**Stock Data Repo**

**[Problem Statement]**

Develop a pseudo backend Application for Stock Data Repo. A data dump is provided which contains the stocks related historical data from 2005 - 2016. Your web app should be an archive of historical stocks trading data. Users should be able to fetch history of desired stock prices using APIs you expose.

**[Ideal Behavior]**

— Write a backend which exports APIs with all the data provided in the dump below.

— Implement multiple APIs for validation of the request and retrieval of data.

— Your APIs should take multiple parameters to fetch data from backend, performs API key validation and other request validations.

**[Minimum Requirement]**

— Write a backend in tech stack mentioned below which exposes APIs which return response in JSON.

— Implement an API key validation.

— Implement APIs for:

* Company Search: This service should take a company name and returns all the price points of that company over the entire duration.
* Time Frame: This service should take two dates as input and should return 10 best performing and 10 least performing stocks in that time frame.
* Stocks In Time: This service should accept two parameters, “any number of stock tickers in a list” and “two dates”. This will return all the highs, lows and closes of these stocks in the desired time frame.
* Ticker Search: This service should take the ticker symbol and should return all the price points in time of that ticker.

— Data APIs should be called internally after validation of incoming requests.

— Implement Postman collection for your APIs documentation.

— Zip all your source code, deployment instructions, screenshots and upload them.

**[Extra Work]**

Along with everything from the above level :

— Implement ORM Mongoose for data modeling in the backend.

— Perform thorough Unit Tests and submit a report.

— Write a script to test and deploy your backend.

— Use your imagination and add features which would make things easier for end users.

— Zip all your source code, executables(if any, viz. war file), deployment instruction, db dump file, screenshots and upload them.

**[Guide]**

Stock Archives Data dump: http://hck.re/CPKVPp

Stocks info Xlsx files: http://hck.re/oUVSlU

**[Ideal Stack]**

* Backend : NodeJS - Express, Golang, ORM Mongoose
* Db : MongoDB