

## EXPERIMENT NO:2

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**Aim:** To design Flutter UI by including common widgets.

### Theory:

#### 1. Introduction

Flutter is an open-source UI development framework created by Google that enables developers to build cross-platform applications using a single codebase. It follows a widget-based architecture, where every UI element is represented as a widget. Widgets in Flutter are categorized into two types: StatelessWidget (which do not change dynamically) and StatefulWidget (which maintain dynamic states).

#### 2. Objective

- Understand the role of widgets in Flutter UI development.
- Explore different types of common widgets and their functionalities.
- Learn how to structure a UI effectively using widgets.

#### 3. Importance of Widgets in Flutter

- Composable – Multiple widgets can be combined to build a complete UI.
- Reusable – The same widget can be used in different parts of the application.
- Customizable – Widgets offer extensive customization options to achieve the desired look and feel.
- Responsive – Widgets adapt to different screen sizes, making the UI flexible across devices.

#### 4. Commonly Used Widgets in Flutter

Flutter provides a wide range of widgets to design modern UIs.

1. Structural Widgets – Define the layout and structure of the UI (e.g., Container, Column, Row).
2. Interactive Widgets – Handle user input and interaction (e.g., Button, TextField, GestureDetector).
3. Styling Widgets – Enhance the visual appearance (e.g., Padding, Align, Card).
4. Scrolling Widgets – Enable scrolling functionality (e.g., ListView, GridView).

#### 5. Implementation of UI in Flutter

Designing a UI in Flutter involves:

1. Defining the widget tree – A hierarchical arrangement of widgets that form the UI structure.
2. Using layout widgets – Arranging elements using **Column**, **Row**, **Stack**, and other layout-based widgets.
3. Adding interactivity – Incorporating buttons, text fields, and gesture detectors for user interaction.

4. Applying styling and theming – Customizing widgets with colors, padding, borders, and shadows to enhance aesthetics.

**Code:**

**Main.Dart**

```
import 'package:flutter/material.dart';
import 'package:flutter_bloc/flutter_bloc.dart';
import 'package:google_fonts/google_fonts.dart';
import 'package:netflix_clone/application/downloads/downloads_bloc.dart';
import 'package:netflix_clone/core/colors/colors.dart';
import 'package:netflix_clone/domain/core/di/injectable.dart';
import 'package:netflix_clone/presentation/main_page/widgets/screen_main_page.dart';
import 'package:netflix_clone/presentation/splash/screen_splash.dart';
```

```
import 'application/description/description_bloc.dart';
import 'application/fast_laugh/fast_laugh_bloc.dart';
import 'application/home/home_bloc.dart';
import 'application/hot_and_new/hot_and_new_bloc.dart';
import 'application/search/search_bloc.dart';
import 'presentation/onStartPage/screen_onboarding.dart';
```

```
Future<void> main() async {
  WidgetsFlutterBinding.ensureInitialized();
  await configureInjection();
  runApp(const MyApp());
}
```

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

  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MultiBlocProvider(
      providers: [
        BlocProvider(
          create: (ctx) => getIt<DownloadsBloc>(),
        ),
        BlocProvider(
          create: (ctx) => getIt<SearchBloc>(),
        ),
        BlocProvider(
          create: (ctx) => getIt<FastLaughBloc>(),
        ),
      ],
    );
  }
}
```

```

    BlocProvider(
      create: (ctx) => getIt<HotAndNewBloc>(),
    ),
    BlocProvider(
      create: (ctx) => getIt<HomeBloc>(),
    ),
    BlocProvider(
      create: (ctx) => getIt<DescriptionBloc>(),
    )
  ],
  child: MaterialApp(
    title: 'Flutter Demo',
    theme: ThemeData(
      appBarTheme: const AppBarTheme(backgroundColor: Colors.black),
      primarySwatch: Colors.blue,
      backgroundColor: Colors.black,
      scaffoldBackgroundColor: backgrounndColor,
      fontFamily: GoogleFonts.montserrat().fontFamily,
      textTheme: const TextTheme(
        bodyText1: TextStyle(color: Colors.white),
        bodyText2: TextStyle(color: Colors.white))),
    home: const ScreenSplash() ,
  ),
);
}
}

```

### **Screen\_home.dart:**

```

import 'dart:developer';
import 'dart:ffi';

import 'package:flutter/material.dart';
import 'package:flutter/rendering.dart';
import 'package:flutter_bloc/flutter_bloc.dart';
import 'package:netflix_clone/application/home/home_bloc.dart';
import 'package:netflix_clone/core/colors/colors.dart';
import 'package:netflix_clone/core/constants.dart';
import 'package:netflix_clone/presentation/home/widget/background_card.dart';
import 'package:netflix_clone/presentation/home/widget/custom_button_widget.dart';
import 'package:netflix_clone/presentation/home/widget/number_card.dart';
import 'package:netflix_clone/presentation/home/widget/number_title_card.dart';
import 'package:netflix_clone/presentation/widget/main_title.dart';
import 'package:netflix_clone/presentation/widget/main_title_card.dart';

```

