Controller/HomeController.cs

**using** **HW7.Models**;

**using** **System**;

**using** **System.Collections.Generic**;

**using** **System.IO**;

**using** **System.Linq**;

**using** **System.Net**;

**using** **System.Web**;

**using** **System.Web.Mvc**;

**namespace** **HW7.Controllers**

{

**public** **class** **HomeController** : Controller

{

**private** Model1 db = **new** Model1();

*// GET: Home*

**public** ActionResult Index()

{

*//ViewBag.csvRows = new string[] { " \" Date,Temperature \" \n + ", "2008-05-07,75 \n", "2008-05-08,70 \n", "2008-05-09,80 \n" };*

**return** View();

}

**public** JsonResult GetStockData()

{

string stockSymbol = "no such symbol";

stockSymbol = Request.QueryString["sym"];

string responseText = String.Empty;

string[,] dataArray = **new** string[100, 100];

int x = 0;

int y = 0;

string[] DateCol = **new** string[50];

string[] OpenCol = **new** string[50];

string[] HighCol = **new** string[50];

string[] LowCol = **new** string[50];

string[] CloseCol = **new** string[50];

HttpWebRequest request = (HttpWebRequest)WebRequest.Create("http://chart.finance.yahoo.com/table.csv?s=" + stockSymbol + "&a=9&b=16&c=2016&d=10&e=16&f=2016&g=d&ignore=.csv");

request.Method = "GET";

**try**

{

HttpWebResponse response = (HttpWebResponse)request.GetResponse();

**using** (StreamReader sr = **new** StreamReader(response.GetResponseStream()))

{

responseText = sr.ReadToEnd();

}

string[] dataRows = responseText.Split('\n');

**for** (int index = 0; index < dataRows.Length; index++)

{

string[] cells = dataRows[index].Split(',');

**for** (int cellIndex = 0; cellIndex < cells.Length; cellIndex++)

{

*// date*

**if** (cellIndex == 0)

{

DateCol[x] += cells[cellIndex];

}

*// open*

**else** if (cellIndex == 1)

{

**if** (index == 0)

{

OpenCol[x] = stockSymbol + "-";

}

OpenCol[x] += cells[cellIndex];

}

*// high*

**else** if (cellIndex == 2)

{

**if** (index == 0)

{

HighCol[x] = stockSymbol + "-";

}

HighCol[x] += cells[cellIndex];

}

*// low*

**else** if (cellIndex == 3)

{

**if** (index == 0)

{

LowCol[x] = stockSymbol + "-";

}

LowCol[x] += cells[cellIndex];

}

*// Close*

**else** if (cellIndex == 4)

{

**if** (index == 0)

{

CloseCol[x] = stockSymbol + "-";

}

CloseCol[x] += cells[cellIndex];

}

}

x++;

}

}

**catch** (Exception e)

{

stockSymbol = "No such symbol.";

}

var data = **new**

{

symbol = stockSymbol,

graphNum = Request.QueryString["graphNum"],

date = DateCol,

open = OpenCol,

low = LowCol,

close = CloseCol,

high = HighCol,

};

Request newRequest = **new** Models.Request();

newRequest.RequestType = Request.RawUrl;

newRequest.SourceIP = Request.UserHostAddress;

newRequest.BrowserType = Request.QueryString["browser"];

newRequest.Date = DateTime.Now;

db.Requests.Add(newRequest);

db.SaveChanges();

**return** Json(data, JsonRequestBehavior.AllowGet);

}

}

}

Views/Index.cshtml

<?php header('Access-Control-Allow-Origin: \*'); ?>

@{

ViewBag.Title = "Index";

