**Website Name: CryptoFreak**

**Website Link: https://cryptofreak.mooo.com/static/home.html**

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**Abstract**

Crypto or Cryptocurrency is a digital currency that works individually without depending on banks and also ensures a secured medium for exchanging currency digitally or virtually. Cryptocurrency is very popular nowadays because of – faster transactions, lower transaction costs, higher security, proper privacy, inflation protection, transparency, etc. Also, it is an easier way for money transactions in this digital era. The main goal of our project is to develop a website to present 24 hours market trends of the coin based on price change (%) and give suggestions to the clients about the best coin to invest in based on its stability. To develop a website, first of all, we set up an account on oracle cloud which is a cloud computing service, created a compute instance followed by setting NGINX Webserver up which is an open-source web server used for various purposes. The reason behind choosing this webserver is that it is much faster than the other webservers. We registered the subdomain with <https://freedns.afraid.org/> as <https://cryptofreak.mooo.com/> by securing it with certbot. To develop this website we needed to install miniconda to work on Ngnix and Uvicorn which are server implementations in python. For continuing the work on the website without losing the connection with the terminal we installed jupyter lab and set up a reverse proxy server. We used an existing Web API <https://api2.binance.com/api/v3/ticker/24hr> which provides publicly accessible data and ran it in a computational notebook named Visual Studio Code using python language to develop our website. JavaScript Object Notation (JSON) was used to change the format of the data to readable or text format. We selected the particular columns from the real data- price change percent, ask Price, weighted Avg Price, count, price Change, and last price and sorted the values accordingly to present the best price for the coin. Then, a graph was made to reflect the market trend of 24 hours of coins by showing the increase and decrease of the price (%). The price change (%) was positive between 0-15% but the price decreased up to 0-20%. Then to develop APIs for the server we needed to run FastAPI in python. The home page of the website was built through FileResponse in FastAPI after installing the starlette package. The home page (<https://cryptofreak.mooo.com/static/home.html>) was designed with the reference to CSS architecture including a proper header, body, and footer. On the navigation bar, Best Crypto Deals, 24 Hrs Trends, Our Free Crypto API, Contact, and About are included with detailed information and graphs. If any client wants to know the API used behind this website, he can easily get all the data from Our Free Crypto API (<https://cryptofreak.mooo.com/docs>) bar which is a built-in API doc.