

# 1. Application design

I designed the application to store in a room database First Name, Last name, employee Id, email, and employee address. The app provides validation as required at the first assignment in the addition to validating the employee address, this just validates against the google maps


| Employee  |   |
|---|---|
| ONE Sebastian Ramirez<br>0345678<br>sebastian@hotmail.com<br>Colombia                           | <br><br>       |
| TWO Sebastian Ramirez<br>1345678<br>sebastian@hotmail.com<br>Australia                          | <br><br>       |
| THREE Sebastian Ramirez<br>2345678<br>sebastian@hotmail.com<br>7 Seaview Avenue, Port Macquarie | <br><br>       |
| FOUR Sebastian Ramirez<br>3345678<br>sebastian@hotmail.com<br>Argentina                         | <br><br>    |
| FIVE Sebastian Ramirez<br>4345678<br>sebastian@hotmail.com<br>Call 49f #87-125, Medellin        | <br><br> |
| SIX Sebastian   |    |

database, which means that the user can type any address searchable in google maps. This validation happens the same way when is required to update the values in the database. In addition, I add two buttons "View database", and "Reset Database".


The reset DB button resets all the items in the App employee Database. On the other hand, View database is a new activity that shows all the items fetch from the database, this provides the employee information with the basic options to edit and delete. The edit button


represented with a pen shows a dialogue that allows editing the item, Delete button also shows a dialogue to confirm the deletion. An extra feature was inserted to view the employee address in google maps represented with a house icon.


I decide to use this design to learn to use room database and google maps due I will use them for the next assignment I hope not to be penalized, I used different forms to interact with the database, for example, using DAO directly or a repository implementation. I found that map fragment is not possible to implement in dialogue for that reason I decided to start a new activity to show the employee's address.





working for you

 First Name

 Last name

 Employee ID

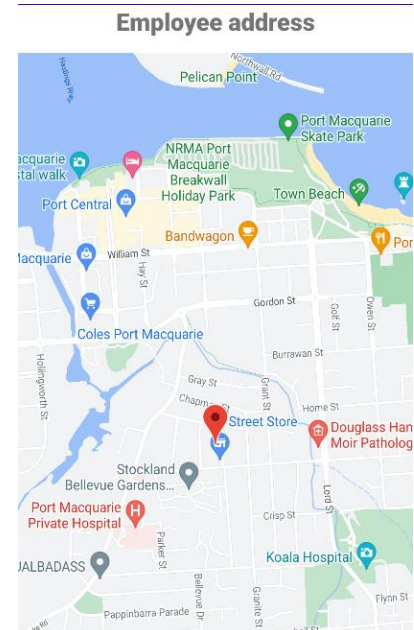
 Email

 Employee\_address

INSERT EMPLOYEE

VIEW DATABASE

RESET DB



## 2. Implementation

The implementation starts inserting the new buttons and text views, view database, reset DB, and Employed address. Then, it's added to the project another activity that contains all the employees inserted, combined with a recycler row that show the employee card and buttons. The dialogue is also created to use when the edit button is pressed.

On the other hand, it implemented the room database that is composed of three important parts: the abstract database that creates the DB instance, the table implements the table features for data (Columns, primary keys, ...) with its specific getters and setters, and Dao that allow me to interact with table with integrated functions such as delete, edit, and insert, or queries to select all or do a specific search.

The activity classes that interact with the user, database, and Google API, were created. The main activity interacts with the user, it validates the inputs, resets the data, and changes to view database activity. Then, in the view database, it fetches the employee cards and initializes the recycle view, then the adapter control all the activities to interact with the database, Finally, the google maps feature is implemented by creating an API key, changing the grandle, creating a class to use the map and show it. Finally, A extra feature to validate the address was inserted.

### 3. Test and Results

ICON

working for you

CAtalina

Calle

6789756

emailtest@hotmail.com

15 seaview avenue, port macquarie

INSERT EMPLOYEE

VIEW DATABASE

RESET DB

ICON

working for you

CAtalina

Data inserted is correct

Name: CAtalina  
Last Name: Calle  
Employee ID: 6789756  
Email: emailtest@hotmail.com  
Address: 15 seaview avenue, port macquarie

INSERT EMPLOYEE

VIEW DATABASE

RESET DB

Employee Added Successfully

Employee

Canada  
SEVEN Sebastian Ramirez  
6345678  
sebastianSEVEN@hotmail.com  
Sydney  
EIGHT Sebastian Ramirez  
7345678  
sebastianEIGHT@hotmail.com  
Tasmania  
NINE Sebastian Ramirez  
8345678  
sebastianNINE@hotmail.com  
Nigeria  
TEN Sebastian Ramirez  
9345678  
sebastianTEN@hotmail.com  
China  
CAtalina  
Calle  
6789756  
emailtest@hotmail.com  
15 seaview avenue, port macquarie

Employee

Canada  
SEVEN Sebastian Ramirez  
6345678  
sebastianSEVEN@hotmail.com  
Sydney  
EIGHT Sebastian Ramirez  
7345678  
sebastianEIGHT@hotmail.com  
Tasmania  
NINE Sebastian Ramirez  
8345678  
sebastianNINE@hotmail.com  
Nigeria  
TEN Sebastian Ramirez  
9345678  
sebastianTEN@hotmail.com  
China  
CAtalina  
Calle  
6789756  
emailtest@hotmail.com  
15 seaview avenue, port macquarie

Edit Employee

SEVEN1 Sebastian Ramirez  
6345678  
sebastianSEVEN@hotmail.com  
Sydney

UPDATE EMPLOYEE

Are you sure?  
CANCEL YES

Employee

ONE Sebastian Ramirez  
0345678  
sebastianONE@hotmail.com  
Colombia  
FOUR Sebastian Ramirez  
3345678  
sebastianFOUR@hotmail.com  
Argentina  
SIX Sebastian Ramirez  
5345678  
sebastianSIX@hotmail.com  
Canada  
SEVEN Sebastian Ramirez  
6345678  
sebastianSEVEN@hotmail.com  
Sydney  
EIGHT Sebastian Ramirez  
7345678  
sebastianEIGHT@hotmail.com  
Tasmania  
NINE Sebastian Ramirez  
8345678  
sebastianNINE@hotmail.com

Employee address

Map showing location of Employee address (Calle 44, Calle 45, Calle 46, Calle 47, Calle 48, Calle 49, Calle 50, Calle 51, Calle 52, Calle 53, Calle 54, Calle 55, Calle 56, Calle 57, Calle 58, Calle 59, Calle 60, Calle 61, Calle 62, Calle 63, Calle 64, Calle 65, Calle 66, Calle 67, Calle 68, Calle 69, Calle 70, Calle 71, Calle 72, Calle 73, Calle 74, Calle 75, Calle 76, Calle 77, Calle 78, Calle 79, Calle 80, Calle 81, Calle 82, Calle 83, Calle 84, Calle 85, Calle 86, Calle 87, Calle 88, Calle 89, Calle 90, Calle 91, Calle 92, Calle 93, Calle 94, Calle 95, Calle 96, Calle 97, Calle 98, Calle 99, Calle 100)