

Dávid Tóth - CurrencyApp

Project:

Build a currency exchange ASP.NET/C# MVC/AJAX web application. For that use the xml feed at <http://www.ecb.europa.eu/stats/eurofxref/eurofxref-hist-90d.xml> and store currency rates in an in-memory data-structure or database. Build a web interface that provides:

1. Exchange facility between two arbitrary currencies using the latest rate
2. Make sure when using the exchange facility there is no page reload and currency is computed asynchronous AJAX calls
3. Historical data presentation for any selected currency using Rickshaw or with any other client-side charting component with similar functionalities(<https://shutterstock.github.io/rickshaw/>)
4. Make the historical currency representation interactive like in this example (<https://shutterstock.github.io/rickshaw/examples/lines.html>)

It's possible that you might have some errors/problems with Rickshaw. In this case it's also a part of the test to solve these problems.

Problem: in-memory or database

Answer: in-memory, the provided xml with AJAX always provides up-to-date results without the need of updating a database
(<http://www.ecb.europa.eu/stats/eurofxref/eurofxref-hist-90d.xml>)
[in case of database, I would use a third-party job scheduler to update the database regularly e.g. <https://www.quartz-scheduler.net/>]

Time: -

Problem: where exactly AJAX is needed

Answer: in the exchange facility using a simple dictionary-like model would remove any need of AJAX, therefore to satisfy point #2, I did not use any Model

Time: ~10 minutes

Problem: get every currency into single-select lists with AJAX and add a text input

Time: ~30 minutes

Problem: after changing currency or input amount, change the other text input's value

Time: 2 hours

Problem: implemented logic is not intuitive

Answer: change: on currency or amount change, only the second text input changes

Time: ~10 minutes

Problem: implemented logic is mathematically incorrect

Answer: coffee to fix it

Time: ~10 minutes

1 & 2 completed.

Problem: figure out how to use Rickshaw

Time: ~30 minutes

Last part of the operation was not documented. 8-10 hours implementation, and some minor css changes.