**Project Report**

1. **Title of the Project: Crypto Currency Price Prediction:**

#### **1. Brief on the project:** Cryptocurrencies are sort of digital currency in which all transactions are carried out through the internet. It is a soft currency that does not exist in hard cash form. We emphasize the difference between a decentralized currency and a centralized currency in that all virtual currency users can acquire services without the intervention of a third party. Using these cryptocurrencies, however, influences international relations and trade because of their severe price volatility. Furthermore, the rapid variations in cryptocurrency prices indicate that a reliable method for estimating this price is urgently required.

1. **Deliverables of the project: To classify /predict whether the currency price with actual price**

Using a time series model like LSTM tried to do analysis on Bitcoin and Ethereum.

Compared few growth rates and rolling mean of Bitcoin and Ethereum

1. **Attribute Information:**

We Can see that we have a dataset with 3654 rows in which we have 0 Missing Values. As you can see, the data has **7 columns**:

* **“Open”** for the opening price for the day
* **“High”** for the highest price during the day
* **“Low”** for the lowest price during the day
* **“Close”** for the closing price for the day
* **“Adj Close”** for the adjusted closing price
* **“Volume”** for transaction volume.
* **"Currency"** the type of the currency

In stock price, **adjusted closing price** reflects a stock’s closing price on any given day of trading that has been amended to include any distributions and corporate actions that occurred at any time prior to the next day’s open.

1. **Resources:**

* **Data set source: The data set source is from the below location:**
* https://www.kaggle.com/code/yassineyahyaouii/crypto-currency-eda-and-market-prediction/input

* **Software: Software used for analysing the problem is Python with Scikit-Learn:** Python is a popular programming language for machine learning.

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1. **Individual Details:**

Done by Name: Sarmistha Chakraborty

**Email id:** [**schakraborty87@gmail.com**](mailto:schakraborty87@gmail.com)

Phone Number: 958665987

1. **Model Selection:**

Are machine learning models capable of forecasting the bitcoin market? Unlike traditional paper currency which can be printed as per market needs, Cryptocurrency has a limited supply. Should you invest or not? We investigate this research question by contrasting well-known machine learning models trained on crypto currency data. I tried using LSTM to compare the prices of Bitcoin and Etherium

**Conclusion:**

* The price volatility of cryptocurrency is affected and determined by factors such as a country's political system, public relations, and market policy. Other cryptocurrencies such as ripple, lite coin, and others were not examined in this project.

The results of the experiments reveal that: •

* The AI algorithm is trustworthy and suitable for bitcoin and Ethereum prediction.