TASK #3

App Dev – Android Native

PROBLEM STATEMENT:

Ankur, a definition geek, has spent all his life in material books, and has no clue about the wonderful world of superheroes. Anand, his new roommate in college and a big superhero geek, can't believe his own roommate doesn't know anything about them. So, he decided to make an app, using your help, that serves as an encyclopedia of superheroes for Ankur, leading him into the light. Hence, help him make the app using the below-mentioned.

API: https://akabab.github.io/superhero-api/api/

You will be using the /all.json endpoint for this task.

Checkout the example query and sample response before attempting to make an API call. Use JSON to Object online tools to understand the response structure.

JSON to Object: https://jsoneditoronline.org/

Make an application with the following features.

LEVEL 1:

- Show all the heroes in a recycler view.
- Upon clicking on an item, show all stats(data) accordingly and his/her image.

LEVEL 2:

- Use loaders to mask the waiting time till data is fetched completely.
- Use shared element transition for pictures.
- Implement searching heroes by name and ID.
- Implement a side navigation drawer which has menu items to navigate between different pages, name ones showing ALL the heroes (as in level one), only FEMALE heroes and only MALE heroes (use fragments).

LEVEL 3:

- Implement adding a particular hero to Favourites, that is, saving the hero to a local database (use Room or SQLite), and add a menu item to the side navigation drawer named FAVOURITES to see the list of such saved heroes.
- Implement the searching mechanism (by name and ID) in Favourites section also.
- Implement sharing of the details of your favourite Hero.
- Add a splash screen to your app.

GUIDELINES:

Do not use third party libraries for the implementations. You need to implement it using inbuilt Android tools and services.

EVALUATION METRICS:

Task will be evaluated based on

- Completion of Task
- UI
- Responsiveness
- Code simplicity
- Creativity

SUBMISSION:

Participants need to push their *code* along with *apk* to their GitHub account and submit the repository link in the Induction website. Once the task is completed, participants need to send repository link and apk to their mentor.

RESOURCES:

- Retrofit
- Recycler View
- Images Api
  Picasso
  BumpTech
- SQLite
- Room
- Fragments
- Shared Element Transistion
- Navigation Drawer
- Sharing
- Searchview

Other resources:

- Official Android Documentation
- Android Basics by Google - Udacity Course
- Android Tutorials - Coding in flow