

Javascript Engineering Resident Performance Task

Total Time - 1 - 1.5 Hours

1

Expected Format

Please submit a link to a Github repo that includes the code for your assessment, as well as a README that explains any steps we might need to follow in order to view the output of your work. Please turn in your response within 72 hours of receiving the assignment.

Technical Task

In our work, we often need to shape or make calculations based on student data. For example, a feature might require us to organize a large number of students into smaller groups, or to display statistical information about a group of students such as their GPA.

You will use <u>students.json</u>, which contains data for 20 fake students. You will use these records as the inputs for the following tasks:

- 1) To parse the data, create two helper methods:
 - a) groupByGrade() should take in an array of student objects as a parameter, and return these records grouped by the grade field on these records.

```
example output:
[
[ { grade: 6, name: 'A'}, { grade: 6, name: 'C' } ],
    [ { grade: 7, name: 'B'} ]
```

b) findLowestAverages() - should take in an array of student objects as a parameter, and return the student with the lowest score average for each grade.

```
example output:
[
    { grade: 6, name: 'A', average: 55 },
    { grade: 7, name: 'B', average: 50 }
]
```



2) Create some way to output the results of running <code>groupByGrade()</code> and <code>findLowestSubject()</code> on the provided data. There is no requirement for <code>how</code> you display this information, but please make sure your README includes an explanation of any steps we should take to see this output. For example, you could output this information in the console, in a file, or (bonus) even spin up a front end environment to display the data.

Bonus - Instead of using the provided JSON file as the source of your data, you could fetch it instead from our database. We have created a public database on <u>Mongo Atlas</u> that allows you to query the same student data. To connect to this database, you will need the following Mongo Atlas connection string:

mongodb+srv://applicant:newvisions2019@residency-task-0wfs4.mongodb.net/test?retryWrites=true&w=majority