

TASK: You are the developer for your company. Build a program, which collects data from [GTmetrix](#) for a number of given URLs.

The data has to be collected for 5 cities:

- Dallas
- London
- Mumbai
- Sydney
- São Paulo

The URLs for which the task has to be done will be provided to you in an excel sheet. We expect your program to work for any number of URLs and Cities. Please refer to this [video walkthrough](#) to further understand the problem.

The collected data has to be presented in the format given in the attached excel sheet.

The following steps have to be taken by your program:

1. Visit <https://gtmetrix.com/>.
2. Login to the website (Note: The program doesn't need you to perform an account sign-up. You can do it manually and put your credentials in your built program.)
3. Once you are in the dashboard area (after login), you need to change the location to "Dallas, USA". The browser has to be "Chrome (Desktop)".
4. Enter the URL in the Analyze bar and press the analyze button.
5. The report generation process will take some time. Wait for it to complete.
6. Once the report is generated, store the following data in a table:
 - a. Page Speed Score
 - b. YSlow Score
 - c. Fully Loaded Time
 - d. Total Page Size
 - e. Requests
 - f. Page Speed Issues (See excel file for clarifications)
 - g. YSlow Issues (See excel file for clarifications)
7. You need to store the data for each city in a **different sheet in the same excel file**.
8. Regarding the Page Speed Issues and YSlow Issues field, we have provided the following example to help you:
 - a. Suppose you have to generate a report for the URL <https://www.datamintelligence.com/research-report/aqua-feed-market/>.
 - b. Now in the image below, we can see that in the Page Speed recommendation section, we have grades lesser than 'A' for 4 items: "Optimized Images", "Serve resources from a consistent URL", "Leverage browser caching", "Minimize redirects".
 - c. We have 'A' Grade in "Defer parsing of JavaScript". This item and all the other items which have an A grade will not be entered in the final excel sheet.
 - d. All items with grades **below 'A' have to be written** in the Page Speed Issues field (separated by comma) for that URL and City.
 - e. Same goes for YSlow Issues.



Latest Performance Report for:

<https://www.datamintelligence.com/research-report/aqua-fee..>

Report generated: Mon, May 14, 2018, 12:20 AM -0700

Test Server Region: Vancouver, Canada

Using: Chrome (Desktop) 62.0.3202.94, PageSpeed 1.15-gt1,
YSlow 3.1.8

Looks like you're running WordPress
[Have a look at our WP optimization tips >](#)

Performance Scores

PageSpeed Score

B (86%) ^

YSlow Score

B (85%) ^

Page Details

Fully Loaded Time

4.8s ^

Total Page Size

1.18MB ^

Requests

45 ^

PageSpeed

YSlow

Waterfall

Timings

Video

History

RECOMMENDATION

GRADE

TYPE

PRIORITY

Optimize images

E (54)



IMAGES

HIGH

Serve resources from a consistent URL

C (72)



CONTENT

HIGH

Leverage browser caching

B (80)



SERVER

HIGH

Minimize redirects

B (83)



CONTENT

HIGH

Defer parsing of JavaScript

A (90)



JS

HIGH

What do my scores mean?

Rules are sorted in order of impact upon score
Optimizing rules at the top of the list can greatly improve your overall score.

Not every recommendation will apply to your page
The recommendations are meant to be generic, best practices; some things will be out of your control (eg. external

9. This process has to be repeated for all the URLs and different cities.

You have to follow the the format of [this excel sheet](#). Perform the task for all the 6 URLs mentioned in the sheet. The first record has been filed for you.

You can use Python, Java or JavaScript to write your program. Use of open source tools and libraries is encouraged. You will get bonus points for clean and maintainable code. Upload all your code and your final output file on [Github](#) and send us a link to your repository. The repository should contain a readme file with instructions regarding how to setup and run the project. Try to minimize the steps required to run the program.