



NUMERUS: NUMBER IN LATIN

Facts About Number

By
KIRAN KUMAR

What number says?

NumerusApp: Numerus means number in latin. Want to know the information about number use Numerus app.

About Android Development:

Used Android material design, Dagger, Rxjava , RxAndroid, MVP architecture.

Modules:

- Dependency Injection
- MVP Architecture.
- Error Handling.
- UI

Dependency Injection:

I have used Dagger 2 library for dependency injection purpose

- **Application Component:** Complete applications and app level dependencies are added here. Eg: Application context, OkHttpClient etc.
- **Activity Component:** Activity level injection implemented.
- **NumerusActivityComponent:** This is the main class where we will use injection for our Activity and Fragment.
- **NetworkModule:** OKHttpClient object creation is done here and used inside Application component.

- NumerusModule: Retrofit API object is created using OkhttpClient.

MVP

- View: In this application Activity loads fragment and Fragment shows the home page. So Activity or fragment is called as Views.
- Presenter: "NumerusPresenter" class is used as presenter.
- Model: Here we don't want any model class as we are showing string data.

App Flow:

- App Launch: "NumerusApp" is the application class, so this class will get executed first. Here I will be creating the Application component object which is required for DI.
- NumerusActivity: extends SimpleActivity, which inturn extends Borrowing Activity.
BorrowingActivity extends BaseActivity.
- SimpleActivity: Used for Loading the Fragment. So Any activity if we create in future which uses fragment inside can extent SimpleActivity.
- BorrowingActivity: Basic butterknife injection and activity init done here.
- conti.....

- **BaseActivity:** Initializing the activity component is done here.
- **NumerusActivity:** After injection, giving the NumerusFragment for SimpleActivity for load.
- **NumerusFragment:** Is the only fragment used in the app where all application functionality is implemented here.

NumerusFragment

- Based on the Option selected(Basic or Advanced), number picker visibility is toggled.
- Category: Handles the category like Trivia, Math, etc
- Based on the combination of Type and Category number picker view will be displayed. For Basic type only category is shown. For Advanced type with "date" category, Edittext with shown, after checking edittext date picker pops up.
- Single retrofit API method is used to get the data based on user selection.

Extra Features:

- Implemented share functionality: User can share the fact which he feels to share with his friends.
- Error Handling: Implemented Error handling, Handled the connectivity error and sever errors.