

# Assignment 0

Due Date: October 2, 2023 at 12:30 PM

## Overview

This assignment will be worth **9%** of your total grade.

## Specifications

All coding questions must be written in JavaScript and feel free to use any HTTP or parsing library needed that is available via **npm**.

### Part I - 30 points

Read the whitepapers for two cryptocurrencies. You will need to write a one page paper (times new roman, 12pt. font, 1.5 spaced) for **each** coin/token (two total pages).

- Cannot use: BTC, ETH, SOL, ZCASH, AMP, FIL, ADA, BAT, DOGE, SHIB, or any stable/meme coin.
- Minimally, address these points in the write-ups:
  - Why was this coin created?
  - What is the marketcap?
  - Why does it have any derived value?
  - Where do you project this coin in 5-10 years? Why?
  - How does this coin affect the greater ecosystem?
  - Please address any other interesting facts/notes from reading the whitepaper
- Feel free to use CoinMarketCap to find white papers and info about different coins.

### Part II - 35 points

You will use the Etherscan API in order to query information available on ETH's Blockchain. Please sign up for a free API key Make sure each bullet point is in a separate JS file (4 total).

- How much ETH is in the wallet address:  
0xd8dA6BF26964aF9D7eEd9e03E53415D37aA96045. Also print the value in USD
- How much ETH did Marlon Humphrey (MarlonHumphrey.eth) from the Baltimore Ravens pay for Bored Ape #1880?
- How much ETH did Trey Songz (TreySongz.eth) transfer to the wallet address 0x5e0b733905CC54989Ec7c28A07c516e51c5Afedf
- Print the current price of ETH in USD and BTC

Hint: Looking up Block and Transactions hashes using the Etherscan/OpenSea websites will be extremely helpful for these tasks.

### Part III - 30 points

To gain some deeper insights on pricing, we will use CoinGecko, which does not require an API key. Please create two JavaScript functions (a single file) that output the following pricing data:

- Print the current price in usd for:
  - BTC
  - ETH
  - SOL
  - ADA

Hint: use /coins/markets

- Print the price of Bitcoin on:
  - March 1, 2020 @ 12am EST
  - March 30, 2020 @ 12am EST
  - May 1, 2017 @ 12am EST
  - Your birthday in 2022

Hint: use /coins/id/history and bitcoin's id is *bitcoin*

### Part IV - 5 points

Please submit a screenshot (.png or .jpeg) of the Slack workspace to show you have signed up correctly.

## Submission

Please submit the following on Moodle (you may need to .zip the contents into a single folder):

- a0p1.pdf
- a0p2-0.js
- a0p2-1.js
- a0p2-2.js
- a0p2-3.js
- a0p3.js
- Screenshot of your Slack Workspace