



Department of Computer Science & Engineering

UE17CS355 - Web Tech II Laboratory

# Project Evaluation

Project Title : BITCOINOLOGY  
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## Project Description

**Bitcoin (BTC)** is a very popular form of crypto currency based on Blockchain technology. Due to the massive fame and success it has gained, we made a website, shedding some light on it and providing the users with plenty of information about it and other crypto currencies as well. This website, gives a quick introduction, elaborates the characteristics as to what makes Bitcoins so special, describes how it works and mentions some fun facts about it too. It tracks real-time market trends like price with the help of a live graph. It has a Bullish Bearish Indicator at the bottom. Higher readings shows that the market is too bullish hence shall be market top and not a sign for buy. Similarly lower readings shows the market is too bearish hence shall be market bottom which will provide opportunity to buy. Furthermore, we have a News feed to keep the users aware and up-to date about the Bitcoin happenings. We also have a table that has the lowest, current and highest price of a bunch of crypto currencies and a contact form via which the user can communicate with us if he/she wishes to.





## Technologies Used

1. Django for front-end
2. Django for back-end
3. Python
4. JavaScript
5. REST API
6. Ajax patterns
7. Libraries imported from Django



## Techniques Implemented

1. We have made use of **Multistage Download** in the News Feed to enhance the speed with which the page can download. The page has text and multimedia pictures. The most basic functionality which is the news, is loaded first. Then the pictures. Thus, within a few seconds, the page has jumped to life as content from several different locations in pulled and displayed.
2. We have made use of **Periodic Refresh** for the Table to update it with the new values frequently. It gets refreshed every 10 seconds using Ajax poll.





## Intelligent Functionality

In the live graph, we have made use of **Moving Average Convergence Divergence (MACD)** which is a trend-following momentum indicator that shows the relationship between two moving averages of a security's price. The MACD is calculated by subtracting the 26-period Exponential Moving Average (EMA) from the 12-period EMA. The result of that calculation is the MACD line. A nine-day EMA of the MACD called the "signal line," is then plotted on top of the MACD line, which can function as a trigger for buy and sell signals. Traders may buy the security when the MACD crosses above its signal line and sell - or short - the security when the MACD crosses below the signal line. Moving Average Convergence Divergence (MACD) indicators can be interpreted in several ways, but the more common methods are crossovers, divergences, and rapid rises/falls.





Thank You