```

// ignore: must_be_immutable
class ScreenHome extends StatelessWidget {
  ScreenHome({Key? key}) : super(key: key);

  ValueNotifier<bool> scrollNotifier = ValueNotifier(true);
  @override
  Widget build(BuildContext context) {
    WidgetsBinding.instance.addPostFrameCallback((timeStamp) {
      BlocProvider.of<HomeBloc>(context).add(const GetHomeScreenData());
    });
    return Scaffold(
      body: ValueListenableBuilder(
        valueListenable: scrollNotifier,
        builder: (BuildContext context, index2, _) {
          return NotificationListener<UserScrollNotification>(
            onNotification: (notification) {
              final ScrollDirection direction = notification.direction;
              if (direction == ScrollDirection.reverse) {
                scrollNotifier.value = false;
              } else if (direction == ScrollDirection.forward) {
                scrollNotifier.value = true;
              }
              return true;
            },
          ),
      child: RefreshIndicator(
        onRefresh: () async {
          BlocProvider.of<HomeBloc>(context)
            .add(const GetHomeScreenData());
        },
        child: Stack(
          children: [
            BlocBuilder<HomeBloc, HomeState>(
              builder: (context, state) {
                if (state.isLoading) {
                  return const Center(
                    child: CircularProgressIndicator(
                      strokeWidth: 2,
                    ),
                  );
                } else if (state.hasError) {
                  return const Center(
                    child: Text(
                      "error while getting data",
                      style: TextStyle(color: kwhiteColor),

```

```

    ));
}
// released past year
final _releasedPastYear =
    state.pastYearMovieList.map((m) {
        return '$imageAppendUrl${m.posterPath}';
    }).toList();
// get id pase year
final _releasedPastYearId =
    state.pastYearMovieList.map((m) {
        return m.id;
    }).toList();
// _releasedPastYearId.shuffle();
// trending
final _trending = state.trendingMovieList.map((m) {
    return '$imageAppendUrl${m.posterPath}';
}).toList();
_trending.shuffle();
// get id trending
final _trendingId = state.trendingMovieList.map((m) {
    return m.id;
}).toList();
_trendingId.shuffle();
// trendse drama
final _trendse = state.tenseDramaMovieList.map((m) {
    return '$imageAppendUrl${m.posterPath}';
}).toList();
_trendse.shuffle();
// get id trendse
final _trendsId = state.tenseDramaMovieList.map((m) {
    return m.id;
}).toList();
// south indian movie
final _southIndia =
    state.southIndianMovieList.map((m) {
        return '$imageAppendUrl${m.posterPath}';
    }).toList();
// get id pase year
final _southIndiaId =
    state.southIndianMovieList.map((m) {
        return m.id;
    }).toList();
// tv shows
final _top10tvShows = state.trendingTvList.map((m) {

```

```

        return '$imageAppendUrl${m.posterPath}';
    }).toList();
    // get id pase year
    final _top10tvShowsId = state.trendingTvList.map((m) {
        return m.id;
    }).toList();
    print(state.trendingMovieList.length);
    return ListView(
      children: [
        const BackgroundCard(),
        kHeight,
        MainTitleCard(
          id: _releasedPastYearId,
          title: "Released in the past year",
          posterList: _releasedPastYear,
        ),
        kHeight,
        MainTitleCard(
          id: _trendingId,
          title: "Trending Now",
          posterList: _trending,
        ),
        kHeight,
        NumberTitleCard(
          posterList: _top10tvShows,
          title: "Top 10 TV shows in india today",
        ),
        kHeight,
        MainTitleCard(
          id: _trendsId,
          title: "Tense Dramas",
          posterList: _trendse,
        ),
        kHeight,
        MainTitleCard(
          id: _southIndiaId,
          title: "South Indian Cinema",
          posterList: _southIndia,
        ),
      ],
    );
  },
),
scrollNotifier.value == true

```

```

? AnimatedContainer(
  duration: const Duration(milliseconds: 1000),
  width: double.infinity,
  height: 90,
  color: Colors.black.withOpacity(0.2),
  child: Column(
    children: [
      Row(
        children: [
          Image.network(

```

```

'https://cdn-images-1.medium.com/max/1200/1*ty4NvNrGg4ReETxqU2N3Og.png',
        width: 60,
        height: 60,
      ),
      const Spacer(),
      const Icon(
        Icons.cast,
        size: 30,
        color: kwhiteColor,
      ),
      kWidth,
      Container(
        color: Colors.blue,
        width: 30,
        height: 30,
      ),
      kWidth
    ],
  ),
  Row(
    mainAxisAlignment:
      MainAxisAlignment.spaceEvenly,
    children: const [
      Text(
        "TV Shows",
        style: kHomeTitleText,
      ),
      Text(
        "Movies",
        style: kHomeTitleText,
      ),
      Text(
        "Categories",

```