}

**<div** class="page-header"**>**

**<h1>**Stocks**</h1>**

**</div>**

**<h4>**Symbol Search**</h4>**

**<div** class="form-group"**>**

**<div** class="row"**>**

**<div** class="form-group col-xs-6"**>**

**<input** type="text" class="form-control" id="symbol" **/>**

**</div>**

**<div** class="form-group col-xs-6"**>**

**<button** type="button" class="btn btn-default" onclick="GetPrices('first')"**>**First Graph**</button>**

**<button** type="button" class="btn btn-default" onclick="GetPrices('second')"**>**Second Graph**</button>**

**</div>**

**</div>**

**</div>**

**<h1** id="symbolHeader"**></h1>**

**<div** id="graph"**>**

**</div>**

**<h4>**Display Toggle**</h4>**

**<div** class="checkbox"**>**

**<label><input** type="checkbox" value="" onclick="ToggleOpen()" checked**>**Open**</label>**

**</div>**

**<div** class="checkbox"**>**

**<label><input** type="checkbox" value="" onclick="ToggleHigh()" checked**>**High**</label>**

**</div>**

**<div** class="checkbox"**>**

**<label><input** type="checkbox" value="" onclick="ToggleLow()" checked**>**Low**</label>**

**</div>**

@section PageScripts

{

**<script** type="text/javascript" src="~/Scripts/StockInfo.js"**></script>**

}

Scripts/StockInfo.js

**var** dateCol = [""];

**var** openCol = [""];

**var** highCol = [""];

**var** lowCol = [""];

**var** openColTwo = [""];

**var** highColTwo = [""];

**var** lowColTwo = [""];

**var** openEnabled = **true**;

**var** highEnabled = **true**;

**var** lowEnabled = **true**;

**var** symbolOne = "";

**var** symbolTwo = "";

**var** first = **true**;

**function** GetPrices(gnum)

{

**if** (first)

{

first = **false**;

**for** (**var** index = 0; index < 24; index++)

{

dateCol[index] = "";

openCol[index] = "";

openColTwo[index] = "";

lowCol[index] = "";

lowColTwo[index] = "";

highCol[index] = "";

highColTwo[index] = "";

}

}

**var** symbol = document.getElementById("symbol").value;

**var** bow = "";

**if** ((navigator.userAgent.indexOf("Opera") || navigator.userAgent.indexOf('OPR')) != -1) {

bow = "Opera";

}

**else** **if** (navigator.userAgent.indexOf("Chrome") != -1) {

bow = "Chrome";

}

**else** **if** (navigator.userAgent.indexOf("Safari") != -1) {

bow = "Safari";

}

**else** **if** (navigator.userAgent.indexOf("Firefox") != -1) {

bow = "Firefox";

}

**else** **if** ((navigator.userAgent.indexOf("MSIE") != -1) || (!!document.documentMode == **true**)) *//IF IE > 10*

{

bow = "IE";

}

**else** {

bow = "Unknown";

}

$.ajax({

type: "GET",

dataType: "json",

url: "/Home/GetStockData/",

data: { sym: symbol, graphNum : gnum , browser : bow},

success: DisplayData

});

}

**function** ToggleOpen()

{

openEnabled = !openEnabled;

DisplayFromGlobal();

}

**function** ToggleHigh()

{

highEnabled = !highEnabled;

DisplayFromGlobal();

}

**function** ToggleLow()

{

lowEnabled = !lowEnabled;

DisplayFromGlobal();

}

**function** BuildData()

{

**var** assembledData = "";

**for** (**var** y = 0; y < 24; y++)

{

console.log(y);

assembledData += dateCol[y] + ",";

**if** (openEnabled)

{

assembledData += openCol[y] + ",";

assembledData += openColTwo[y] + ",";

}

**if** (highEnabled)

{

assembledData += highCol[y] + ",";

assembledData += highColTwo[y] + ",";

}

**if** (lowEnabled)

{

assembledData += lowCol[y];

assembledData += lowColTwo[y];

}

assembledData += "\n";

}

**return** (assembledData);

}

**function** DisplayFromGlobal()

{

g = **new** Dygraph(

document.getElementById("graph"),

BuildData(),

{

xlabel: 'Date',

ylabel: 'Price',

}

);

document.getElementById("symbolHeader").innerHTML = symbolOne + " and " + symbolTwo;

}

**function** DisplayData(data)

{

dateCol = data.date;

**if** (data.graphNum == "first")

{

openCol = data.open;

highCol = data.high;

lowCol = data.low;

symbolOne = data.symbol;

}

**if** (data.graphNum == "second")

{

openColTwo = data.open;

highColTwo = data.high;

lowColTwo = data.low;

symbolTwo = data.symbol;

}

DisplayFromGlobal();

}