

Design Patterns

The Singleton Pattern:

In the client application:

- We need to have only one instance of `AppDataManager`, and you can get the instance by `getInstance()` method.
- We need to have only one instance of `AppFileHelper`, and you can get the instance by `getInstance()` method.

(MVC) design pattern:

- `MainView` act as View that presents the model's data to the user.
- `MainController` act as Controller that exists between the view and the model
- `DataManager` act as Model that contains only the pure application data.

The producer-consumer pattern:

Where client "produces" a stream of bytes, and the server will "consume" the stream and save it in a file.