

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. **DO NOT** update the project version
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 Saturday Jun 16th, 11pm