

## **PURPLE TEST PROJECT**

### **Overview**

Your goal is to make a simple currency conversion web app with Node.js backend. User will input amount, currency and destination currency. Your app will show the converted amount.

You can find detailed requirements below. To be successful you don't have to follow them strictly. Invest reasonable time depending on your free time and don't worry if you can't finish it all. Focus on quality of your code not on quantity of tasks. Make it readable, expandable and production ready. Make sure you deal with possible errors etc.

Feel free to ask any questions. Write down any significant problems you encountered. Let us know how you solved them or how would you tackle them if you had more time.

### **Requirements**

- Use Node.js with Hapi for the backend/API.
- Use Joi for validation.
- Preferably use Ember.js or React for the frontend. jQuery is acceptable as well.
- In the backend, use an external API to get the currency rates.
- The frontend has to communicate only with your custom API.
- The app should also display the following stats:
  - Most popular destination currency
  - Total amount converted (in USD)
  - Total number of conversion requests made
- You can save the stats anywhere you like. Just make sure they are not cleared on restart and are aggregate for all visitors. This means they have to be calculated and stored in the backend.

### **Additional tips**

- Currency rates APIs:
  - <https://openexchangerates.org>
  - <https://currencylayer.com>

- <http://fixer.io>
- Try to use ES6
- Split the code into several modules. Don't use just one file for the Node server.
- When building the API, consider it public. Other developers might use it so make sure it's understandable, validate inputs, etc.