**Technologies Used**

1. Entity Framework Code First
2. Newtonsoft.Json
3. Moq
4. Asp.Net MVC and all its accessries
5. AutoMapper
6. Bootstrap Css/Js
7. Angularjs
8. Structure Map (IOC)

**Pattern Used**

1. Domain Driven Development
2. Test Driven Development
3. Dependency Injection
4. MVC Pattern
5. Auto Mapper

An overall component interaction diagram

StocksDB

(Database)

StockExchange

Repo

(Provides Display data)

StockExchange

Auth

(Provides Auth Token)

StockExchange

Data

(Link to DB for Data)

StockExchange

Service

(Live Feed of Stocks )

StockExchange

Web

(The Page User Interact with )

A detailed sequence diagram for the tickers page

Stock Service Receive the Request with token. Validate if token is still valid based on age and token setting in web.config

Monitored list Page Get a new token from stock web. Then the page make a service request using JavaScript to Stocks Service.

User Visit Live Feed to see live activities of Monitored list

User Edit items in list of Stocks to be Monitored in My List

User Sign in after Creating an Account in StockExchage.Web

If Token is valid then data is send out with a fresh token to be used for the next request. Also new volume and price is generated and store into our DB based sometimes based on some random values

The Stocks Web’s Live waits 10secs and make the request again to get fresh data and Token. The process repeat itself

The Stocks Web’s Live feed page receive data with token. Display the data and keeps the token for next request

Thanks for reviewing. Ran out time, couldn’t look for a tool for this