

# **Javascript Home Assignment**

Hi there! Welcome to Bananatag's interview process. This is a coding assignment that will test your JavaScript skills. We expect you to submit your work within **2 hours** of being sent the assignment regardless of the progress you've made. We will not accept any submissions after the 2-hour deadline.

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# **Instructions**

In this take home assignment, you will be given access logs for a website in csv format which represents customers visits to each page in the website at different times.

#### **Included Documents**

We have provided the following documents in the zipped file **BananatagDeveloperAssignment.zip**:

- 1. Datasets
  - a. input1.csv
  - b. input2.csv
- 2. main.txt

The input files (input1.csv and input2.csv) represent simplified access logs to a website and entries are always ordered by timestamp.

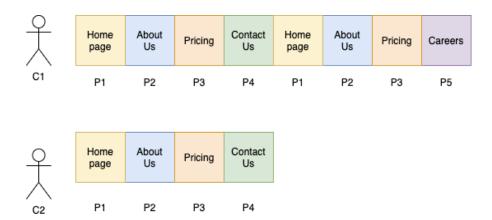
- The first column is a timestamp.
- The second column is a customer ID (C#).
- The third column is a page ID (P#).
- The fourth column is the page's load time in milliseconds.

To read the CSV file, use the javascript function in the main.txt document.

# **Assignment**

Your task: For each dataset (input1.csv and input2.csv), calculate the single most frequented 3-page path (Question 1) and the slowest (Question 2) 3-page path for all customer visits.

#### Please review the example below:



In the above dataset example,

- Customer 1 (C1) has five valid 3-page paths:
  - o P1P2P3, P2P3P4, P3P4P1, P4P1P2, P2P3P5
- Customer 2 (C2) has two valid 3-page paths:
  - o P1P2P3 and P2P3P4

#### Question 1

For each dataset, what is the most common 3-page path taken across all customers, and how many times was it visited?

#### Question 2

For each dataset, which 3-page path was the slowest, how long did it take to load all 3 pages, and which user was impacted?

# **FAQ**

### How are you evaluating this assignment?

We will be evaluating your work based on the following requirements:

- 1. Code runs successfully
- 2. Code output is accurate
- 3. Code design follows industry best practices
- 4. Code uses latest JavaScript features
- 5. Assignment is completed within 2 hour range

#### Is there a time limit?

We expect this home assignment to be submitted within 2 hours or less of you receiving it. If you don't think you'll be able to finish/start the assignment after organizing your time with our HR representative then please email them and let them know. If 2 hours have passed, please submit your work anyway, we will not be accepting anything after the 2 hour deadline!

## How do I submit my work?

To submit your assignment please first change any .js file extensions to .txt to allow for sending through email and then zip any files you have updated or added. Please name the zipped folder as <firstname\_lastname\_year-month-day>.zip. The assignment should be emailed back to the HR representative that initially reached out to organize this assignment.

## What if I have questions?

If you have any questions or are unsure of how something should work, feel free to make an assumption then clearly state the assumption you've made to complete the project.