**Analytics Engineering Interview Task #1**

* **Spin up a t1.micro instance on AWS (this is eligible for the AWS free tier – for 1 year)**
* **Install Flask**
  + Create a simple web application that performs two functions:
    - 1: Accepts input in a text-box called ‘delay’ that will then wait [*delay]* seconds before returning a CSV file (can be as a file download, not as plaintext if desired).. ex: 1.2.3.4:5000/csv\_test
    - 2: Shows the number of csv downloaded, the delay, a timestamp of the download and any other useful information (client\_ip, user agent, etc). ex: 1.2.3.4:5000/report
  + Enable this web application to return two requests concurrently. Ex: Open two tabs and load /csv\_test at the same time. Both requests with *delay* = 10s return in 10s (not 20s).
    - Please explain more than one approaches to tackle this problem – and the justification behind your choice.
* **Install MySQL (sqlite or mysql)**
  + Record the number of times that the file is downloaded.
* **Explain possible sources of latency for the application above. What type of possible conditions may make latency better/worse?**
* **[Bonus] What is the first thing you would do in order to “scale” this app up to 1MM possible users?**

**Please ask as many questions as you would like – directly to** [**etutlys@mediamath.com**](mailto:etutlys@mediamath.com) **also cc:** [**kbabkin@mediamath.com**](mailto:kbabkin@mediamath.com)[**nricci@mediamath.com**](mailto:nricci@mediamath.com)[**ctirol@mediamath.com**](mailto:ctirol@mediamath.com) **! Questions are encouraged.**