

# STOCK MARKET API

**Axel, Cris, Mani, Andre & Pratt**

# INTRODUCTION

This project involves designing a simulated stock/equity market trading platform for users. Two applications would be created accessing the same database with the same WEB API. One application will use NODEJS and the other will use VUE. The first application accesses the data only through backend while the other one accesses only through the AJAX in the front end.

Stock Market Platform components:

- Laravel Rest API
- Node JS client
- Vue client

# PROJECT DESCRIPTION

# THE MAIN REQUIREMENTS

- Develop a REST API for delivering stock market data (DBMS of our own choice)
- Develop a Vue.js SPA that consumes the data provided by the API (Using Charts.js)
- Develop a Node.js/Express app that consumes the data from the API(Using Charts.js and render engine from our own choice)

## WEB API:

- Implement a DB. (The DBMS to use has to be decided by the team and also if the DB features relational or non relational design)
- Backend has to be developed in PHP / Laravel v.7.

# COMPANIES

## COMPANY 1 (Market Based)

- This is a hypothetical client for the API.
- It has to be developed in Node JS to query the API so the responsibility to obtain data relapse on the backend. It's important to properly design Classes and Methods that abstract data the cleaner the better.
- It won't be using AJAX as data will be consumed from the Backend and will be conveyed to the views.
- Views have to be responsive being Bootstrap allowed.
- It has to use Chart.js as a requirement.

## COMPANY 2 (VISUAL BASED)

- Create a SPA (Single Page Application)
- Implement VueJS and query data from the WEB API using AJAX.
- Using npm, webpack and sass is mandatory
- It has to use Chart.js as a requirement.
-

# DETAILED DESC.

## DATA ARCHITECTURE

- ❑ Values/Actions / Company
  - ❑ Name of the action, for instance:  
TESLA MOTORS, IBEX 35, GOLD, etc
  - ❑ Unic code pro example: TESLA,  
IBEX35, etc
  - ❑ Description
  - ❑ Logo or image
  - ❑ Current price:
  - ❑ qty / current price
  - ❑ Relationship with the value /  
Action to which it belongs
  - ❑ Data Type that includes  
milliseconds
-

# DETAILED DESC.

WEB API

- ❑ List all Values / Actions / Companies available.
- ❑ List all registered prices within a date range. (Maximum 1 year)
- ❑ View detailed Value/ Action / Company (name, description, etc)
- ❑ List the values / Actions / Company that have increased the most in the last 24H

# DETAILED DESC.

APP 1

- ❑ Show value listing (including the last registered price)
  - ❑ Top results page
  - ❑ Detailed value page with its corresponding graphic
  - ❑ Search results view + search form
  - ❑ Menu bar with access to all of the pages
-

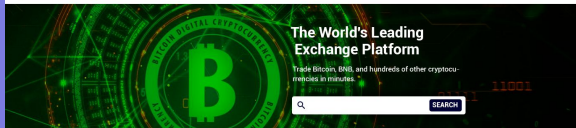


# DETAILED DESC.

APP 2

- ☐ Show value listing
  - ☐ Top results page
  - ☐ Detailed value page with its corresponding graphic
  - ☐ Add a value to be followed
  - ☐ Searcher Form
  - ☐ Search results view
-

WIREFRAME






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SEARCH

TOP 3













Name	Last Price	24h Change
 BTC BitCoin	\$7.976	+12.05%
 BTC BitCoin	\$7.976	+12.05%
 BTC BitCoin	\$7.976	+12.05%

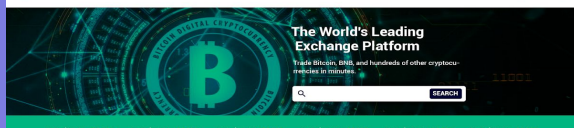
Bacon ipsum dolor amet prosciutto brisket pig pork belly, short ribs landjaeger porchetta. Andouille picanha pastrami, spare ribs burgdoggen meatloaf boudin tail flank jowl meatball ground round pancetta kielbasa tenderloin. Turkey bresaola buffalo beef. Frankfurter picanha bacon, flank chislic alcatra buffalo tail kevin turducken chicken shankle pork chon salami.

Does your lorem ipsum text long for something a little meatier? Give our generator a try... it's tasty!



## MARKET VALUES

Name	Last Price	24h Change
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SEARCH

**FOLLOWING**

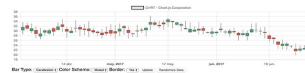
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TOP 3





























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## Axel Louis Brinck Fernández

CTO, Team Lead and Back- End Developer.

Axel is the person responsible for assigning tasks, supervising tasks before being added to the master branch, designing data-base and decision maker in the team. Supervisor and highest ranked person in contact with Assembler and other Team Leads.



## Mani Tahriri

Back-End Lead

Mani is part of the Back-End team composed by André and himself. They are both in charge of developing the NodeJS APP and integrate all markup, styling and layout provided by the front-End Team.



