

CT414 Assignment 2

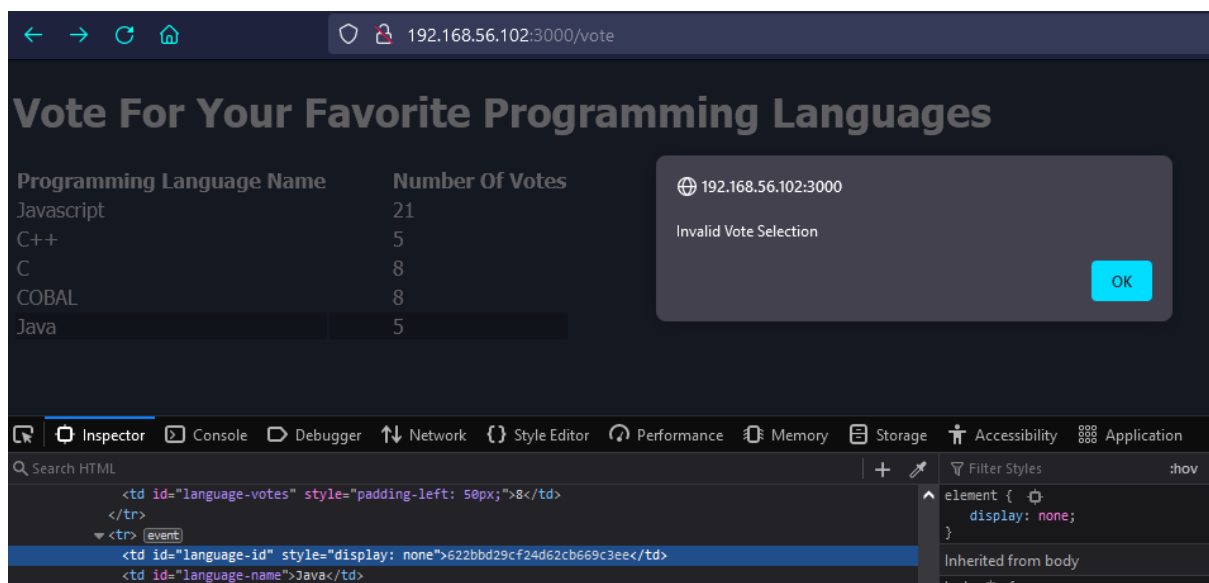
Testing

I tested the frontend with Firefox and backend with Firefox & Postman. When it came to testing the frontend, I wanted to make sure that when errors occurred, the user was made aware of the error and with the backend, I wanted to make sure errors were handled correctly and did not leave NodeJs 'hanging'.

I first checked that the normal scenarios worked (happy path) and they did. The application only allows you to vote for one language before reloading the webpage to update the tallies.



I then checked to see what would happen if the user somehow managed to vote for a programming language that didn't exist, maybe by changing the hidden ID fields in the HTML.



I directly contacted the API via postman and got the same status code for if the ID was invalid or didn't exist.

http://192.168.56.102:3000/vote/622bbd29cf24d62cb669c3e8

POST http://192.168.56.102:3000/vote/622bbd29cf24d62cb669c3e8

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (7) Test Results 400 Bad Request 56

Pretty Raw Preview Visualize Text

1 Bad Request

Whilst I was testing the application, I kept track via the logs when the database was being updated.

```
conor@Shaw-Smith-Ubuntu:~/Workspace/College/4th Year/CT414/assignment_2$ node app.js
Listening on port 3000
(node:11446) Warning: Accessing non-existent property 'count' of module exports inside circular dependency
(Use `node --trace-warnings ...` to show where the warning was created)
(node:11446) Warning: Accessing non-existent property 'findOne' of module exports inside circular dependency
(node:11446) Warning: Accessing non-existent property 'remove' of module exports inside circular dependency
(node:11446) Warning: Accessing non-existent property 'updateOne' of module exports inside circular dependency
DEBUG: Collection initialised
(node:11446) DeprecationWarning: Mongoose: `findOneAndUpdate()` and `findOneAndDelete()` without the `useFindAndModify` option set to false are deprecated. See: https://mongoosejs.com/docs/deprecations.html#-findandmodify-
DEBUG: Javascript vote incremented by 1
DEBUG: C++ vote incremented by 1
DEBUG: C vote incremented by 1
DEBUG: COBAL vote incremented by 1
DEBUG: Java vote incremented by 1
DEBUG: COBAL vote incremented by 1
DEBUG: Javascript vote incremented by 1
DEBUG: C++ vote incremented by 1
DEBUG: C vote incremented by 1
DEBUG: Javascript vote incremented by 1
DEBUG: Javascript vote incremented by 1
DEBUG: Java vote incremented by 1
DEBUG: Javascript vote incremented by 1
DEBUG: C++ vote incremented by 1
```

I also made sure that the routes worked correctly and invalid routes were dropped.

GET https://dash.comp... GET https://dash.comp... POST http://192.168.56... + ... No Environment

http://192.168.56.102:3000/vote Save

POST http://192.168.56.102:3000/vote Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

Body Cookies Headers (8) Test Results 404 Not Found 5 ms 416 B Save Response

Pretty Raw Preview Visualize HTML

```
4 <head>
5   <meta charset="utf-8">
6   <title>Error</title>
7 </head>
8
9 <body>
10  <pre>Cannot POST /vote</pre>
11 </body>
12
```

I also made sure that if the collection didn't exist, that it should be made on startup of the node app.

```
conor@Shaw-Smith-Ubuntu:~/Workspace/College/4th Year/CT414/assignment_2$ node app.js
Listening on port 3000
(node:11595) Warning: Accessing non-existent property 'count' of module exports inside circular dependency
(Use `node --trace-warnings ...` to show where the warning was created)
(node:11595) Warning: Accessing non-existent property 'findOne' of module exports inside circular dependency
(node:11595) Warning: Accessing non-existent property 'remove' of module exports inside circular dependency
(node:11595) Warning: Accessing non-existent property 'updateOne' of module exports inside circular dependency
DEBUG: Collection initialised
```

+ Create Database

Q NAMESPACES

ct414-assignment2

languages

ct414-assignment2.languages

STORAGE SIZE: 4KB TOTAL DOCUMENTS: 5 INDEXES TOTAL SIZE: 4KB

Find

Indexes

Schema Anti-Patterns 0

Aggregation

FILTER { field: 'value' }

<

QUERY RESULTS 1-5 OF 5

_id: ObjectId("622bc227d81a762d4b239901")

name: "Javascript"

votes: 0

__v: 0

_id: ObjectId("622bc227d81a762d4b239902")

name: "C"

votes: 0

__v: 0

_id: ObjectId("622bc227d81a762d4b239903")

name: "C++"

votes: 0

Here's a screenshot of MongoDB being updated once I voted for Javascript.

Vote For Your Favorite Programming Languages

Programming Language Name	Number Of Votes
Javascript	1
C	0
C++	0
COBAL	0
Java	0

DATABASES: 1 COLLECTIONS: 1

+ Create Database

Q NAMESPACES

ct414-assignment2

languages

ct414-assignment2.languages

STORAGE SIZE: 20KB TOTAL DOCUMENTS: 5 INDEXES TOTAL SIZE: 20KB

FindIndexesSchema Anti-PatternsAggregatic

FILTER

{ field: 'value' }

<

QUERY RESULTS 1-5 OF 5

```
_id: ObjectId("622bc227d81a762d4b239901")
name: "javascript"
votes: 1
__v: 0
```

```
_id: ObjectId("622bc227d81a762d4b239902")
name: "c"
votes: 0
__v: 0
```