Competition REQ103140

IT Services, Health Sector IM/IT, Ministry of Health
Coding Assignment

Congratulations on being selected to complete the Coding Assignment for the Full Stack Developer - CRM Analyst IS24 position. We look forward to your response.

PLEASE READ THE FOLLOWING INSTRUCTIONS AND THE EXERCISE CAREFULLY BEFORE YOU START.

INSTRUCTIONS:

- You are required to complete this coding assignment on your own. Do not cut and paste or generate information from other sources.
- You must not involve any other person in the research, preparation, or review of either this coding assignment or your response.
- You are required to maintain the confidentiality of this coding assignment.
- Candidates will have until Saturday, August 19th at 11:59 pm PST to complete and submit the assignment.

***IMPORTANT**: Any non-compliance with these instructions may result in the invalidation of your submission and may result in your elimination from this competition.*

The exercise is on the next page.

Coding Assignment

Preparation

- It is recommended that you have NodeJS (npm is included) (version 18+ to enable the fetch API), and Git installed locally on your machine.
- You will need to create a GitHub account to complete this exercise. Instructions for using GitHub can be found here: Quickstart - GitHub Docs
- Create a **private** GitHub repository and clone it locally. You **must** be working with a private repository.
- Rename the .ZIPX extension of the file you received to .ZIP to access the files. Unzip and cut/paste the **code-assignment** folder into your local Git repo.
- Ensure that you are "git ignoring" **node_modules**.
- As you complete the assignment, commit your changes to the remote repository.
- Read through the assignment in its entirety being careful not to miss any instructions.
- Install dependencies (npm install or equivalent wherever you are running your code).
- Run the command **node assignment.js** from the command line to test run your project. It will break as is but should run and give some console errors.
- Begin the assignment.

Provided Materials

Once un-zipped, you should have the following:

code- assignment /

/api/

/api/fetchDogs.js

/inputs/

/inputs/getValidUserName.js

.prettierrc

assignment.js

friend-collections.js

getDaysInMonth.js

months.js

package.json

sortedAlphabet.js

If you are missing any of these materials, please contact the hiring manager.

Coding Assignment Description

Parker and his friends recently got into photography. Their latest challenge to each other is to take a picture of a different dog breed every day until they have a photo of every dog breed.

Parker has been learning about programming in JavaScript and came up with the idea of creating a program that would help organize the challenge and make it more fun. Here is the list of Parker's requirements:

- Code the assignment using JavaScript.
- Retrieve a list of dog breeds from the Dog API. Some breeds returned by the API are groupings and should be pulled out into a single flat list with the following naming structure <breed> <grouping> (i.e., border collie, great dane). Data should be cached in some form locally so subsequent runs of the program can pull from it rather than querying the API.
    - Read through the rest of the requirements to determine the appropriate structure.
- The program should allow a user to select a username (choice input that should only include Parker and friends), a start year (present or future only), a start month (present or future only), a start day of the month (the day when the challenge will begin – present or future only), and a letter of the alphabet. Users should be re-prompted when invalid input is entered.
- From the date provided by the user, the console should return the name of a dog breed and date for every day until all dog breeds have been exhausted. Parker and his friends would then use the response to determine which dog breed they will try to photograph each day.
- The list should start with dog breeds with names beginning with the letter given by the user. Once breeds starting with that letter have been exhausted, a randomizer should choose the next letter (excluding letters that have been dealt with already).
- Within the context of a letter, dog breeds should be sorted in ascending alphabetical order.
- Parker's friends have gotten a head start and already have photos for a few dog breeds. These breeds should be excluded from your list. The friend names and their dog breed photo collections can be found in the **friend-collections.js** file.
- After the console has successfully planned out Parker's photography itinerary, the program should restart with a user prompt and allow the user to repeat the process.

Parker has since abandoned this project after making very little progress. Now it's up to you to complete it! Parker has noted that there are 2 bugs in the existing code being provided.

Requirements – Checklist

- Private GitHub repository hosting the completed assignment.
- Git organization will be marked. Please ensure an organized and informative commit history.
- Only the most recent commit (before the submission deadline) to the **main branch** will be assessed.
- Provide access to ryan.farrell@gov.bc.ca (GitHub email) and andrew.barnes.nrm@gmail.com, ensuring permission to clone/download zip is given.
- **Do not** import additional packages/libraries (use only those that have been provided).
- You may add/modify configuration files to help with your code (**.prettierrc** is included for example).

What to Submit

Email Ryan.Farrell@gov.bc.ca and Andrew.Barnes@gov.bc.ca with the following by Saturday, August 19thth before 11:59 PM Pacific Time.

- A link to your GitHub repository.
- Your GitHub User ID.
- Any assumptions you may have made (optional).
- Confirmation that you have added Ryan and Andrew to your private GitHub repository.
- Submit any notes you have taken while completing the assignment.

Please ensure the submitted code remains available in GitHub for the duration of the competition process.

Note: Any commits made after the submission deadline will not form part of the assessment.

If you have any questions about this competition, please contact Ryan Farrell before noon PST on Saturday, August 19th.