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# ToTheMoon Crypto Tracker

## Description

A simple and easy to use crypto currency tracker with support for over 5000+ coins.

Manage your Bitcoin, Ethereum, Ripple (...) portfolio without providing your public and private keys.

This App is completely free (no ads) and open-source

Supported currencies are USD, EUR, JPY and GBP.

## Intended User

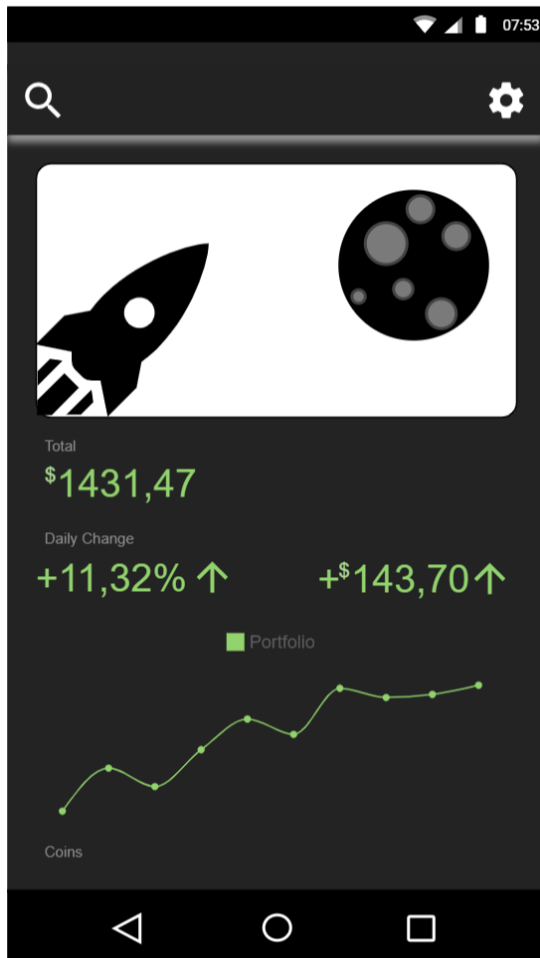
This application is mainly intended for newcomers to crypto currencies to monitor all their Bitcoin and Altcoins. It should inform the user about the daily changes in their portfolio at a glimpse with a basic and responsive design.

## Features

- Add transactions for over 5000+ coins (cryptocompare.com api)
- Daily change statistics
- Support for 4 currencies

# User Interface Mocks

## Main 1

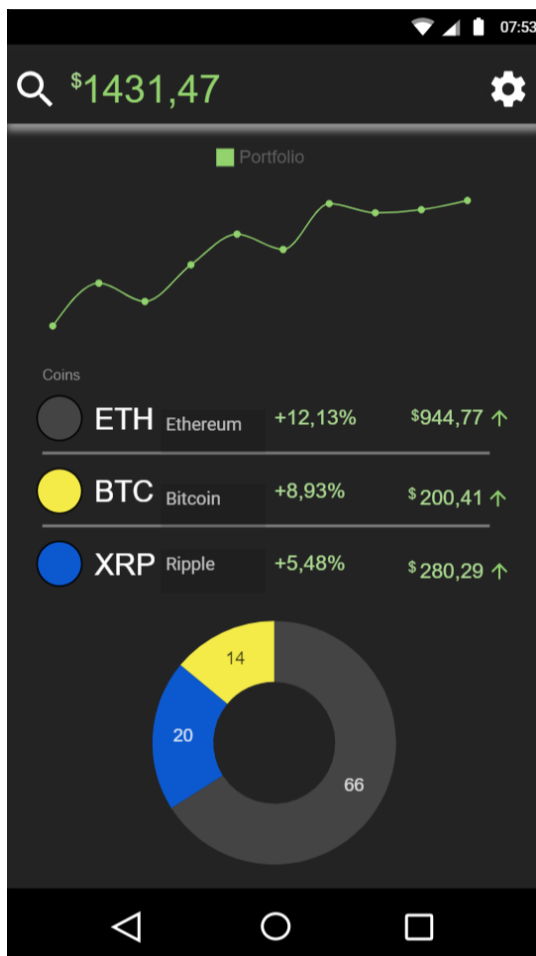


The Main Activity gives information about the daily change of the portfolio and owned coins.

The ImageView at the top and the color of the numbers changes depending on the 24h percentage change.

