

ASSIGNMENT 2

WEB 700

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SCREENSHOTS:

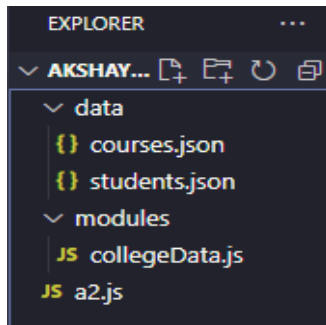


Figure 1 File/Folder Structure

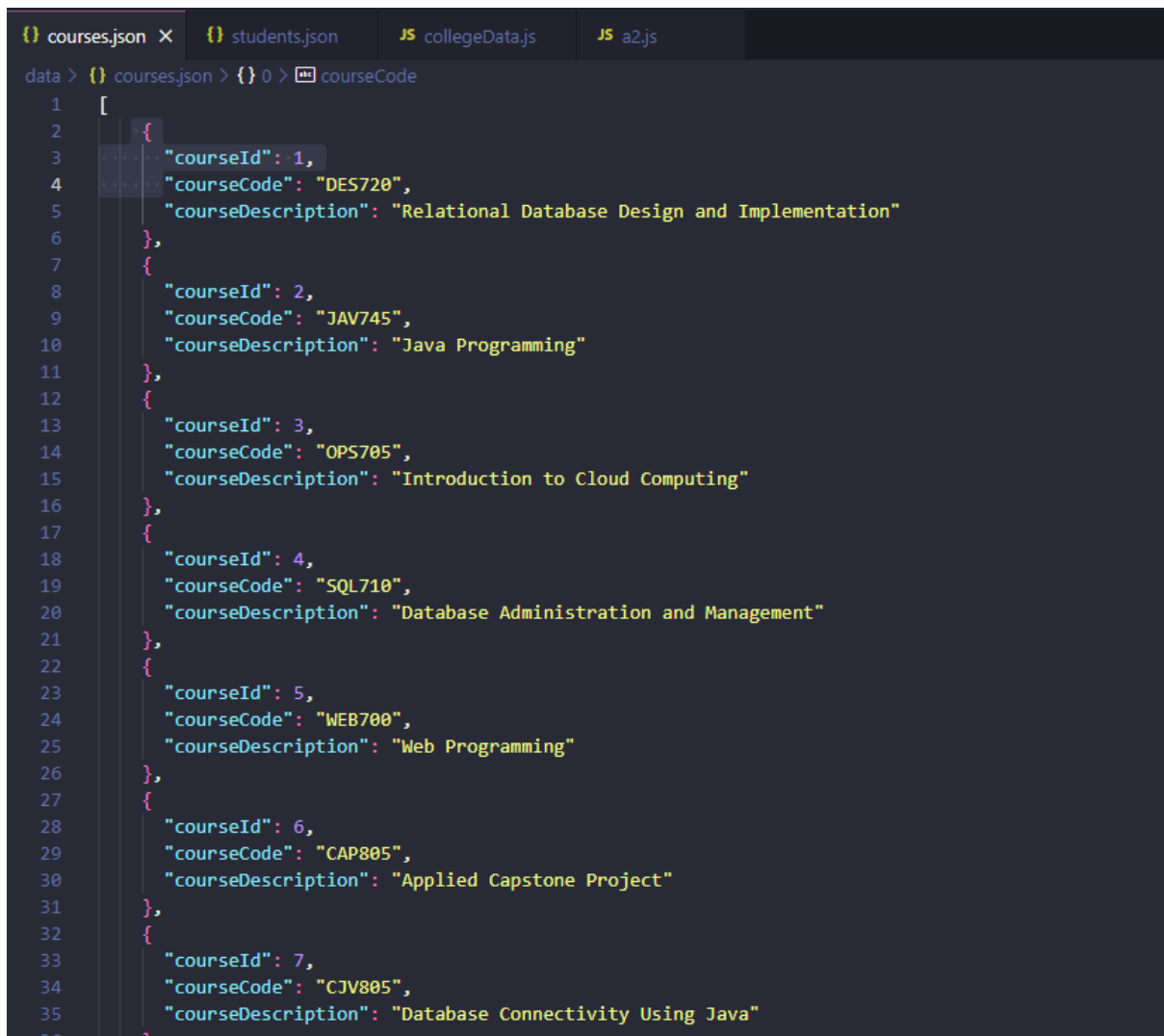


Figure 2 courses.json

```
{} courses.json {} students.json X JS collegeData.js JS a2.js
data > {} students.json > {} 1
1  [
2    {
3      "studentNum": 1,
4      "firstName": "Foster",
5      "lastName": "Thorburn",
6      "email": "fthorburn0@mySeneca.ca",
7      "addressStreet": "8 Arapahoe Park",
8      "addressCity": "Toronto",
9      "addressProvince": "ON",
10     "TA": true,
11     "status": "Full Time",
12     "course": 2
13   },
14   [
15     {
16       "studentNum": 2,
17       "firstName": "Emmy",
18       "lastName": "Trehearne",
19       "email": "etrehearne1@mySeneca.ca",
20       "addressStreet": "66965 Shelley Circle",
21       "addressCity": "Toronto",
22       "addressProvince": "ON",
23       "TA": true,
24       "status": "Full Time",
25       "course": 2
26     },
27     {
28       "studentNum": 3,
29       "firstName": "Zonnya",
30       "lastName": "Laytham",
31       "email": "zlaytham2@mySeneca.ca",
32       "addressStreet": "24665 Scoville Parkway",
33       "addressCity": "Toronto",
34       "addressProvince": "ON",
35       "TA": true,
36       "status": "Full Time",
37       "course": 2
38     }
39   ]
40 ]
```

