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**GitHub Username:** [xenonzx](#)

# Omla

## Description

Omla is an app that provides the currency exchange rates of banks operating in Egypt . Today Each bank available has its own currency exchange rate different than other banks since Egypt lifted up government Restrictions on currency and [allowed its currency to float](#).now the exchange rates are freely determined by the market. The purpose of Omla is to provide the user with banks currency exchange rates so that he can determine which bank to go to to get the best value for his money. The translation of the word “currency” in Arabic is the word “عملة” and

it's pronounced "Omla" hence the name of the application. The app has free version(with ads) and paid version(ad-free).

### Problem

The user wants to know the current foreign currency exchange rate with regard to the Egyptian Pound (EGP) and which bank to go to so that he get the best price when exchanging from or to the Egyptian pound.

### Proposed Solution:

Design an app that provides the user with banks currency exchange rates. The app should provide sorting option so the user could pick the highest sell rate or the highest buy rate according to his own need. The app should contain updated exchange rates from banks and location of the bank branches on map. The app also should provide a collection widget that can display rates on home screen.

### Intended User

Tourism , Solid remittances(remittances of Egyptians working abroad) and Export revenues are among [the sources of foreign currency](#). that makes the intended users for this application tourists, families of Egyptians working abroad and exporters.

Families of Egyptians working abroad are most likely to use the app on monthly basis and for a long duration of time (as long as their relative is working abroad).

Tourists are most likely going to use the app as they probably going to make the currency exchange once or few times along their tour.

Exporters are most likely to use the app frequently through their daily work but most likely be restricted with some banks that provide deals and Bank facilities for them.

### Features

List the main features of your app. For example:

- Displays bank exchange rates for multiple currencies
- Sorting option for best sell and buy rates
- Home screen widget to display rates
- Map to show bank branches locations

## User Interface Mocks

### Screen 1

Omla	USD/EGP	
showing for USD/EGP	EUR/EGP	
Bank 1	19.7569 EGP	19.9062 EGP
Bank 2	19.7569 EGP	19.9062 EGP
Bank 3	19.7569 EGP	19.9062 EGP
Bank 4	19.7569 EGP	19.9062 EGP
Bank 1	19.7569 EGP	19.9062 EGP
Bank 1	19.7569 EGP	19.9062 EGP

Main activity showing list of banks buy and sell rates for the USD -as an example- . the user can change the currency from options menu . each list item is clickable and leads to bank details screen.


## Screen 2

Omla		
Rates	Buy	Sell
USD/EGP	19.7569 EGP	19.9062 EGP
SAR/EGP	19.7569 EGP	19.9062 EGP
EUR/EGP	19.7569 EGP	19.9062 EGP



Bank details activity showing all the currency rates of the bank and a map to show near by bank branches.

## Screen 3

Omla					
showing for USD/EGP	Buy	Sell	Rates	Buy	Sell
Bank 1	19.7569 EGP	19.9062 EGP	USD/EGP	19.7569 EGP	19.9062 EGP
Bank 2	19.7569 EGP	19.9062 EGP	SAR/EGP	19.7569 EGP	19.9062 EGP
Bank 3	19.7569 EGP	19.9062 EGP	EUR/EGP	19.7569 EGP	19.9062 EGP
Bank 4	19.7569 EGP	19.9062 EGP			
Bank 1	19.7569 EGP	19.9062 EGP			
Bank 1	19.7569 EGP	19.9062 EGP			

Tablet version showing master and detail view.

## Key Considerations

### How will your app handle data persistence?

The app should keep only the last updated version of bank exchange rates.

The app should keep the user selected currency option in shared preferences.

### Describe any corner cases in the UX.

The user pulls down the list of rates in main activity a swipe to refresh view shows progress and sync-immediately job is started.

The user opens the app for the first time and has no connection, the user is presented with a message to turn on his wifi and sync job should start when he is connected to the internet.

Nothing should happen if the user clicked on rates inside the bank detail activity as he is already watching all the details of the bank.

**Describe any libraries you'll be using and share your reasoning for including them.**

[Butter knife](#) for view binding.

[Okhttp](#) to handle network http requests.

[Retrofit](#) to mainly to use okhttp to make network requests and get type safe object from response.

[Crashlytics](#) to integrate crash reporting in the app.

**Describe how you will implement Google Play Services.**

Admob is used in the free version for monetization. The free version should show banner ads in main activity(the list of banks exchange rates ) and detail activity (the activity showing all the detail of the bank).

The app should use google Maps to show the branches available for that bank.

The app should use location services to set the camera of map view to the users current location.

## Next Steps: Required Tasks

### Task 1: Project Setup

Initiate project

- Add libraries to gradle.
- Initializing git repo on github.

### Task 2: Implement UI for Main Activity and Detail activity on mobile

Building main activity with dummy data.

- Populate main activity with dummy data.
- Build detail activity as a fragment activity showing single fragment with dummy data.

- Inflating menu and adding actions on option items in main activity.
- Adding pull to refresh layout.
- Adding sorting option on dummy data.
- Handling accessibility by adding content description.
- Handling localization by designing Right-to-Left layout and showing which strings are translatable in xml.
- Keeping good format by showing currency formats and dates formats.
- Handle empty results response.
- Handle no connection message.

### **Task 3: SharedPreferences Utils**

Building shared preferences utils to keep the user preferences.

- Keep preferred currency exchange rate.

### **Task 4: Maps integration**

Using dummy data display bank branches.

- Google Maps integration.

### **Task 5: Tablet version**

Determining the layout to be displayed given the width of the screen.

- Display master and detail layout on tablet version.

### **Task 6: Content provider**

Build content provider to provide actual data.

### **Task 7: Data sync**

Schedule data sync jobs to pull latest banks exchange rates.

### **Task 8: Paid and free versions**

Create paid and free versions from the app giving each a different application id.

- Handling build variants.
- Integrating AdMob.

## Task 9: Widget

Creating the collection widget.

- Create widget provider class.
- Create remote service factory to populate the widget.
- Create widget configuration xml.
- Create widget layout.