School of Computing

CA326 Year 3 Project Proposal Form

SECTION A

Project Title: Crypto Copy Trade Boy

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Project Description

Introduction

Our project entails the development of a bot that will copy the trades of the top performing users of Binance.com, the world's largest crypto trading platform. Users will have the ability to trade with a demo account, allowing them to explore crypto trading without the risk of using actual cryptocurrency. Alternatively, users will be able to link their Binance account, and trade using their real crypto currencies.

Users will be able to choose from the Binance exchange leaderboard the top performing traders they would like to "follow". They will then be able to allot an amount of their crypto funds to each followed trader. Our bot will use this currency to mirror the trading patterns of their followed Binance traders.

The bot will improve the users cryptocurrency trading skills, by providing them with features that can plan, monitor and report on their progress and performance . The bot will run 24/7 and every position opened by the user's selected trader(s) will be tracked efficiently and will notify the user.

Upon sign-up, we will suggest a selection of top traders for the user to follow. These traders will be selected based on their annual or monthly performance. The project will be facilitated on a web application, ensuring users can access their trades on any online device.

Outline

Our project is composed of the following parts:

· Backend – We will use the Django web framework to create the foundation of our web app. The Binance API will allow us to interact with Binance servers in order to send and receive trading data, for example executing cryptocurrency trades. SQL will be used to store trading data, and in turn provide the user with insights into their trading. A limited number of Python libraries will be required: Beautiful Soup for web scraping, PyTest for testing, and MatPlotLib for graphing data.

· Frontend - We will primarily use the React JavaScript library to build the frontend of our project. HTML, CSS and JavaScript will be implemented in tandem to provide the user with our web app GUI.

Background

We both have an interest in cryptocurrency and trading, and we decided this common ground was a solid foundation for our CA326 project. As cryptocurrency trading can be daunting for newcomers, we decided to build an app that would assist beginner traders.

According to the stock trading platform Etoro, it was found that 80% of the day traders on their platform lose money over the course of a year. Our goal is to prevent beginner traders from losing money by providing them with the opportunity to trade alongside the best crypto traders in the world, and learn from them, with an emphasis on the analysis of trades.

Goals

Copy Trade Bot will provide:

· The ability for a beginner cryptocurrency trader to follow the trades of top performers, and analyse their trading patterns.

· The user will be provided with an intuitive web UI, where they can follow top Binance users and track their trades.

· The user will be able to use a demo account, where they can pretend to trade with cryptocurrency. Alternatively, when they feel ready, they will be able to link their Binance account and use their actual funds.

· The user will have access to all the data from their previous trades such as their entry price, exit price and their trade size.

Programming language(s) and tools

Backend

       Python + Django + MySQL

Front-end

       React + HTML5+ CSS3 + ES6

Python Libraries

       Beautiful Soup + PyTest + MatPlotLib

Breakdown of work

Student 1 - Eamon Goonan

- I will initiate the Django application and integrate the Binance API
- I will focus on the databasing of trading data
- I will help to design the web application GUI
- I will consistently write unit tests to maintain high code coverage
- I will conduct user testing upon completion of the application

Student 2 - Mudiaga Dortie

- I will conduct research regarding what traders
- I will produce content for the blog
- I will utilise the ReactJS framework to build the application frontend
- I will help to design the web application GUI
- I will conduct user testing upon completion of the application