Web Science Quiz 2
Spring 2023
April 18, 2023

Instructions:
1. Read everything twice before you do anything.
2. Submit everything you want graded to GitHub, in your personal repo in a folder named quiz2.
3. It must be hosted on your Azure VM using Node (no Apache!). I will go to https://[yourFQDN]/node and grade whatever I see unless you give me explicit instructions to do something else.
4. Good luck!

Question 1
Find 2 or 3 new APIs that, when combined with any/all of the APIs you've worked with this semester, might tell some interesting stories that can be visualized with something like D3. Preload a MongoDB collection (making a new collection is fine) with some of that data.

Extend your Node.js server and, using Express.js, create the following API for your React frontend to talk to:
1. GET /quiz2
   a. Get a listing of all nodes from the collection
      i. **Do not** simply dump the entire database.
2. GET /quiz2/:number
   a. Get the document corresponding to :number
3. POST /quiz2
   a. Connect to one of the external APIs you've used this semester and put a new document from that API into your collection. You **do not** need to perform any ETL on it (though you can if you'd like, as something that gets counted as creativity).
4. POST /quiz2/:number
   a. Create a proper error with a proper error code and human-readable error description.
5. PUT /quiz2
   a. Bulk update all documents in the collection
6. PUT /quiz2/:number
   a. Update the document corresponding to :number
   b. If the document corresponding to :number does not exist, create a proper error with a proper error code and human-readable error description.
7. DELETE /quiz2
   a. Bulk delete all documents in the collection
8. DELETE /quiz2/:number
   a. Delete the document corresponding to :number

Extend your React frontend with at least **two** new visualizations. What those visualizations contain will depend on your data. Tell interesting stories.

After you have accomplished this, your task is to go **far above and beyond** this minimum. Show me everything you've learned over the past two semesters. We'll call it creativity. Include a README.md file that has all of your citations and everything you'd like me to consider for creativity.

Grading

Database	25 pts
Node+Express API	25 pts
React/Visualizations	25 pts
Creativity	25 pts
Total	**100 pts**

Extra credit (+5): What did Dr. Callahan major in as an undergraduate?
Music performance and Antrhopology