```

                style: kHomeTitleText,
            )
        ],
    ),
],
),
)
: kHeight
],
),
),
);
}));
}
}

```

### **Main\_cart.dart:**

```

import 'package:flutter/material.dart';
import 'package:flutter_bloc/flutter_bloc.dart';
import 'package:netflix_clone/core/constants.dart';
import '../application/description/description_bloc.dart';
import '../decriptions/Screen_decription.dart';

```

```

class MainCard extends StatelessWidget {
  final String imageUrl;
  const MainCard({
    Key? key,
    required this.imageUrl,
    required this.id,
  }) : super(key: key);
  final int id;
  @override
  Widget build(BuildContext context) {
    return Padding(
      padding: const EdgeInsets.symmetric(horizontal: 10),
      child: GestureDetector(
        onTap: () {
          print("movie id $id");
          Navigator.push(
            context,
            MaterialPageRoute(
              builder: (ctx) => ScreenDescription(
                id: id,
              ),
            ),
          );
        },
      ),
    );
  }
}

```



```

    ),
  );
},
child: Container(
  width: 130,
  height: 250,
  decoration: BoxDecoration(
    borderRadius: kRadius10,
    image: DecorationImage(
      fit: BoxFit.fill,
      image: NetworkImage(imageUrl),
    ),
  ),
),
),
),
);
}
}

```

#### **Main\_title.dart:**

```

import 'package:flutter/material.dart';

class MainTitle extends StatelessWidget {
  const MainTitle({Key? key, required this.title}) : super(key: key);

  final String title;
  @override
  Widget build(BuildContext context) {
    return Text(
      title,
      style: const TextStyle(fontSize: 22, fontWeight: FontWeight.bold),
    );
  }
}

```

#### **Main\_title\_card.dart:**

```

import 'package:flutter/material.dart';
import 'package:netflix_clone/core/constants.dart';
import 'package:netflix_clone/presentation/widget/main_card.dart';
import 'package:netflix_clone/presentation/widget/main_title.dart';

class MainTitleCard extends StatelessWidget {
  const MainTitleCard({

```

```

    Key? key,
    required this.title,
    required this.posterList,
    required this.id,
  }) : super(key: key);
  final String title;
  final List<String?> posterList;
  final List<int?> id;
  @override
  Widget build(BuildContext context) {
    return Column(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        MainTitle(title: title),
        kHeight,
        LimitedBox(
          maxHeight: 200,
          child: ListView(
            scrollDirection: Axis.horizontal,
            children: List.generate(
              posterList.length,
              (index) => MainCard(
                id: id[index]!,
                imageUrl: posterList[index]!,
              )),
          ),
        ],
      );
  }
}

```

### **Video\_widget.dart:**

```

import 'package:flutter/material.dart';
import 'package:netflix_clone/core/colors/colors.dart';
import 'package:netflix_clone/core/constants.dart';
import 'package:netflix_clone/presentation/search/widget/search_idel.dart';

class VideoWidget extends StatelessWidget {
  const VideoWidget({

```

```

    Key? key,
    required this.imageUrl,
  }) : super(key: key);

final String imageUrl;
@override
Widget build(BuildContext context) {
  return Stack(
    children: [
      SizedBox(
        width: double.infinity,
        height: 200,
        child: Image.network(
          imageUrl,
          fit: BoxFit.cover,
          loadingBuilder:
            (BuildContext _, Widget child, ImageChunkEvent? progress) {
              if (progress == null) {
                return child;
              } else {
                return const Center(
                  child: CircularProgressIndicator(
                    strokeWidth: 2,
                  ));
              }
            },
        errorBuilder: (BuildContext _, Object a, StackTrace? trace) {
          return const Center(
            child: Icon(
              Icons.wifi,
              color: kwhiteColor,
            ));
        },
      ),
    ],
  ),
);

```

#### **App\_bar\_widget.dart:**

```

import 'package:flutter/material.dart';
import 'package:google_fonts/google_fonts.dart';
import 'package:netflix_clone/core/colors/colors.dart';
import 'package:netflix_clone/core/constants.dart';

class AppBarWidget extends StatelessWidget {
  const AppBarWidget({Key? key, required this.title}) : super(key: key);

```

```

final String title;
@override
Widget build(BuildContext context) {
  return Row(
    children: [
      kWidth,
      Text(
        title,
        style: const TextStyle(fontSize: 30, fontWeight: FontWeight.bold),
      ),
      const Spacer(),
      const Icon(
        Icons.cast,
        size: 30,
        color: kwhiteColor,
      ),
      kWidth,
      Container(
        color: Colors.blue,
        width: 30,
        height: 30,
      ),
      kWidth
    ],
  );
}
}

```

Home\_bloc.dart:

