CMPS 312 – Mobile Application Development
Midterm Practical Exam – 08 October 2020 (duration 2h)

Objective: In this exam you will apply your Mobile development skills to build an app that tracks Country Visits on Android.

Create a new Android App named **CountryVisitsApp** under `Midterm` subfolder on your repository. Sync cmps312-content repo then copy *eu-countries.json* & *visits.json files* from the **exam subfolder** to your **assets** folder. Also copy all *drawables* files (.xml) from the exam subfolder to your r**es/ *drawables* folder**.

Implementation Tasks

The app should have 1 Activity and 2 Fragments: VisitsFragment to display the visited countries & AddVisitFragment to add a newly visited country. The app should use the Navigation Component to navigate between the two fragments.

1) VisitsFragment

- As shown in the image on the right, the VisitsFragment should have a RecycleView to display the country visits with the ability to delete items from the list. When the user clicks the delete button next to every item in the list then the app should delete the visit.
- When this fragment starts, it should load the visited countries from assets/*visits.json* and display them in the RecyclerView.
- This fragment should have 'Add Visit' Floating Action Button (FAB). When the user clicks it, the app should navigate to **AddVisitFragment** to allow the user to add a new visit.

Tip: In the Visit class declare the rating and the amount properties as Float

Tip: The Stars Rating UI element can be created using **RatingBar** view. It has a rating property to read/write the rating value. To make it read only set the `isIndicator` to true. Also, set numStars = **"5".**
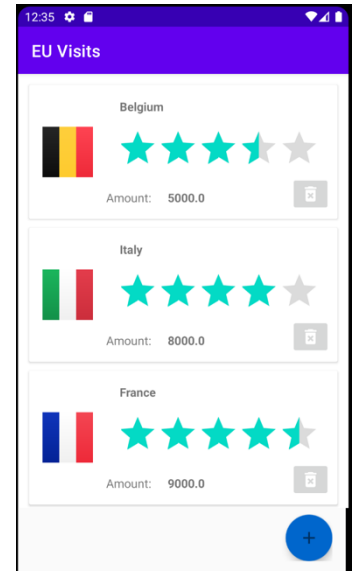RatingBar is optional you can use a TextView instead.

```
<RatingBar
    android:id="@+id/ratingBar"
    android:isIndicator="true"
    android:numStars="5" />
```
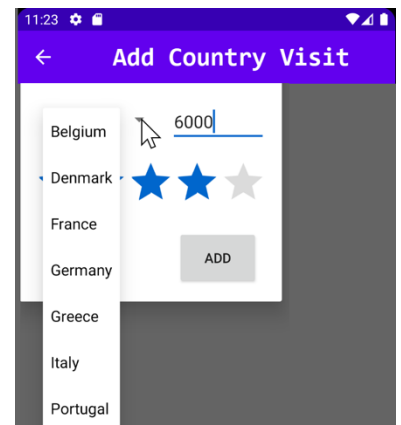
2) AddVisitFragment

- The **AddVisitFragment** presents a form to allow the user to select a country from a Spinner and specify the visit rating and the amount spent.
- This fragment should fill the countries Spinner from assets/*eu-countries.json*
- When the user clicks **Add button**, the app should navigate back to the **VisitsFragment** and the new visit should be added and shown in the RecycleView.

  The added visit could be passed to the **VisitsFragment** using either as a shared ViewModel or a Navigation Destination Argument.

Tip: Using RatingBar is optional you can use a TextEdit instead.
The Stars Rating UI element can be created used **RatingBar** view. It has rating property to read/write the rating value. Also, set numStars = **"5".**

Grading Rubrics

Criteria	%	Functionality*	Quality of the implementation
1. Visits Fragment	65		
2. Add Visit Fragment	35		
Total			
Provide screenshots in *testing.docx*	-		*[-10pts if missing]*

* **Possible grading for functionality**: ***Complete and Working*** (get 70% of the assigned grade), ***Complete and Not working*** (lose 60% of assigned grade) and ***Not done*** get 0. The remaining grade is assigned to the quality of the implementation. Must submit screenshots in **Testing-GradingSheet.docx** (otherwise - 10pts).