

# Mobile Dev Bootcamp LATAM

Learn from our experts

Join us



## I. Introduction

Welcome to the Bootcamp Mobile Latam Devtest event. The Devtest is a development event where you are able to show your technical, soft and process skills by working to solve a given problem for the test. The skills we mainly observe are:

1. Analysis of the problem
2. Programming language knowledge and experience
3. Coding best practices
  - a. OOP
  - b. SOLID principles
  - c. Unit testing
  - d. Architectural pattern
4. Knowledge in the consumption of a REST API
5. Research
6. Communication
7. Autonomy

## Functional Requirements

(**keywords:** Front-end development, API integration, Navigation, Components, Images, Local Storage, Unit Test)

The event will take place virtually and is for the accepted candidates only, more details as follow:

**Devtest date:** Saturday, April 23rd, 2022

**Start hour:** 09:00 AM (Bolivia time)

**Location:** Discord

## Duration

The event will last 5 hours.

You will have 4 hours to complete the challenge, so make sure to use it wisely. Of course, break time is planned to help you refresh your mind and sync with your team members.

The remaining 1 hour will be used to present each project, each person will have 10 minutes to present the project, showing functionality, unit tests and architecture of the application.

## II. Event Requirements

- **Internet connection:** Ensure that you have a stable internet connection
- **Discord client:** Join our server using the [following invite](#).
- **Github:** Create a [Github account](#) with your personal email used for the registration. A repository for each participant will be given at the beginning of the challenge.
- **Workstation:** You'll need to have the following items set on your machine:
  - Webcam
  - Headset
  - A development environment (that you'll need to work on your preferred language/framework).

## III. Rules

- Keep your camera and mic turned on all the time during the event.
- You will be required to share your screen on discord so that at any point people can join and take a look at your progress and give feedback.

## IV. Recommendations

- Punctuality is very important for us, so please be at least 10 minutes online before the start time of the event. Please notice the time we have is very tight for all and you can fall into disadvantage if you get late.
- During the test, plan your tasks carefully in order to optimize your time. We recommend completing as many requirements as you can and focus first on the main ones and work on the optional/bonus requirements once you are happy with the implementation you have.
- English is really key to success so make sure to use it all the time if possible (variables naming, commit comments, demo, etc.)
- Please do the needed research before the event for all the things you are not familiar with from this document, mainly about the *keywords and tech stack* that are listed above.
- Make sure you'll have all the needed tools installed/set before the challenge starts.
- Solve the problem using the technologies (frameworks, programming languages, databases, etc) with which you feel comfortable.
- Make sure to upload your code to github before the allotted time expires.

## V. Support

Additionally, some Jalasoft engineers will be in the live session to help you with any technical issues or doubts. By the end of the test, you'll be asked to demo your work.

## VI. The Problem

### Country App

The digital era has allowed us to use apps for absolutely anything; cataloging and searching for information online sometime is too tedious, having a central application for getting all the countries with their flags in a specific region and the currencies is useful specially for the travelers

### Functional Requirements

(**keywords:** API, Navigation, Components, Local Storage)

For this assignment you need to create an application that will display information for certain countries in a specific region and their currencies, using two external APIs: the <https://restcountries.com/#api-endpoints-v2> and <https://exchangerate.host/#/docs>

1. In the first screen of the application users should be able to see a list of Countries, displaying the flag, the name, and the capital for each country.  
(Feel free to use one of these endpoints )  
<https://restcountries.com/v2/lang/es> (short list)  
<https://restcountries.com/v2/all> (complete list)
2. Users should be able to sort the countries by the population and by the area of the countries (population and area are fields provided in the response model)
3. If a user taps/clicks into a Country it should be redirected to a CountryDetail page, where it can see the same information provided in the list, and in addition the population, the area, the language, and current currency code
4. When the user is in the CountryDetail page, It should display a new field showing the currency converted with your country using <https://exchangerate.host/#/docs> (e.g If a user is from Bolivia and enters the Uruguay country he should see the conversion of his currency <https://api.exchangerate.host/convert?from=BOB&to=UYU&amount=1> )

## Bonus Features

In addition to the Main features of the application it is required to implement at least one of the extra features described below:

### Extra Feature 1:

For the CountryDetail page, the user should be able to edit the amount of currency to be converted.

