

# A TimeBanking application

## Lab4 – Storing data in a database

### Learning objectives

- Connect to Cloud Firestore database and perform basic operations
- Use Google Sign-In to properly authenticate with Firebase
- Choose a data model suitable to retrieving information according to the app requirements

### Description

You will improve the app created in the previous lab, saving and retrieving data into/from Cloud Firestore.

The main page of the application will become a section that contains the list of services (skills) offered by other users in the platform. If the list were empty, a message would be shown. When an item is clicked, the list of related offers is shown, providing tools to sort and filter it according to different criteria. The user will be able to search the offers he is interested in, see the corresponding details as well as the profile of the person offering it.

In order to connect to the backing database, users must be authenticated: this will typically happen the first time the app is launched. Google Sign-in (<https://firebase.google.com/docs/auth/android/google-signin>) will be used to collect the user's credentials and obtain a corresponding authentication token. An option will be available to sign out, once authenticated.

The project will be kept on GitHub as a private repository.

### Submission rules

- Lab must be submitted by next lab
- The functionalities implemented in your code as well as the design of the user interface will be evaluated

- Before submitting, clean the project using *Build -> Clean Project*
- Create a zip file with your project and name it groupXX\_lab4.zip
- Upload it on the Polito web portal (only one student of the group must upload it); for multiple uploads, only the most recent file will be evaluated