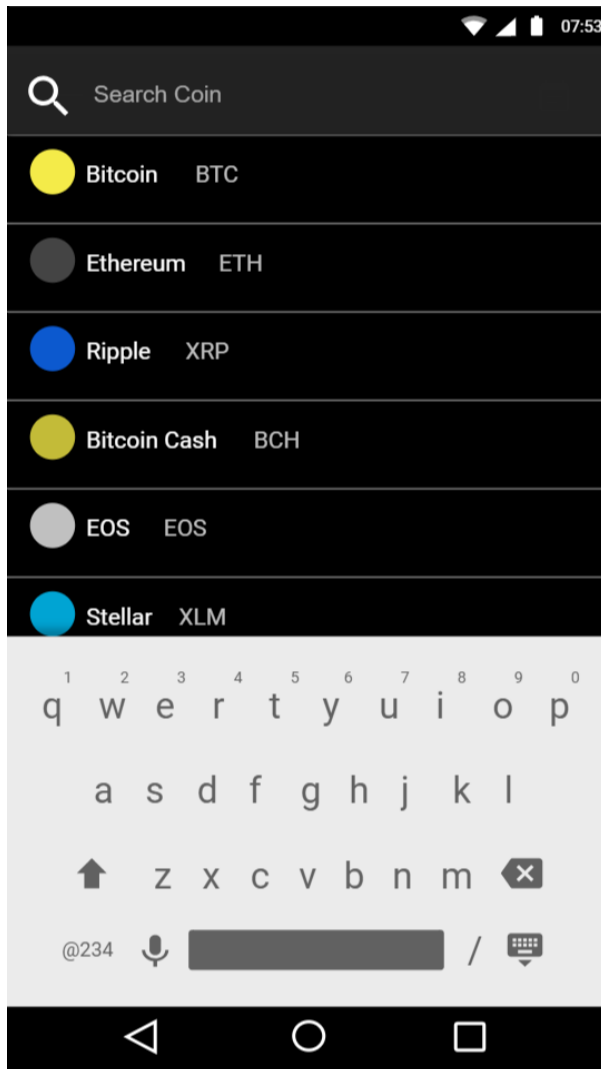
You can swipe down to refresh the information.

## Main 2



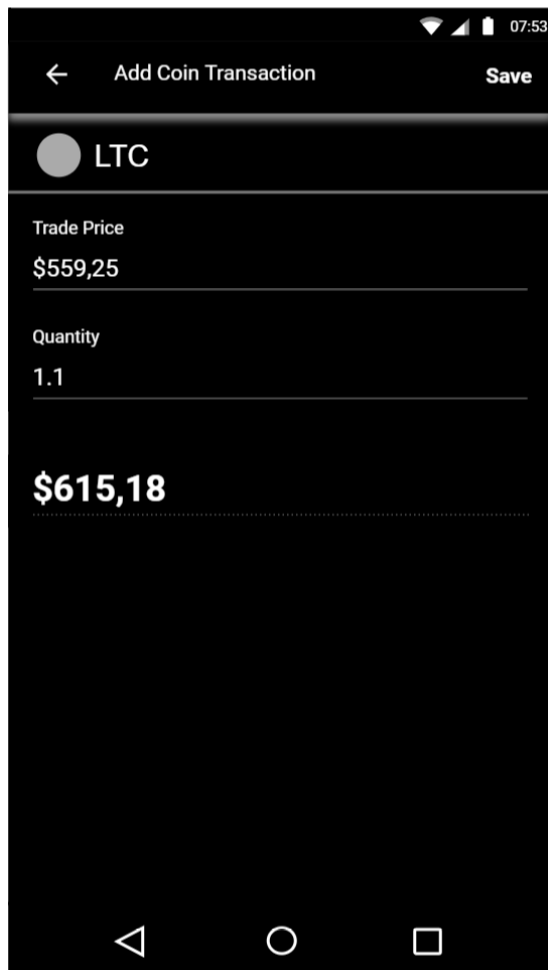
If you scroll down, you get further information on your crypto currencies and a pie chart showing the current distribution of your owned coins. You can sell a coin by swiping right or left.

## Search Coin



If you tap the icon on the top left, you can search for coins and add transactions to your main activity screen.

