

Big Data Project: Bitcoin Sentiment Analysis

Project Description:

MarketPulse Analytics, a leading company in the market research sector, initiated a project to estimate public consensus on Bitcoin by analyzing millions of tweets. My responsibility was to conduct a sentiment analysis on the collected data and understand how opinions regarding Bitcoin varied over time. Additionally, I needed to address critical questions about user engagement on social media and evaluate any correlations with Bitcoin's price.

Key Responsibilities and Tasks:

1. **Data Collection:** I gathered relevant data from the Bitcoin blockchain and other sources like public APIs and historical datasets.
2. **Data Cleaning and Preprocessing:** I performed data cleaning operations to handle missing values, remove duplicate entries, and standardize data formats to facilitate analysis.
3. **Exploratory Data Analysis (EDA):** I conducted exploratory analysis to understand data distribution, identify significant trends and patterns, and visualize key data features through charts and tables.
4. **Data Visualization:** I used libraries like Matplotlib and Seaborn to create visualizations that clearly represented analysis results, such as charts on transaction trends.
5. **Results Interpretation:** I interpreted the findings to gain insights into Bitcoin's consensus dynamics.

Outcome:

- I provided a useful tool for data-driven business decisions.

Technology:

- PySpark (DataBricks)