



Developing a Web Application (Coin Compass) that Predicts Six Crypto Currency Price, Gives Live Prices and Prices Chart



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Introduction

Context: As the world strides towards becoming a cashless society, crypto currency has gained popularity in recent years. Individuals, groups and organizations investing in crypto currency has grown in number due to high profits from trading. However, investment in crypto currency also comes with high risks because of how highly unstable or volatile the currency is. This high volatility is caused by high price changes in the crypto currency market.

Objectives: The purpose of this project is to create a web application which houses a machine learning model to help predict the prices of six altcoins which are – Bitcoin(BTC), Ethereum(ETH), Stellar Lumens(XLM), Litecoin(LTC), Chainlink(LINK) and Cardano(ADA) on the crypto market. This application will serve as a tool in predicting the price of these coins.

Methodology: Real life problems can be huge and complex to solve. Procedural methodology is the approach used to analyze and plan development of software and controlling of processes involved in development. The steps taken in effort to understand and develop solution to the problem include:

1. Requirement Specification
2. Analysis
3. System design
4. Implementation
5. Testing
6. Maintenance

A design science approach was used in for this project

Conclusion: The Coin compass we app is an effective tool for forecasting prices, visualizing price changes and thereby reducing the risk posed by investing in crypto coins

Problem Definition

The high volatility of crypto currency poses great risk to investor. In order to reduce risk, individuals, organizations and groups come together to discuss and attempt to predict the trend of crypto currency prices and speculate on the market.

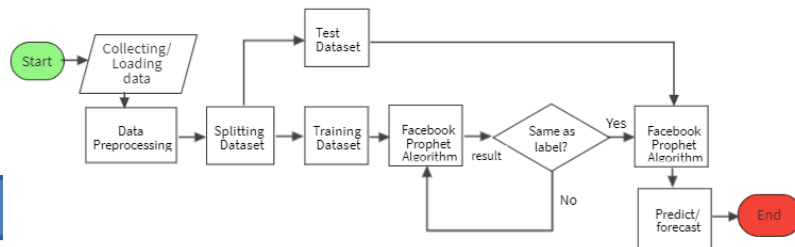
Predictions made may not always be accurate and individuals who are not in these groups may incur unnecessary or unexpected losses.

Research Contribution

This project seeks to bring into existence a web application(Coin Compass) with its main purpose being 1. to predict prices of the fore mentioned crypto currency coins so as to mitigate risk associated with investing in crypto currency. 2. This tool will help person(s) who may not have access to groups in which discussions are held to predict and speculate coin prices.

3. It will also be of use to individuals in such groups who need clearer and more certain forecast of trends.
4. It provides live prices and price chart that aid with visualization and analysis of data by investors

Overview of Coin Compass Prediction Method



Coin Compass Method

A user can perform the ff functions when Coin Compass is opened:

1. From the home screen, user can read information on the application and see documentation if need be
2. From the navigation bar, user can select dashboard. Here, user can view live prices of selected coins and can select multiple coins to display a graph containing all selected coins with specified time duration. User can use this to compare trends and price differences of coins
3. From navigation bar, user can select Forecast. Here, user can select only one coin for prediction and move the slider to select the span of prediction(1 to 4 years). User can view raw and forecasted data and their corresponding graphs

Assumption

1. Users are presumed to be accustomed to and know coin names and abbreviation of names
2. All coin prices on this app will be in US dollars (USD) since it is one of the most popular fiat currency and can easily be converted to local currencies.

Conclusion

At the end of this project, the crypto currency price prediction application (Coin Compass) was created to meet all its expected requirements. This application can now serve as a tool to make predictions of the possible trend of prices and aid individuals, groups and organizations to make better investment decisions when it comes to crypto currency.

References

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