(<https://api.exchangerate.host/convert?from=BOB&to=UYU&amount=1>)

### Extra Feature 2:

In the Country detail page, the user should be able to mark the country as favorite, and this country would be the base currency to be converted

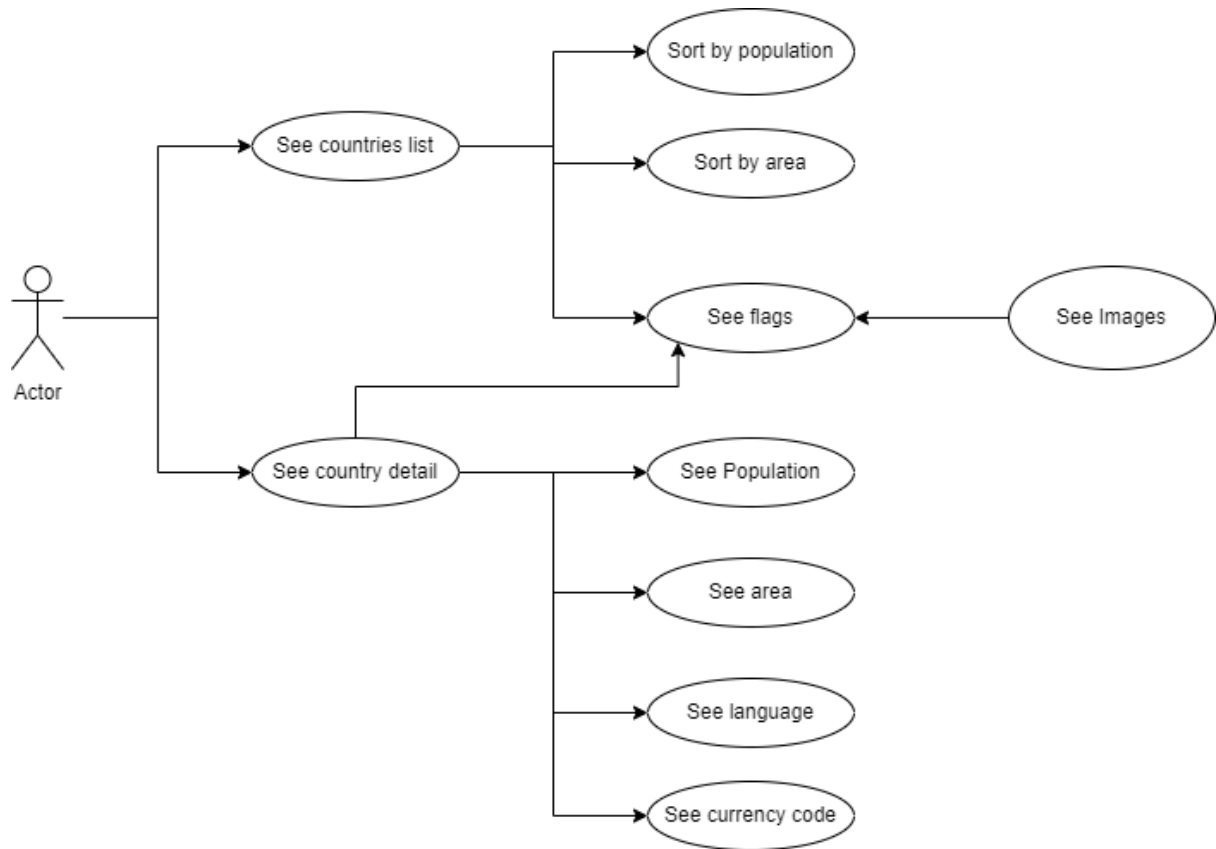
(<https://api.exchangerate.host/convert?from=NEWFAVORITE&to=UYU&amount=1>)

### Extra Feature 3:

Store data locally so that the application can work without an internet connection.

### Extra Feature 4:

Add search functionality to allow the user to search by country.



*Use case diagram with the application features and bonuses*

## VII. Appendix

- A. REST API documentation.  
Country list

<https://restcountries.com/#api-endpoints-v2>

- B. REST API documentation.  
Currency converter

<https://exchangerate.host/#!/docs>

- C. Mockups

The mockups are just UI examples, the project doesn't have to be the same, use your creativity and your own ideas to solve the problem