```

import 'package:bloc/bloc.dart';
import 'package:freezed_annotation/freezed_annotation.dart';
import 'package:injectable/injectable.dart';
import 'package:netflix_clone/domain/core/failures/main_failure.dart';
import 'package:netflix_clone/domain/new_and_hot/hot_and_new_service.dart';

import '../domain/new_and_hot/model/discover.dart';

part 'home_event.dart';
part 'home_state.dart';
part 'home_bloc.freezed.dart';

```

```

@injectable
class HomeBloc extends Bloc<HomeEvent, HomeState> {
  final HotAndNewService _homeService;

```

```

HomeBloc(this._homeService) : super(HomeState.initial()) {
  // get home screendata
  on<GetHomeScreenData>((event, emit) async {
    // set loading to ui
    emit(state.copyWith(isLoading: true, hasError: false));
    // // get datat
    final _movieResult = await _homeService.getHotAndNewMovieData();
    final _tvResutl = await _homeService.getHotAndNewTvData();

    // //transform data
    final stateOne = _movieResult.fold((MainFailure failures) {
      return HomeState(
        stateId: DateTime.now().millisecondsSinceEpoch.toString(),
        pastYearMovieList: [],
        trendingMovieList: [],
        tenseDramaMovieList: [],
        southIndianMovieList: [],
        trendingTvList: [],
        isLoading: false,
        hasError: true,
      );
    }, (HotAndNewDataResp resp) {
      final pastYear = resp.results;
      pastYear.shuffle();
      final trending = resp.results;
      trending.shuffle();
      final tenseDarama = resp.results;
      tenseDarama.shuffle();
      final southIndia = resp.results;
      southIndia.shuffle();
      return HomeState(
        stateId: DateTime.now().millisecondsSinceEpoch.toString(),
        pastYearMovieList: pastYear,
        trendingMovieList: trending,
        tenseDramaMovieList: tenseDarama,
        southIndianMovieList: southIndia,
        trendingTvList: state.trendingMovieList,
        isLoading: false,
        hasError: false,
      );
    });
    emit(stateOne);
    final stateTwo = _tvResutl.fold((MainFailure failure) {
      return HomeState(

```

```

        stateId: DateTime.now().millisecondsSinceEpoch.toString(),
        pastYearMovieList: [],
        trendingMovieList: [],
        tenseDramaMovieList: [],
        southIndianMovieList: [],
        trendingTvList: [],
        isLoading: false,
        hasError: true,
      );
    }, (HotAndNewDataResp resp) {
      final topTenList = resp.results;
      return HomeState(
        stateId: DateTime.now().millisecondsSinceEpoch.toString(),
        pastYearMovieList: state.pastYearMovieList,
        trendingMovieList: state.trendingMovieList,
        tenseDramaMovieList: state.tenseDramaMovieList,
        southIndianMovieList: state.southIndianMovieList,
        trendingTvList: topTenList,
        isLoading: false,
        hasError: false,
      );
    });
    emit(stateTwo);
  });
}
}

```

Home\_bloc.freezed.dart:  
part of 'home\_bloc.dart';

```

// *****
// FreezedGenerator
// *****

```

T \_\$identity<T>(T value) => value;

final \_privateConstructorUsedError = UnsupportedError(

'It seems like you constructed your class using `MyClass.\_()`. This constructor is only meant to be used by freezed and you are not supposed to need it nor use it.\nPlease check the documentation here for more information: <https://github.com/rrousselGit/freezed#custom-getters-and-methods>');

```

/// @nodoc
mixin _$HomeEvent {
  @optionalTypeArgs

```

```

TResult when<TResult extends Object?>({
  required TResult Function() getHomeScreenData,
}) =>
  throw _privateConstructorUsedError;
@optionalTypeArgs
TResult? whenOrNull<TResult extends Object?>({
  TResult Function()? getHomeScreenData,
}) =>
  throw _privateConstructorUsedError;
@optionalTypeArgs
TResult maybeWhen<TResult extends Object?>({
  TResult Function()? getHomeScreenData,
  required TResult orElse(),
}) =>
  throw _privateConstructorUsedError;
@optionalTypeArgs
TResult map<TResult extends Object?>({
  required TResult Function(GetHomeScreenData value) getHomeScreenData,
}) =>
  throw _privateConstructorUsedError;
@optionalTypeArgs
TResult? mapOrNull<TResult extends Object?>({
  TResult Function(GetHomeScreenData value)? getHomeScreenData,
}) =>
  throw _privateConstructorUsedError;
@optionalTypeArgs
TResult maybeMap<TResult extends Object?>({
  TResult Function(GetHomeScreenData value)? getHomeScreenData,
  required TResult orElse(),
}) =>
  throw _privateConstructorUsedError;
}

