Assignment Instructions: Flutter Image Gallery Application

Overview

Your assignment is to create a Flutter application called `gallery` that showcases a gallery of images fetched from an external website.
The application should include features such as image fetching and caching, image search functionality. Additionally, you are required to document your code using Dart doc comments.
You are free to use any state management solution of your choice
For bonus points you can (any or all):

1. Searching/Filtering: Use live API-base search
2. Create functionality to star/mark favourite images, and be able to showcase them separately
3. Use logging
4. Make unit tests (special points for BDD), widget tests (patrol), intergration tests, Golden-testing (alchemist)
5. Provide a Class UML diagram
6. Provide an API reference
7. Use MVVM as your state management solution
8. Release preparation
9. Native/platform-dependent (Material/iOS) look-and-feel

Requirements

1. Image Fetching

Implement an API for fetching images from an external website. The application should be able to cache images that are fetched, and reuse them throughout the entire app lifecycle. The following are good example APIs to use:

1. Unsplash
2. Pexels

2. Maintain Scope and Limitations

Since this is a demo assignment, you are allowed to keep the scope of functionalities small. However, make sure to address any performance-critical sections (both UI and backend) and fix any rare-case bugs. Clearly mark 'todo' items. Limitations in your code in the README.

3. User Interface

Ensure that the user interface is functional, easy to use, and aesthetically pleasing.

4. Submission

Submit your assignment by providing a link to the repository containing your Flutter project. Ensure that the README in your repository is updated with any additional information about building and running the application.

Evaluation criteria

1. Organization/structuring/modularity/architecture
2. Maintainability/simplicity/cleanliness
3. Scalability
4. Robustness
5. Security
6. Adherence to Flutter/Dart style guidelines
7. Performance (UI and backend)
8. UX

It does not matter too much if you do not get all of them, as some of the criteria are more important that others. This is just an explicit checklist, and really nothing more.

Additional Information

- Feel free to explore and use third-party packages to enhance your application, but clearly mention any external dependencies in your documentation.
- If you encounter any challenges or limitations during the assignment, document them and propose potential solutions.
- Test your application thoroughly to ensure it works as intended.

Good luck, and happy coding!