INVESTMENT APP

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INTRODUCTION

The search for "investment" is constantly growing in Brazil, a research demonstrates the number of individual investors in the market is increasing each year. There is a lack in the market for an app that shows valuable insights and leads investors to make a better allocation of their money. Actually, the majority of the apps available in the market are focused on teaching, market indicators and informing with news, in addition to that, they have fewer functionalities regarding the investor wealth. In consequence of that, the project was born and it's driven by the vision of delivering investor insights. This document contemplates the description of a few functionalities, both in business and technical spectrum.

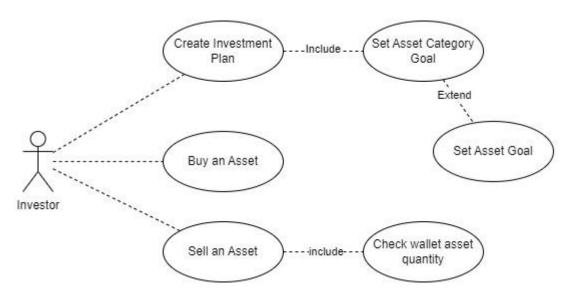
SCOPE

This project is a backend Rest API with the functionalities:

- 1. Manage investment goals;
- 2. Buy and sell assets.

The document doesn't contemplate the entire project functionalities.

USE CASE



The investor can create an investment plan, buy and sell assets. When creating an investment plan, the investor must set the category goal. The categories and most assets are automatically fed by a system task which is not contemplated on this document. A goal for an asset is optional. When selling the asset must be in the investor's wallet. Available amount is not checked when buying, because the app does not control the investor earning, only his investments.

FUNCTIONAL REQUIREMENTS

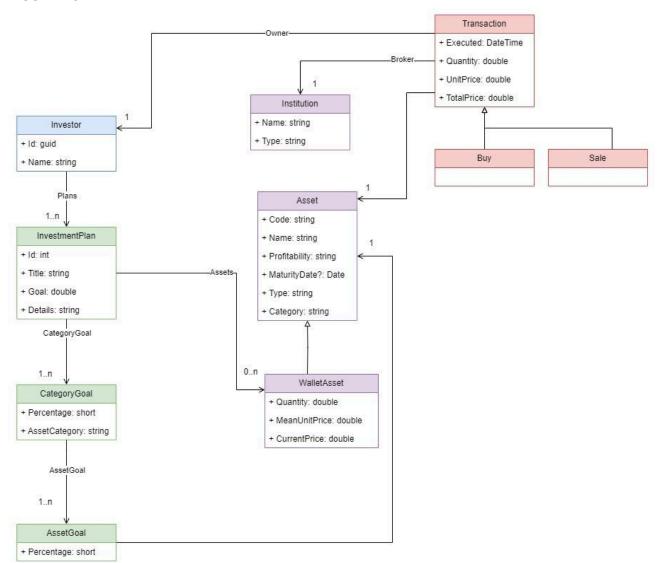
- 1. The system must require the creation of an investment plan.
- 2. The investor is required to set at least one category goal.
- 3. The asset category goal must be a percentage value.

- 4. The asset goal must be a percentage value.
- 5. The investor can buy any listed asset. He must inform the unit value and quantity.
- 6. The investor can only sell assets that are in his wallet. He must inform the unit value and quantity.
- 7. The investor must specify from which plan the asset was withdrawn.

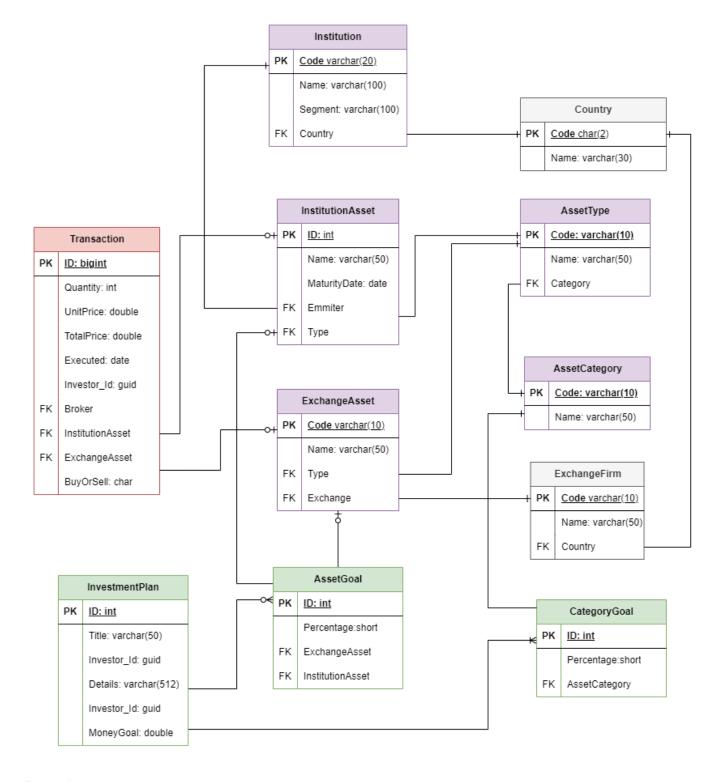
NON-FUNCTIONAL REQUIREMENTS

- 1. Assets and institutions requests should have fast response, so they may be stored in memory.
- 2. The system may support thousands of users concurrently, so it must scale horizontally.
- 3. Get requests cannot take longer than 3 seconds.
- 4. Post, Put and Patch requests cannot take longer than 5 seconds.
- 5. The system should be available 99.9% of the time.
- 6. The system must guarantee the consistency of wallet's assets when a transaction is executed.

CLASS DIAGRAM



SQL DATABASE DIAGRAM



Remarks:

- Profitability is set from the result of another service response. The service is not in scope.
- The wallet asset is compiled during each transaction and stored in a NoSQL database which is not in scope.
- Investor data is managed by a separated service, which is not in scope.

TECHNOLOGIES

Web and fast development is required. The team knowledge platform is chosen: .NET