/// @nodoc
abstract class $HomeEventCopyWith<$Res> {
  factory $HomeEventCopyWith(HomeEvent value, $Res Function(HomeEvent) then) =
    _$HomeEventCopyWithImpl<$Res>;
}

/// @nodoc
class _$HomeEventCopyWithImpl<$Res> implements $HomeEventCopyWith<$Res> {
  _$HomeEventCopyWithImpl(this._value, this._then);

  final HomeEvent _value;

```

```

// ignore: unused_field
final $Res Function(HomeEvent) _then;
}

/// @nodoc
abstract class _$$GetHomeScreenDataCopyWith<$Res> {
  factory _$$GetHomeScreenDataCopyWith(
    _$GetHomeScreenData value, $Res Function(_$GetHomeScreenData) then) =
    __$$GetHomeScreenDataCopyWithImpl<$Res>;
}

/// @nodoc
class __$$GetHomeScreenDataCopyWithImpl<$Res>
  extends _$HomeEventCopyWithImpl<$Res>
  implements _$$GetHomeScreenDataCopyWith<$Res> {
  __$$GetHomeScreenDataCopyWithImpl(
    _$GetHomeScreenData _value, $Res Function(_$GetHomeScreenData) _then)
    : super(_value, (v) => _then(v as _$GetHomeScreenData));

  @override
  _$GetHomeScreenData get _value => super._value as _$GetHomeScreenData;
}

/// @nodoc

class _$GetHomeScreenData implements GetHomeScreenData {
  const _$GetHomeScreenData();

  @override
  String toString() {
    return 'HomeEvent.getHomeScreenData()';
  }

  @override
  bool operator ==(dynamic other) {
    return identical(this, other) ||
      (other.runtimeType == runtimeType && other is _$GetHomeScreenData);
  }

  @override
  int get hashCode => runtimeType.hashCode;

  @override
  @optionalTypeArgs

```



```

TResult when<TResult extends Object?>({
    required TResult Function() getHomeScreenData,
}) {
    return getHomeScreenData();
}

```

```

@Override
@optionalTypeArgs
TResult? whenOrNull<TResult extends Object?>({
    TResult Function()? getHomeScreenData,
}) {
    return getHomeScreenData?.call();
}

```

```

@Override
@optionalTypeArgs
TResult maybeWhen<TResult extends Object?>({
    TResult Function()? getHomeScreenData,
    required TResult orElse(),
}) {
    if (getHomeScreenData != null) {
        return getHomeScreenData();
    }
    return orElse();
}

```

```

@Override
@optionalTypeArgs
TResult map<TResult extends Object?>({
    required TResult Function(GetHomeScreenData value) getHomeScreenData,
}) {
    return getHomeScreenData(this);
}

```

```

@Override
@optionalTypeArgs
TResult? mapOrNull<TResult extends Object?>({
    TResult Function(GetHomeScreenData value)? getHomeScreenData,
}) {
    return getHomeScreenData?.call(this);
}

```

```

@Override
@optionalTypeArgs

```

```

TResult maybeMap<TResult extends Object?>({
    TResult Function(GetHomeScreenData value)? getHomeScreenData,
    required TResult orElse(),
}) {
    if (getHomeScreenData != null) {
        return getHomeScreenData(this);
    }
    return orElse();
}
}

```

```

abstract class GetHomeScreenData implements HomeEvent {
    const factory GetHomeScreenData() = _$GetHomeScreenData;
}

```

```

/// @nodoc
mixin _$HomeState {
    String get stateId => throw _privateConstructorUsedError;
    List<HotAndNewData> get pastYearMovieList =>
        throw _privateConstructorUsedError;
    List<HotAndNewData> get trendingMovieList =>
        throw _privateConstructorUsedError;
    List<HotAndNewData> get tenseDramaMovieList =>
        throw _privateConstructorUsedError;
    List<HotAndNewData> get southIndianMovieList =>
        throw _privateConstructorUsedError;
    List<HotAndNewData> get trendingTvList => throw _privateConstructorUsedError;
    bool get isLoading => throw _privateConstructorUsedError;
    bool get hasError => throw _privateConstructorUsedError;

    @JsonKey(ignore: true)
    $HomeStateCopyWith<HomeState> get copyWith =>
        throw _privateConstructorUsedError;
}

```

```

/// @nodoc
abstract class $HomeStateCopyWith<$Res> {
    factory $HomeStateCopyWith(HomeState value, $Res Function(HomeState) then) =
        _$HomeStateCopyWithImpl<$Res>;
    $Res call(
        {String stateId,
        List<HotAndNewData> pastYearMovieList,
        List<HotAndNewData> trendingMovieList,
        List<HotAndNewData> tenseDramaMovieList,

```

