## **ZONAR SYSTEM CHALLENGE**

- **MPV architecture** This App was implemented using MPV architecture, using a view, presenter and interactor classes per view. For this project, it was created for the Home view. Also, I decided to create an API package, where you will find the models/POJOs classes used to load the data and an **AppDataBase** class to provide the access to a Local database with ROOM.
- **Kotlin**: I decided to use this programming language in order to improve my skills with Kotlin and to use the latest official programming language for Android applications.
- **DialogFragments**: I created 2 custom dialog fragments, in order to show a form to create new Snacks and another one to summarize of the Snacks currently selected.
- To load the data, I was thinking in two approaches:
  - First approach: Create different queries or create a Dynamic query with Room, however I am still learning Room, and could take long time to finish the homework so, I decided to continue with a different approach.
  - Second approach (Selected): Load the complete list of Snacks and then by JavaRx filter the data accordingly with the selected options in the UI.
- **Libraries**: All the libraries used in this project are open-source online available to be downloaded and used.
  - o CardView Used to Show each item of the list with a Card Style
  - RxJava Used to manage the communication with the interactor to receive the response of
    the service with Observables in the presenter. Also, it was used to send the data to the view in
    a Streaming way, allowing to transform the received data from the services and then deliver to
    the view accordingly with only the necessary fields or processed data.
  - Dagger2 Used to manage the dependencies of the objects allowing this framework to manage the creation of new instances such as the Presenter, Interactor and AppDatabase, and then inject it where it would be required.
  - Room Used to load prepopulate data and storage new Snacks and persist it even when the app is closed.

You can find the source code of this project in this <u>repository</u>