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Software Design H.W 1 – Dry Part

The repository structure is off an android app and as such, the discussed modules that are using dependency injection are located under the main directory of the app files (app/src/main/java/chat/rocket/android)

Configuration of the dependency injection:

Most of the packages in this project have dependency injection package that contains modules and providers and binds the classes under that package.

Regarding the dagger package (located at the root directory), the classes inside this package inject dependencies for the app framework: it's activities and fragments classes ,SharedPreferences and other app utils.

The main concept that guides the use of dependency injection is the use of the 'single source of truth' structure which facilitates testing since the dependencies can be altered once and utilized from anywhere else in the project's modules. In addition the dependency injection improves class decoupling (which makes testing easier as well).

RocketChatClient Overview:

RocketChatClient is not located in the project's source code and is provided externally through a separate SDK. Hence, the RocketChatClientFactory singleton is being used as a dependency for the creation of RocketChatClient instances.

Injecting another implementation for RocketChatClient:

Since the RocketChatClientFactory singleton is being passed, we'd change the implementation of this factory's getter method to produce the alternative implementation of RocketChatClient .

CreateChannelView – Overview:

CreateChannelView is a pure interface which it's implementations are provided by the CreateChannelModule class.

This Module is annotated by the @Module annotation and its methods are annotated by the @Provides annotation. Those annotations are being used by Dagger to define classes and methods (respectively) that provide dependencies. In our case, createChannelView method is a provider that provides CreateChannelView instances.

Injecting another implementation for CreateChannelView:

In order to inject other implementation we had have to change the provide method 'createChannelView' in the CreateChannelModule.