```

        List<HotAndNewData> southIndianMovieList,
        List<HotAndNewData> trendingTvList,
        bool isLoading,
        bool hasError});
}

/// @nodoc
class _$HomeStateCopyWithImpl<$Res> implements $HomeStateCopyWith<$Res> {
  _$HomeStateCopyWithImpl(this._value, this._then);

  final HomeState _value;
  // ignore: unused_field
  final $Res Function(HomeState) _then;

  @override
  $Res call({
    Object? stateId = freezed,
    Object? pastYearMovieList = freezed,
    Object? trendingMovieList = freezed,
    Object? tenseDramaMovieList = freezed,
    Object? southIndianMovieList = freezed,
    Object? trendingTvList = freezed,
    Object? isLoading = freezed,
    Object? hasError = freezed,
  }) {
    return _then(_value.copyWith(
      stateId: stateId == freezed
        ? _value.stateId
        : stateId // ignore: cast_nullable_to_non_nullable
          as String,
      pastYearMovieList: pastYearMovieList == freezed
        ? _value.pastYearMovieList
        : pastYearMovieList // ignore: cast_nullable_to_non_nullable
          as List<HotAndNewData>,
      trendingMovieList: trendingMovieList == freezed
        ? _value.trendingMovieList
        : trendingMovieList // ignore: cast_nullable_to_non_nullable
          as List<HotAndNewData>,
      tenseDramaMovieList: tenseDramaMovieList == freezed
        ? _value.tenseDramaMovieList
        : tenseDramaMovieList // ignore: cast_nullable_to_non_nullable
          as List<HotAndNewData>,
      southIndianMovieList: southIndianMovieList == freezed
        ? _value.southIndianMovieList

```

```

        : southIndianMovieList // ignore: cast_nullable_to_non_nullable
          as List<HotAndNewData>,
trendingTvList: trendingTvList == freezed
  ? _value.trendingTvList
  : trendingTvList // ignore: cast_nullable_to_non_nullable
    as List<HotAndNewData>,
isLoading: isLoading == freezed
  ? _value.isLoading
  : isLoading // ignore: cast_nullable_to_non_nullable
    as bool,
hasError: hasError == freezed
  ? _value.hasError
  : hasError // ignore: cast_nullable_to_non_nullable
    as bool,
  ));
}
}

/// @nodoc
abstract class __$_InitialCopyWith<$Res> implements $HomeStateCopyWith<$Res> {
  factory __$_InitialCopyWith(
    __$_Initial value, $Res Function(__$_Initial) then) =
    __$_InitialCopyWithImpl<$Res>;
  @override
  $Res call(
    {String stateId,
    List<HotAndNewData> pastYearMovieList,
    List<HotAndNewData> trendingMovieList,
    List<HotAndNewData> tenseDramaMovieList,
    List<HotAndNewData> southIndianMovieList,
    List<HotAndNewData> trendingTvList,
    bool isLoading,
    bool hasError});
}

/// @nodoc
class __$_InitialCopyWithImpl<$Res> extends __$_HomeStateCopyWithImpl<$Res>
  implements __$_InitialCopyWith<$Res> {
  __$_InitialCopyWithImpl(__$_Initial _value, $Res Function(__$_Initial) _then)
    : super(_value, (v) => _then(v as __$_Initial));

  @override
  __$_Initial get _value => super._value as __$_Initial;
}

```

```

@override
$Res call({
  Object? stateId = freezed,
  Object? pastYearMovieList = freezed,
  Object? trendingMovieList = freezed,
  Object? tenseDramaMovieList = freezed,
  Object? southIndianMovieList = freezed,
  Object? trendingTvList = freezed,
  Object? isLoading = freezed,
  Object? hasError = freezed,
}) {
  return _then(_$_Initial(
    stateId: stateId == freezed
      ? _value.stateId
      : stateId // ignore: cast_nullable_to_non_nullable
        as String,
    pastYearMovieList: pastYearMovieList == freezed
      ? _value._pastYearMovieList
      : pastYearMovieList // ignore: cast_nullable_to_non_nullable
        as List<HotAndNewData>,
    trendingMovieList: trendingMovieList == freezed
      ? _value._trendingMovieList
      : trendingMovieList // ignore: cast_nullable_to_non_nullable
        as List<HotAndNewData>,
    tenseDramaMovieList: tenseDramaMovieList == freezed
      ? _value._tenseDramaMovieList
      : tenseDramaMovieList // ignore: cast_nullable_to_non_nullable
        as List<HotAndNewData>,
    southIndianMovieList: southIndianMovieList == freezed
      ? _value._southIndianMovieList
      : southIndianMovieList // ignore: cast_nullable_to_non_nullable
        as List<HotAndNewData>,
    trendingTvList: trendingTvList == freezed
      ? _value._trendingTvList
      : trendingTvList // ignore: cast_nullable_to_non_nullable
        as List<HotAndNewData>,
    isLoading: isLoading == freezed
      ? _value.isLoading
      : isLoading // ignore: cast_nullable_to_non_nullable
        as bool,
    hasError: hasError == freezed
      ? _value.hasError
      : hasError // ignore: cast_nullable_to_non_nullable
        as bool,
  ));
}

```

