Cách sử dụng các tệp

1. Tạo dự án Flutter mới: flutter create photo_search
2. Thay thế thư mục lib / và tệp pubspec.yaml bằng các tệp đính kèm
3. Có thể them hình ảnh, font chữ
4. Chạy lệnh: flutter packages get
5. flutter run (với trình giả lập đang chạy hoặc thiết bị thực được kết nối với máy) để xem ứng dụng

1. Tạo file các folder: screens, datamodels nằm trong folder lib

2. Tạo folder views tong folder screens, tạo các folder home và picture trong folder views.

3. Tạo Photo.dart trong folder datamodels

```dart
class Photo {
  String id, secret, server, title;
  int farm;
  Photo.fromMap(Map snapshot) {
    this.id = snapshot['id'];
    this.secret = snapshot['secret'];
    this.server = snapshot['server'];
    this.farm = snapshot['farm'];
    this.title = snapshot['title'];
  }

  urlString() {
    return 'https://farm$farm.staticflickr.com/$server/$id\_$secret.jpg';
  }
}
```

4. Tạo file FlickrPhoto.dart trong folder datamodels

```dart
import 'Photo.dart';

class FlickrPhoto {
  int page, pages;
  List<Photo> photo;
  FlickrPhoto.fromMap(Map snapshot) {
    this.page = snapshot['page'];
    this.pages = snapshot['pages'];
    List photoMap = snapshot['photo'];
    this.photo = photoMap.map((t) => Photo.fromMap(t)).toList();
  }
```

```
}
```

5. Tạo file home_viewmodel.dart trong folder home

```dart
import 'package:flutter/material.dart';
import 'package:photo_search/screens/views/picture/pic_view.dart';
import 'package:stacked/stacked.dart';

class HomeViewModel extends BaseViewModel{
  String _value = "";

  String get value => _value;

  void updateValue(value) {
    _value = value;
    notifyListeners();
  }

  void navigationToView(context){
    if(_value != "")
      Navigator.push( context, MaterialPageRoute( builder: (context) => PhotoList
View(keyword: _value,), ));
  }
}
```

6. Tạo file home_view.dart trong folder home

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

import 'home_viewmodel.dart';

class HomeView extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return ViewModelBuilder.reactive(
        builder: (context, HomeViewModel model, child) {
          return Scaffold(
              appBar: AppBar(
                title: Text('Photo search view'),
              ),
              body: Container(
                  child: Column(
                mainAxisAlignment: MainAxisAlignment.center,
```

```
                children: <Widget>[
                  Container(
                    child: Center(
                      child: Text(
                        'Photo Browser',
                        style: TextStyle(
                          color: Colors.blue,
                          fontSize: 34.0,
                          fontWeight: FontWeight.bold,
                        ),
                      ),
                    ),
                  ),
                  TextField(
                    decoration:
                        InputDecoration(hintText: 'Enter a search term'),
                    onChanged: (text) => model.updateValue(text),
                  ),
                  RaisedButton(
                    child: Icon(Icons.search),
                    onPressed: () => model.navigationToView(context),
                  ),
                ],
              )
            )
          );
        },
        viewModelBuilder: () => HomeViewModel());
  }
}
```

7. Tạo file pic_viewmodel.dart trong folder picture

```dart
import 'dart:convert';

import 'package:photo_search/datamodels/FlickrPhoto.dart';
import 'package:stacked/stacked.dart';
import 'package:http/http.dart' as http;
import 'dart:async';

class PhotoViewModel extends BaseViewModel{
  String _keyword = "";
  FlickrPhoto _flickrPhoto;
  Map<String, dynamic> _res;
```

```dart
  bool _hasData = false;

  String get keyword => _keyword;
  Map get res => _res;
  FlickrPhoto get flickrPhoto => _flickrPhoto;
  bool get hasData => _hasData;

  void updateKeyword(value) {
    _keyword = value;
    notifyListeners();
  }

  Future<void> getPhotoByKeyword(value) async {
    this.updateKeyword(value);
    var client = http.Client();
    String url = "https://www.flickr.com/services/rest/?method=flickr.photos.search&api_key=bed6678fa4dd799882101ebddc0e74ac&text=$_keyword&format=json&nojsoncallback=1";
    var response = await client.get(url);
    if(response.statusCode == 200){
      _res = json.decode(response.body);
      if(int.parse(_res['photos']['total']) > 0){
        _flickrPhoto = FlickrPhoto.fromMap(_res['photos']);
        _hasData = true;
      }
    }
    print(_res['photos']);
    notifyListeners();
  }
}
```

8. Tạo pic_view.dart trong file picture

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

import 'pic_viewmodel.dart';

class PhotoListView extends StatefulWidget {
  final String keyword;
  PhotoListView({Key key, @required this.keyword}) : super(key: key);
  @override
  _PhotoListViewState createState() => _PhotoListViewState(keyword: keyword);
}
```

```dart
class _PhotoListViewState extends State<PhotoListView> {
  final String keyword;
  _PhotoListViewState({Key key, @required this.keyword});
  @override
  initState() {
    super.initState();
    // model
  }

  @override
  Widget build(BuildContext context) {
    return ViewModelBuilder.reactive(
      onModelReady: (model) => model.getPhotoByKeyword(keyword),
      builder: (context, PhotoViewModel model, child) {
        return Scaffold(
          appBar: AppBar(
            title: Text('Từ khóa tìm kiếm: $keyword'),
          ),
          // body: Text(model.res)
          body: (model.hasData) ? GridView.count(
          crossAxisCount: 3,
          children: model.flickrPhoto.photo
              .map((p) => Center(child: Image.network(p.urlString())))
              .toList()
              :Center(
                child: Text('Không có dữ liệu',
                  style: TextStyle(
                    color: Colors.blue,
                    fontSize: 34.0,
                    fontWeight: FontWeight.bold,
                  ),),
              ),

        );
      },
      viewModelBuilder: () => PhotoViewModel()
    );
  }
}
```

9. Sửa file main

```dart
import 'package:flutter/material.dart';
import 'package:photo_search/screens/views/home/home_view.dart';
```

```dart
void main() {
  runApp(MyApp());
}

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Photo search view',
      home: HomeView(),
    );
  }
}
```

10. Kết quả

Photo search view

Photo Browser

Enter a search term

🔍

q w e r t y u i o p

a s d f g h j k l

z x c v b n m

?123 , 😊 .