

## Objective

The objective of this workshop is make HTTP invocations to other REST endpoint from a SpringBoot application

## Setup

- Create a new repository for this workshop
- Generate a SpringBoot application with the usual dependencies
- Add JSON-P library to your application
- Get an API key from <https://free.currencyconverterapi.com/>. Use this server <https://free.currconv.com> for making API calls

## Workshop

### Task 1

When the SpringBoot application start up, it should make a call to Currency Converter API (CCA) to retrieve a list of currencies. When the currency is retrieved, save the currency in a Service object.

Use the following endpoint to retrieve the list of supported currencies

`https://free.currconv.com/api/v7/countries`

### Task 2

Write a landing page (`index.html`) to allow uses to convert from one currency to another currency. The following is an example of this landing page

### Currency Exchange

From:

To:

Amount:

The list of countries should be dynamically populated from the result from Task 1.

When the submit button is pressed, your Spring controller will take all the submitted information and use it to make a RESTful API call to CCA

Use the following API

```
GET /api/v7/convert?q=<from>_<to>&compact=ultra&apiKey=<apiKey>
```

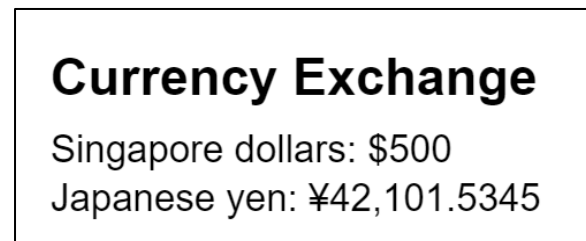
For example

```
https://free.currconv.com/api/v7/convert?q=SGD_JPY&compact=ultra&apiKey=abc123
```

returns the conversion rate between Singapore dollars and Japanese yen

### Task 3

Use the rate return from Task 2 to calculate the conversion. The following figure shows an example of the output.



### Task 4

Deploy to Heroku.

## Submission

When you have completed the workshop, commit and push your code to your Github repository.