

Assignment 5

Due Date: April 12, 2022 at 7:00 PM

Overview

This assignment will be worth **8%** of your total grade. You cannot use the HTTP or Moment module at all in this assignment. If the HTTP or Moment modules are used, you will receive a 0. If you use the ES6 import statement **instead** of the CommonJS require for node modules taught during lecture, you will lose 10%.

Specifications

Brian Armstrong from Coinbase needs your help (not really, but just pretend) in building a simple API to get details about the prices of his two favorite cryptocurrencies: Bitcoin and Ethereum.

For this assignment, you will write an API Server that listens on the **port provided by the first argument to your program** to provide the amount of Bitcoin or Ethereum that can be purchased with a dollar amount passed in by the user. For this assignment assume BTC is worth \$25,000 USD and ETH is \$900 USD

JSON API Server

Write a server called api.js that serves JSON data when it receives a GET request to the path '/api/btc'. Expect the request to contain a query string with a key 'usd' which is the price in US dollars to convert.

For example: /api/btc?usd=25000

The JSON response should contain only the 'amount' property.

For example: {"amount": 1}

Add second endpoint for the path '/api/eth' which accepts the same query string but return the amount of Ethereum that can be purchased with.

For example: /api/eth?usd=900

For example: {"amount": 1}

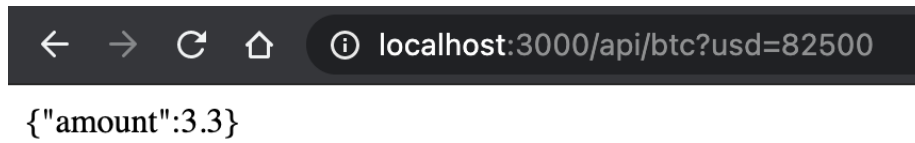


Figure 1: Bitcoin endpoint

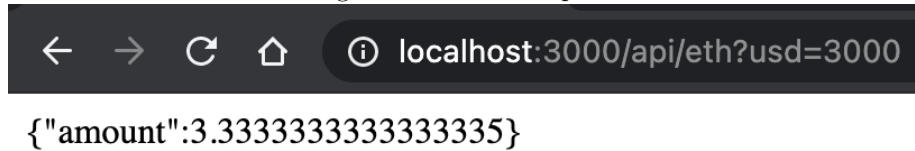


Figure 2: Ethereum endpoint

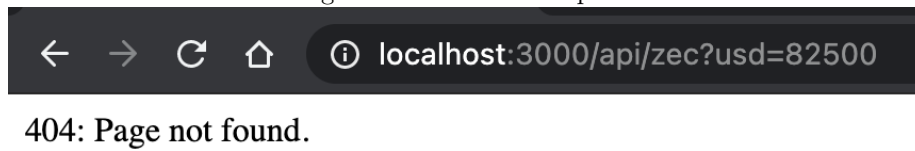


Figure 3: Incorrect endpoint

Please return a 200 status code if the request is correct and a 404 if the request is not correct (invalid endpoint, arguments, etc.)

Submission

Please submit the following on Blackboard:

- api.js