



BB1-

B-PAV-591

EPicture

A simple universal app for searching & browsing pictures

v1.2



binary name: epitecture
repository name: DotNet_epicture_\$YEAR
repository rights: ramassage-tek
language: .Net - C#
group size: 1-2
compilation: via MSBuild



- Your repository must contain the totality of your source files, but no useless files (binary, temp files, obj files,...).
- All the bonus files (including a potential specific Makefile) should be in a directory named *bonus*.
- Error messages have to be written on the error output, and the program should then exit with the 84 error code (0 if there is no error).

This project contains a bonus section, which includes a non-exhaustive list of all bonuses you may implement, in addition to the other mandatory sections.



Your repository must contain the totality of your source files, but no useless files (binary, temp files, class files,...).



You **must** implement more than the mandatory sections in order to validate the unit.

The goal of the project is to develop a UWP (Universal Windows Platform) software. This software must be able to:

- search through pictures on Flickr and/or Imgur
- upload pictures on Flickr and/or Imgur
- filter pictures by type and/or size
- add/remove pictures to/from favorites

The project must be developed according to the following rules:

- the project must be developed in C#
- you must use the official Flickr and Imgur APIs
- you must code by the .Net best practices, as described by Microsoft
- you must comply with the best practices for UI and UX, as described by Microsoft
- the use of Webviews and other components enabling webpages to be opened is strictly prohibited
- in order to prove the quality and stability of your work to the examiner, you must create a coherent set of Unit Tests.



The .NET framework already provides some classes to simply and efficiently execute HTTP requests (in particular, HttpClient and HttpResponseMessage).
The goal of this project isn't to reinvent the wheel, but to use, integrate and understand Microsoft's existing technologies.



Preliminaries

Your software must comply with the project's build constraints.
Your software must offer basic features, as outlined in the project description.
Your software must offer a high-quality UI and UX.
You are free to implement additional and bonus features in your project.
You **MUST** set up a test strategy for your project.
You must submit documentation for your project.



Any use of libraries that aren't authorized in the project description must be validated by your local module coordinator.



Start by consulting the official platform for the UWP developer.

1. XML/JSON

You'll have to handle the JSON and/or XML data dynamically.

The .Net framework already contains tools that are able to treat this type of data. However, there are packages like *Newtonsoft.Json*, which make this part a lot easier.

2. APIs Keys

To be able to use Flickr and Imgur APIs, you'll first have to obtain a key for each API.

This will enable you to authenticate your application with the services used.

You can obtain the keys on the official websites of each application.



Build application

Your project must use MSBuild as a production system.

All your builds must be able to be run with MSBuild in the command line.

At the very least, the build targets are:

- *assembleDebug*, in order to build your application in Debug mode,
- *assembleRelease* in order to build your application in Release mode.

Documentation

We require you to provide us with documentation that will illustrate the design and development phases of your project.

You will document the project's technical specifications and functionalities.

You will document the application's principles of ergonomics and navigation.

You can incorporate a few design drawings.

You can document your project's code.

The goal is to have a document that we can use as a tool in order to easily understand the project so that we can make communication between groups and gaining new skills for new developers easier.

Bonus

You are free to implement the bonus functionalities of your choice, under the condition that you comply with the minimum expectations of your application for the build management project, the test strategy, the elementary functions and the UI/UX.