## Add Coin



← Add Coin Transaction Save

● LTC

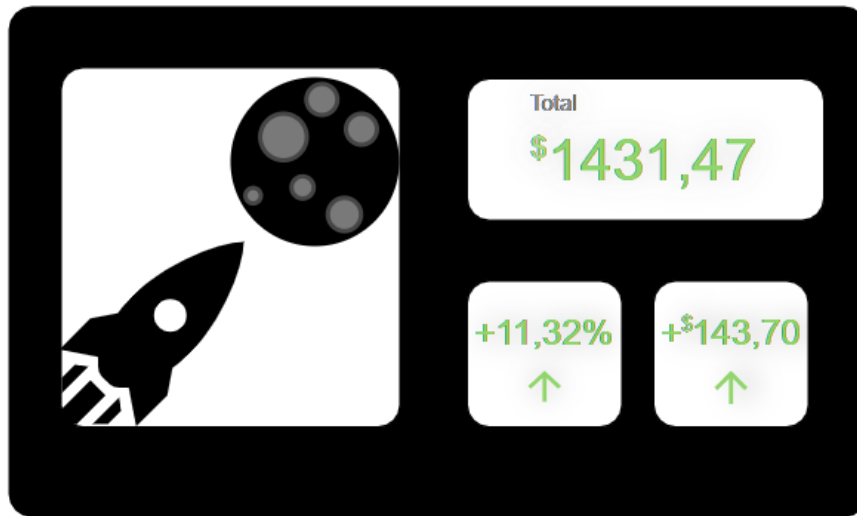
Trade Price  
\$559,25

Quantity  
1.1

**\$615,18**

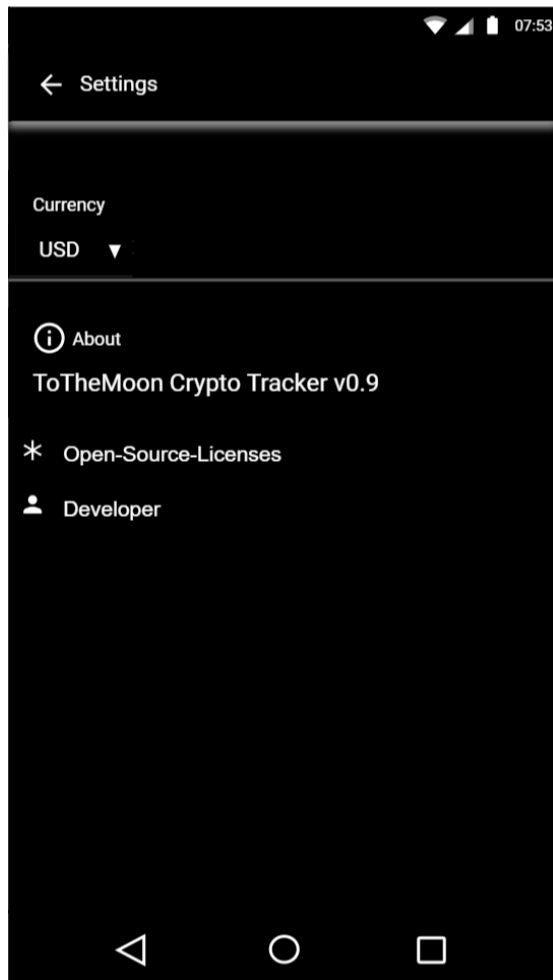
When you chose a coin, you can change the trade price and the quantity you bought.

## Widget



The widget shows an image, the total portfolio value and the daily changes.

## Settings



If you tap on the top right icon in the main activity, you get to the settings screen.

You can change your currency to USD, EUR, JPY and GBP.

On the bottom you can get information about the licenses and the developer.



## Key Considerations

### How will your app handle data persistence?

The app will use shared preferences for currency settings and the Room Persistence Library to store coin transactions.

### Describe any edge or corner cases in the UX.

- **UI to complex:** I want to make the application UI as simple as possible while providing all necessary information
- **Error cases:** The app shouldn't crash in error cases, for example when the device is offline

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

- **Timber:** better logging
- **Android Design Support Library:** basic app style
- **Butterknife:** better view binding
- **Retrofit:** for calling the [cryptocompare.com](https://cryptocompare.com) api
- **Room Persistence Library:** for better database access
- **Picasso:** loading images from the web
- **Espresso:** UI testing
- **GSON:** converting JSON to Java objects
- **MPAndroidChart:** drawing the line graph and the pie chart
- **Firebase:** Crashlytics and Performance Monitoring

### Describe how you will implement Google Play Services or other external services.

- Firebase Crashlytics  
For crash analytics
- Firebase Performance Monitoring  
Diagnose app performance
- CryptoCompare APIs: (<https://min-api.cryptocompare.com/>)  
The app gets all names, live and historical crypto currency prices from here

## Next Steps: Required Tasks

### Task 1: Project Setup

- Create project
- Setup git/github
- Add dependencies
- Add permissions
- Choose colors/styles

### Task 2: Calls to API

- Build URI
- Create entity classes
- Create AsyncTask for API

### Task 3: Create Database

- Create Contract
- Create Helper
- Use Room to implement the database

### Task 4: Create Fragments for MainActivity

Create functionality/layout for:

- ImageFragment
- StatisticsFragment
- GraphFragment
- CoinFragment
- PieChartFragment
- MainActivity

### Task 5: Add AddCoinActivity

- Create search for coin
- Create functionality/layout for AddCoinActivity
- Add new transaction to the database

## **Task 6: Add SettingActivity**

- Create functionality/layout for SettingsActivity
- Implement currency change
- Add information about licenses and developer

## **Task 7: Create Widget**

- Create widget layout
- Implement communication to app

## **Task 8: Polish App**

- Fix remaining bugs
  - Create app icon
  - Add full accessibility and RTL features
  - Add tutorial screen
  - App testing
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