

## Java

### Listing 1.

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/WEB-INF/src/com/devx/tradingapp/web/PortfolioController.java

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package com.devx.tradingapp.web;

import java.util.ArrayList;
import java.util.HashMap;
import java.util.Iterator;
import java.util.List;
import java.util.Map;

import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

import net.neurotech.quotes.Quote;
import net.neurotech.quotes.QuoteException;
import net.neurotech.quotes.QuoteFactory;

import org.springframework.web.servlet.ModelAndView;
import org.springframework.web.servlet.mvc.Controller;

import com.devx.tradingapp.business.Portfolio;

public class PortfolioController implements Controller {

    private com.devx.tradingapp.business.Portfolio portfolio;

    public PortfolioController(Portfolio portfolio) {
        this.portfolio = portfolio;
    }

    public ModelAndView handleRequest(HttpServletRequest request,
                                    HttpServletResponse response) {
        Map model = new HashMap();

        List portfolioItems = getPortfolioItems();

        model.put("cash", portfolio.getCash() + "");
        model.put("portfolioItems", portfolioItems);

        return new ModelAndView("portfolio", "model", model);
    }

    private List getPortfolioItems() {
        List portfolioItems = new ArrayList();

        Iterator symbolIter = portfolio.getSymbolIterator();

        while (symbolIter.hasNext()) {
            String symbol = (String) symbolIter.next();

            int shares = portfolio.getNumberOfShares(symbol);
            QuoteFactory quoteFactory = new QuoteFactory();

            Quote quote = null;

            try {
                quote = quoteFactory.getQuote(symbol);
            } catch (QuoteException e) {
                quote = new Quote(this.getClass().getName());
            }
        }

        PortfolioItemBean portfolioItem = new PortfolioItemBean();
        portfolioItem.setSymbol(symbol);
        portfolioItem.setShares(shares);
        portfolioItem.setQuote(quote);
        portfolioItem.setCurrentValue(shares * quote.getValue());
    }
}
```

```
    portfolioItem.setGainLoss(shares * quote.getPctChange());
    portfolioItems.add(portfolioItem);
}
return portfolioItems;
}
```