

NodeJS Acceleration

Exercise 9

Preamble: Speed reading is a popular skill admired by many. As a developer, the importance of being able to grasp concepts quickly cannot be overemphasized as you often come across new technologies, and upgrades to existing ones that must be learnt in as little time as possible. This exercise will stretch your speed of reading and knowledge acquisition by exercising your mind in a terrain you're already familiar with—ES6.

Task A:

Problem statement: You are required to read (completely) the attached Appendix I.pdf, while paying careful attention to all concepts presented in the material. You will fulfil the following requirements.

Requirements:

1. Create a proxy `Student` that exhibits the following behaviours:
 - Each student has the name, age, class, and gender attributes
 - These attributes are set when each `Student` object is constructed
 - No student may change their gender
 - Maintain a `StudentRecords` object that contains a list of students, grouped by their classes
 - A student may change class (only valid classes as defined in `StudentRecords` are permitted)
 - On class change, the `StudentRecords` wrapper is notified and immediate rearrangement is made, to place the affected student in the correct class (recall that `StudentRecords` maintains a list)
 2. Implement custom `Iterators` and `Generators` with example codes
 3. What's a crazy implementation you can think of, as far as your new-found depth on `Promises` is concerned?
 4. Make a team submission (as a Medium Draft) talking about `Reflection` in ES6
 5. Each solution must be made testable, either as a *repl* or a github pages link as the case demands
 6. Ensure to leave your `console.log`s (commented out at the least) to allow for proper testing of your solutions
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