
    return Scaffold(
      key: const Key('home_page_scaffold'),
      backgroundColor: Colors.black,
      appBar: AppBar(
        key: const Key("home_page_appbar"),
        backgroundColor: Colors.black,
        leading: const Icon(
          key: Key('home_page_camera_icon'),
          Icons.camera_alt,
        ),
        title: const Center(
          key: Key('home_page_title_center'),
          child: Text(
            key: Key('home_page_title_text'),
            "Instagram",
            style: TextStyle(fontFamily: 'Billabong', fontSize: 35),
          ),
        ),
        actions: const <Widget>[
          Icon(key: Key('home_page_send_icon'), Icons.send),
        ],
      ),
      body: SingleChildScrollView(
        key: const Key('home_page_single_child_scroll_view'),
        child: Column(
          key: const Key('home_page_column'),
          children: <Widget>[
            SingleChildScrollView(
              key: const Key('stories_scroll_view'),
              scrollDirection: Axis.horizontal,
              child: Row(
```

```dart
              key: const Key('stories_row'),
              children: <Widget>[
                const UserStory(key: Key('user_story')),
                Row(
                  key: const Key('following_stories_row'),
                  children: List.generate(
                    widget.stories.length,
                    (index) {
                      return StoryItem(
                        key: Key('story_item_$index'),
                        img: widget.stories[index]['img'],
                        name: widget.stories[index]['name'],
                      );
                    },
                  ),
                ),
              ],
            ),
          ),
          Divider(
            key: const Key('home_page_divider'),
            color: white.withOpacity(0.3),
          ),
          Column(
            key: const Key('posts_column'),
            children: List.generate(
              widget.posts.length,
              (index) {
                return PostItem(
                  key: Key('post_item_$index'),
                  postImg: widget.posts[index]['postImg'],
                  profileImg: widget.posts[index]['profileImg'],
                  name: widget.posts[index]['name'],
                  caption: widget.posts[index]['caption'],
                  isLoved: widget.posts[index]['isLoved'],
                  viewCount: widget.posts[index]['commentCount'],
                  likedBy: widget.posts[index]['likedBy'],
                  dayAgo: widget.posts[index]['timeAgo'],
                  userPhoto: profile.profilePic!,
                );
              },
            ),
          )
        ],
      ),
    ),
  );
}
```

```
}
```