

CSCI 3130: Introduction to Software Engineering

Assignment 3: CRUD and Data Binding

You are creating a web-based “business to business” application for the Nova Scotia seafood industry, called the Seafood Marketplace. You are tasked with creating a simple CRUD interface that permits creating, reading, updating and deleting businesses.

Technical requirements:

- Code in Android Studio published to GitHub
- Use Android UI Elements to create a List interface with Create, Edit, and Delete buttons.
- ~~- Edit the contact class to add the required contact information~~
- ~~- Use Firebase rules to ensure that entries follow formatting rules (see below)~~
- use Javadoc
- define at least 1 test for each CRUD operation

***Note:** there is already a starting project on github. Fork this repo and start coding from it. The code **will not** compile once you fork it. You need to create your firebase database on firebase.google.com and download the google-services.json configuration file the package name is: “com.acme.a3csci3130”. If you want you can change it on the application gradle. Note also that the starting project assumes a contacts list, not a business list – this will need to be modified accordingly.*

Link: <https://github.com/jmfranz/A3csci3130>

The starting project uses Firebase-UI for Android, a UI-DB data binding library. See the use of FirebaseListAdapter in MainActivity.

More info: <https://github.com/firebase/FirebaseUI-Android>.

There is a file named fireRules.json -- this is an example of firebase rules for data validation. More information about firebase rules can be found here:

https://firebase.google.com/docs/database/security/securing-data#validating_data

Business data formatting rules:

Business number: required, 9-digit number

Name: required, 2-48 characters

Primary business: required, {Fisher, Distributor, Processor, Fish Monger}

Address: <50 characters

Province/territory: {AB, BC, MB, NB, NL, NS, NT, NU, ON, PE, QC, SK, YT, “ “}

Assignment submission and due date:

Submit the link to your github repository containing the **entire** project code and a screenshot of the running application depicting the populated list. The repo should also contain a copy of your firebase data validation rules. (You can just write them to the fireRules.json file)

Assignment is due Thursday March 15th, 11pm (Be advised, it is the day DST begins!).