```
    ));  
  }  
}
```

```
/// @nodoc
```

```
class _$Initial implements _Initial {  
  const _$Initial(  
    {required this.stateId,  
    required final List<HotAndNewData> pastYearMovieList,  
    required final List<HotAndNewData> trendingMovieList,  
    required final List<HotAndNewData> tenseDramaMovieList,  
    required final List<HotAndNewData> southIndianMovieList,  
    required final List<HotAndNewData> trendingTvList,  
    required this.isLoading,  
    required this.hasError})  
    : _pastYearMovieList = pastYearMovieList,  
      _trendingMovieList = trendingMovieList,  
      _tenseDramaMovieList = tenseDramaMovieList,  
      _southIndianMovieList = southIndianMovieList,  
      _trendingTvList = trendingTvList;
```

```
  @override  
  final String stateId;  
  final List<HotAndNewData> _pastYearMovieList;  
  @override  
  List<HotAndNewData> get pastYearMovieList {  
    // ignore: implicit_dynamic_type  
    return EqualUnmodifiableListView(_pastYearMovieList);  
  }
```

```
  final List<HotAndNewData> _trendingMovieList;  
  @override  
  List<HotAndNewData> get trendingMovieList {  
    // ignore: implicit_dynamic_type  
    return EqualUnmodifiableListView(_trendingMovieList);  
  }
```

```
  final List<HotAndNewData> _tenseDramaMovieList;  
  @override  
  List<HotAndNewData> get tenseDramaMovieList {  
    // ignore: implicit_dynamic_type  
    return EqualUnmodifiableListView(_tenseDramaMovieList);  
  }
```

```

final List<HotAndNewData> _southIndianMovieList;
@override
List<HotAndNewData> get southIndianMovieList {
  // ignore: implicit_dynamic_type
  return EqualUnmodifiableListView(_southIndianMovieList);
}

final List<HotAndNewData> _trendingTvList;
@override
List<HotAndNewData> get trendingTvList {
  // ignore: implicit_dynamic_type
  return EqualUnmodifiableListView(_trendingTvList);
}

@override
final bool isLoading;
@override
final bool hasError;

@override
String toString() {
  return 'HomeState(stateId: $stateId, pastYearMovieList: $pastYearMovieList, trendingMovieList:
$trendingMovieList, tenseDramaMovieList: $tenseDramaMovieList, southIndianMovieList:
$southIndianMovieList, trendingTvList: $trendingTvList, isLoading: $isLoading, hasError: $hasError)';
}

@override
bool operator ==(dynamic other) {
  return identical(this, other) ||
    (other.runtimeType == runtimeType &&
      other is _$Initial &&
      const DeepCollectionEquality().equals(other.stateId, stateId) &&
      const DeepCollectionEquality()
        .equals(other._pastYearMovieList, _pastYearMovieList) &&
      const DeepCollectionEquality()
        .equals(other._trendingMovieList, _trendingMovieList) &&
      const DeepCollectionEquality()
        .equals(other._tenseDramaMovieList, _tenseDramaMovieList) &&
      const DeepCollectionEquality()
        .equals(other._southIndianMovieList, _southIndianMovieList) &&
      const DeepCollectionEquality()
        .equals(other._trendingTvList, _trendingTvList) &&
      const DeepCollectionEquality().equals(other.isLoading, isLoading) &&

```

```

        const DeepCollectionEquality().equals(other.hasError, hasError));
    }

```

```

@override
int get hashCode => Object.hash(
    runtimeType,
    const DeepCollectionEquality().hash(stateId),
    const DeepCollectionEquality().hash(_pastYearMovieList),
    const DeepCollectionEquality().hash(_trendingMovieList),
    const DeepCollectionEquality().hash(_tenseDramaMovieList),
    const DeepCollectionEquality().hash(_southIndianMovieList),
    const DeepCollectionEquality().hash(_trendingTvList),
    const DeepCollectionEquality().hash(isLoading),
    const DeepCollectionEquality().hash(hasError));

```

```

@JsonKey(ignore: true)
@override
__$ _InitialCopyWith<__$ _Initial> get copyWith =>
    ____$ _InitialCopyWithImpl<__$ _Initial>(this, _$identity);
}

```

```

abstract class _Initial implements HomeState {
    const factory _Initial(
        {required final String stateId,
        required final List<HotAndNewData> pastYearMovieList,
        required final List<HotAndNewData> trendingMovieList,
        required final List<HotAndNewData> tenseDramaMovieList,
        required final List<HotAndNewData> southIndianMovieList,
        required final List<HotAndNewData> trendingTvList,
        required final bool isLoading,
        required final bool hasError}) = _$_Initial;

```

