Android Advance 2 Lesson 1 MVP Architect



Outline

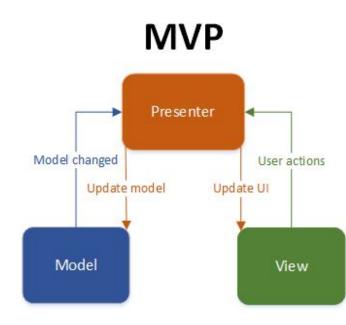
- Introduction to MVP Architect
- II. Implement MVP Architect in Android
- III. Template & Example





1. What is MVP?

- The MVP pattern allows separate the presentation layer from the logic, so that everything about how the interface works is separated from how we represent it on screen. Ideally the MVP pattern would achieve that same logic might have completely different and interchangeable views.
- First thing to clarify is that MVP is not an architectural pattern, it's only responsible for the presentation layer. In any case it is always better to use it for your architecture that not using it at all.





1. Why MVP?

- We divide the application into at least three different layers, which let us test them independently
- Using MVP application to be easily extensible and maintainable
- Using MVP we can write unit-test easier, with MVP we are able to take most of logic out from the activities so that we can test it without using instrumentation tests.
- Using MVP we can apply TDD (Test Driven Development)

II. Implement MVP Architect in Android



1. Model

- It is enough to see it as the provider of the data we want to display in the view
- Gateway towards the business logic
- Contains methods for data retrieval



2. View

- Activity, Fragment, View...
- Has a reference to the Presenter
- Propagates events from the UI to the presenter (onClick, lifecycle events)
- Exposes methods that control the presentation of data
- Implementation with layout (ex: show / hide the loading layout, notify data, ...)



3. Presenter

- Middle-man between the View and Model
- Contains view logic for preparing content for display (as received from the Models) and for reacting to user inputs (by requesting new data from the View)
- Introduces a level of abstraction to the data from the Model and formats it before sending it to the View
- This makes the View and Model independent
- Updates the UI the difference from MVC





1. Templates & Example

- MVP example: https://goo.gl/kUXelX
- MVP templates: https://goo.gl/8Nz0BC



Q&A



Exercise

Implement project Search users on github apply MVP