## Prattya Datta

Front-End Developer

Prattya is part of the Front-End team composed by Cristina and himself. They are both in charge of developing the Vue SPA and also conveying same markup, styling and layout to the NodeJS App.



## André Joyo

Back-End Developer

André is part of the Back-End team composed by Mani and himself. They are both in charge of developing the NodeJS APP and integrate all markup, styling and layout provided by the front-End Team.



## Cristina Moreno Medran

Design Supervisor, Deploy Officer and Front-End Lead

Cristina is the design supervisor, it means that she's going to supervise and make sure that design guidelines are being followed. She is also in charge of the research and implementation of the deployment to Heroku. She is part of the Front-End team composed by Prattya and herself and they both are in charge of developing the Vue SPA and also conveying same markup, styling and layout to the NodeJS App.

TEAM MEMBERS

TASKS

# TASKS

The tasks are all high priority except the ones that finishes in a character. Tasks are distributed per-day and per-worker so you can see what you need to do. Tasks represents also the deadline day!

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## #1: LARAVEL TASKS

- #L01: DOCUMENT DB USE CASES
- #L02: CREATE DB MYSQL CREATION SCRIPT
- #L03: CREATE DB MYSQL POPULATION SCRIPT
- #L04: CREATE LARAVEL PROJECT INITIAL STATE
- #L05: CREATE LARAVEL API ROUTING ACCORDING TO DB USE CASES
- #L06: CREATE LARAVEL CONTROLLER FILES THAT CONNECT TO DB THROUGH ELOQUENT.
- #L07: REFACTOR PROJECT.
- #L08: PROJECT README.MD
- #L09: DEPLOY TO HEROKU.

## #N: NODE TASKS

- #N01: CREATE INITIAL STATE PROJECT USING NPM. INSTALL EXPRESS.
- #N02: MAKE FUNCTIONS THAT SIMULATE FAKE DATA COMING FROM LARAVEL BACKEND (SEE DOCUMENT'S DB USE CASES).
- #N03: IMPLEMENT EXPRESS ROUTING TO THE FOLLOWING PAGES: TOP24, MENU ('/'), SEARCH, ABOUT, MARKET.
- #N04: IMPLEMENT DESIGN TOP.
- #N05: IMPLEMENT DESIGN MENU.
- #N06: IMPLEMENT DESIGN SEARCH.
- #N07: IMPLEMENT DESIGN ABOUT.
- #N08: IMPLEMENT DESIGN MARKET.
- #N09: USING FAKE FUNCTIONS FROM #N02, POPULATE RESPECTIVE CHART.JS, HANDLE NEEDED ROUTINGS.
- #N10: IF LARAVEL BACKEND IS ON RELEASE STATE (HEROKU) REDIRECT FAKE FUNCTIONS TO REAL ENDPOINTS.
- #N11: PROJECT README.MD
- #N12: TESTING IN IE11, SAFARI, OPERA...
- #N13: DEPLOY TO HEROKU.



## #V: VUE TASKS

- #V01: CREATE INITIAL STATE REPOSITORY.
- #V02: MAKE FUNCTIONS THAT SIMULATE FAKE DATA COMING FROM LARAVEL BACKEND (SEE DOCUMENT'S DB USE CASES).
- #V03: IMPLEMENT SPA DESIGNED FRONTEND.
- #V04: USING FAKE FUNCTIONS AS YOUR SOURCE, POPULATE RESPECTIVE CHART.JS.
- #V05: USING LOCALSTORAGE, IMPLEMENT ABILITY TO 'STAR' OR FOLLOW A MARKET.
- #V06: IF LARAVEL BACKEND IS ON RELEASE STATE (HEROKU) REDIRECT FAKE FUNCTIONS TO REAL ENDPOINTS.
- #V07: PROJECT README.MD
- #V08: TESTING IN IE11, SAFARI, OPERA...
- #V09: DEPLOY TO HEROKU.

## INVESTIGATION TASKS

- #I01: PROVIDE A DOCUMENTATION ABOUT HOW TO USE CHART.JS WITH FINANCIAL DATA (CANDLESTICKS)
- #L09A: IMPLEMENT SOCKET REALTIME DATA FROM BINANCE.COM
- #L09B: IMPLEMENT DOCKER.
- #S: PROVIDE SUPPORT IF NEEDED IN OTHER TASKS

## HEROKU INIT

- #H01: INIT LARAVEL
- #H02: INIT NODE
- #H03: INIT VUE

	Prattya	Cris	Mani	André	Axel
Friday & Monday	V02 S	H01 H02 H03 V01 V03	N01 N03	N02 I01 N03	L01 L02 L03 L04
Tuesday	N04 N06 N09	N05 N07 N08	N03 I01	N03 I01 (Continue)	L05 L06 L07 L08
Wednesday	N10 V07	L09 V05	V04/V06	S	N12 L09A L09B
Thursday	S	N13 V09 N12 V08	S	S	V08 L09A L09B
Friday	S	S	S	S	S