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Department of Computer Science & Engineering

UE17CS355 – Web Tech II Laboratory

Project Evaluation

Project Title : Time Series Evaluation on Prices for GOLD

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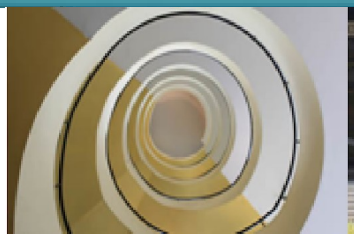




Project Description

Our Project is out time series forecasting on the prices of gold. The data we have is from 1956 to current day and it uses timeseries-analysis (npm module) to forecast and graphically elaborate the data we have on our hand. We use the supervised learning so that we have a percentage of accuracy to make the forecasting model learn better as there is no trend in the graphs. We apply noise removal and smoothening to the curve so that it makes out job easier with all the modern tools to make the site realistic and use the latest version of javascript to match up with the framework we are using, making it so that there are safe changes to the webpage and realtime update to the database.We have used total of 4 different use cases of API’s in doing so.

Technologies Used

Front-End Framework : REACT

Back-End Framework : Firebase(Cloud Database similar to mongoDB)

AR (autoregressive model) for forecasting the data.

Javascript :- ES6/ES7 + JSON

Axios(POST api) + Fetch(GET api)

Google Charts API (for graphical representation of Data)

CSS Loader + BootStrap + flexbox

Polling to Load Data + Some Ajax Methods implemented in REACT

Techniques Implemented

AJAX Pattern : - Periodic Refresh and Long Polling

RESTful API:- POST and GET (implemented by axios and fetch methods respectively)

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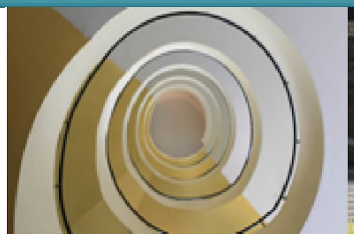




Intelligent Functionality

Machine Learning and Data Analytics to forecast the next year price for gold.

AR (auto regressive) model for forecasting data.

Noise removal of data.

Data smoothening.(removal of seasonal data and trends and cyclic trends)

Forecast Accuracy keeps on improving as the year passes

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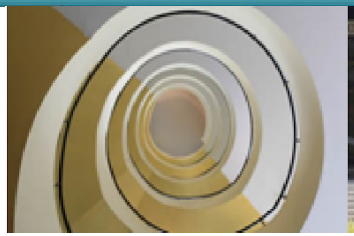

Thank You