# Homework 8 – Local Storage

# Problem

Based on the demo project from the “Work with API” lecture for listing countries do the following:

#### Main task

• Integrate Room database in the project.

• Define the database class, an entity for the Country object fetched from the API and a DAO with functions for the CRUD (Create, Read, Update, Delete) operations.

• After the list of countries is fetched save each country in the database.

• Turn off the internet connection of the device (physical or emulator).

• On application start add a check for available internet connection (R&D).

• In case no internet connection is available retrieve the list of countries from the database and show a Snackbar informing the user for the missing internet connection and that information might be outdated.

• If internet connection is available update the information in the database with the one fetched from the API.

#### Bonus task

• Create another entity to keep track of last update time.

• Every time the countries are successfully fetched from the API update the last updated date and time.

• Add a text element above the list showing the last update time.

• Add another text element under the last update time that shows the number of countries in the list.

#### Bonus task 2

• Add an animated loading bar that is shown to users during the check for internet connection and the loading of the countries (either from database or from the API). The loading bar should be shown when starting the application and should disappear as soon as the countries list is passed to the adapter.

# Deadline

Submit your solution **until 23:59 on 13 November 2022**, **Sunday**.

# Upload Instructions

#### File Upload Form

THIS IS AN EXAMPLE!!!

Upload an archived file (zip/rar/7z) in the course page under the lesson’s section (<https://softuni.bg/trainings/3884/android-development-with-kotlin-september-2022#lesson-46001>):

1. Graphical user interface, application

   Description automatically generated

Choose the file you want to upload, then select this button:

1. Graphical user interface, text, application

   Description automatically generated 3) Graphical user interface, application

   Description automatically generated with medium confidence

When you see “**Done**” and “**100%**” completion of upload, you have successfully uploaded the file.

You can **replace the uploaded file** by **uploading a new one** (a single archive for all files), you can make changes until the **due date**.

#### Project Solutions File Instructions

Archive the whole project folder and upload the file.