```

@override
String get stateId;
@override
List<HotAndNewData> get pastYearMovieList;
@override
List<HotAndNewData> get trendingMovieList;
@override
List<HotAndNewData> get tenseDramaMovieList;
@override
List<HotAndNewData> get southIndianMovieList;
@override
List<HotAndNewData> get trendingTvList;

```



```

@override
bool get isLoading;
@override
bool get hasError;
@override
@JsonKey(ignore: true)
_$$_InitialCopyWith<_$_Initial> get copyWith =>
  throw _privateConstructorUsedError;
}
Home_event.dart:
part of 'home_bloc.dart';

```

```

@freezed
class HomeEvent with _$HomeEvent {
  const factory HomeEvent.getHomeScreenData() = GetHomeScreenData;
}

```

```

Home_state.dart:
part of 'home_bloc.dart';

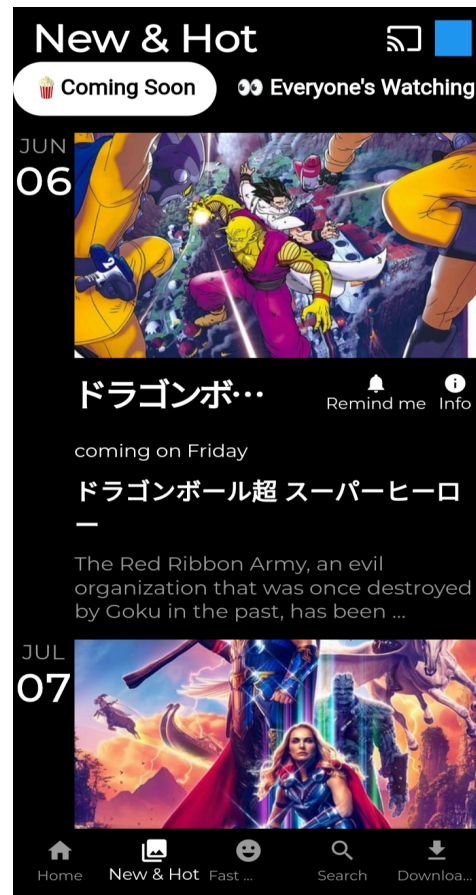
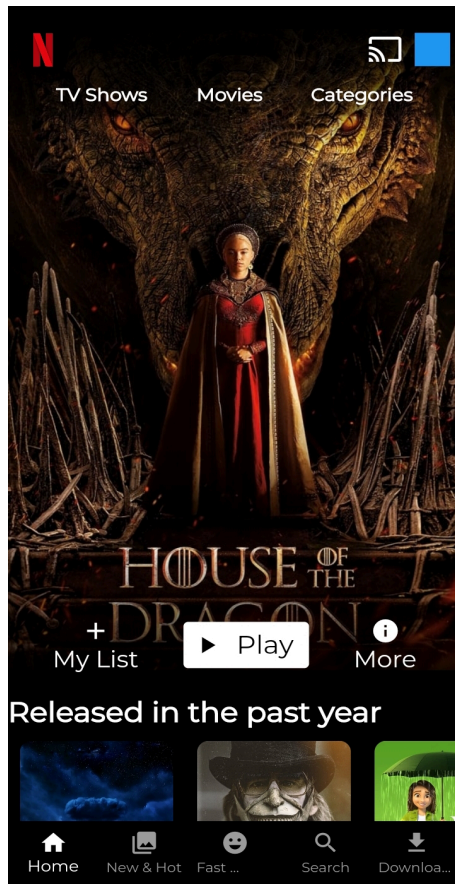
```

```

@freezed
class HomeState with _$HomeState {
  const factory HomeState(
    {required String stateId,
    required List<HotAndNewData> pastYearMovieList,
    required List<HotAndNewData> trendingMovieList,
    required List<HotAndNewData> tenseDramaMovieList,
    required List<HotAndNewData> southIndianMovieList,
    required List<HotAndNewData> trendingTvList,
    required bool isLoading,
    required bool hasError}) = _Initial;
  factory HomeState.initial() => const HomeState(
    stateId: '0',
    pastYearMovieList: [],
    trendingMovieList: [],
    tenseDramaMovieList: [],
    southIndianMovieList: [],
    trendingTvList: [],
    isLoading: false,
    hasError: false,
  );
}

```

## Screenshots:



## Conclusion

Flutter's widget-based design pattern makes UI development intuitive and flexible. By utilizing common widgets effectively, developers can create seamless, responsive, and visually engaging user interfaces. This experiment provides a foundation for understanding Flutter's UI structure and the role of widgets in application development.