Figure 3 Student.json

```
modules > JS collegeData.js > [x] <unknown>
1  const fs = require("fs")
2  class Data {
3      constructor(students, courses) {
4          this.students = students
5          this.courses = courses
6      }
7  }
8  let dataCollection = null
9
10 function initialize() {
11     return new Promise((resolve, reject) => {
12         fs.readFile("./data/students.json", "utf8", (err, studentDataFromFile) => {
13             if (err) {
14                 reject("file not found--student.json")
15                 return
16             }
17             fs.readFile("./data/courses.json", "utf8", (err, courseDataFromFile) => {
18                 if (err) {
19                     reject("file not found--courses.json")
20                     return
21                 }
22                 let studentData = JSON.parse(studentDataFromFile)
23                 let courseData = JSON.parse(courseDataFromFile)
24                 dataCollection = new Data(studentData, courseData)
25                 resolve()
26             })
27         })
28     })
29 }
30 function getAllStudents() {
31     return new Promise((resolve, reject) => {
32         if (dataCollection.students.length > 0) {
33             resolve(dataCollection.students)
34         } else {
35             reject("No results ret")
36         }
37     })
38 }
```

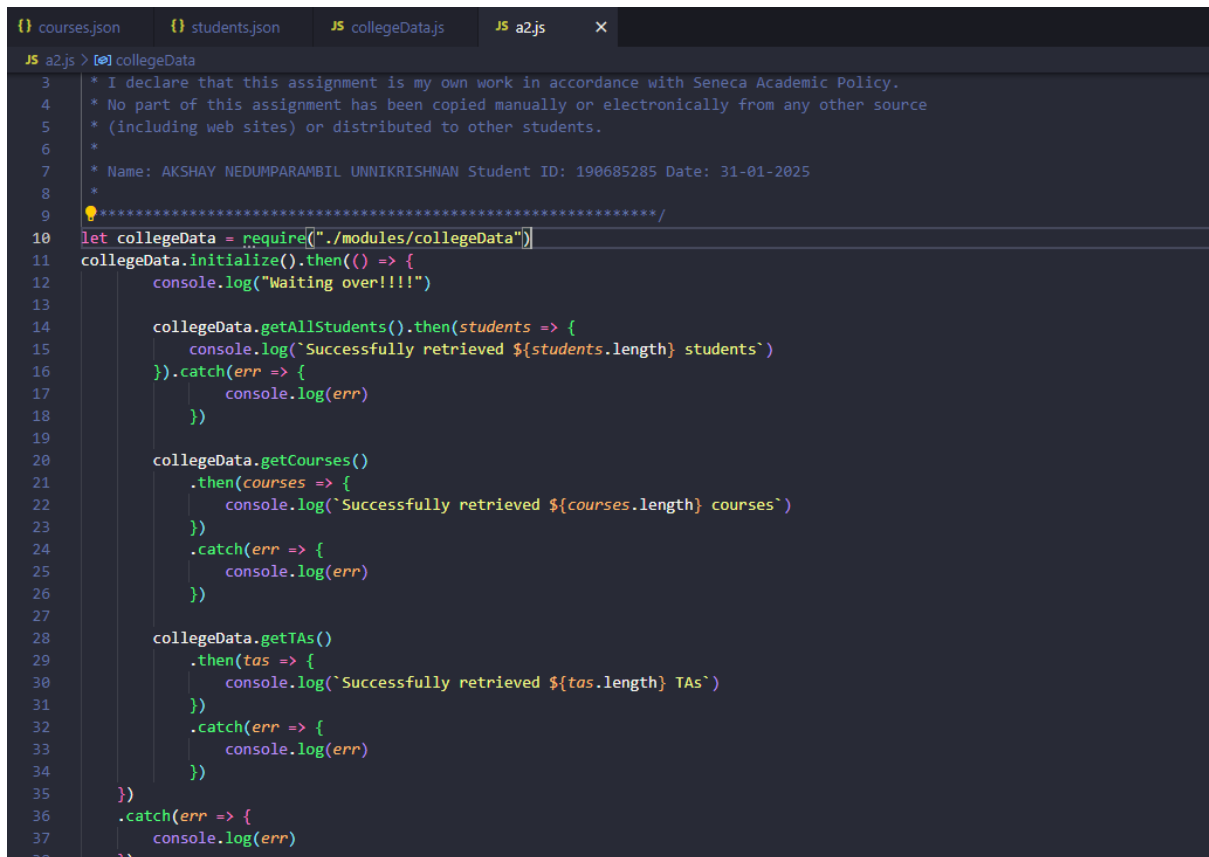
Figure 4 CollegeData.js -1

```

38 }
39 function getCourses() {
40     return new Promise((resolve, reject) => {
41         if (dataCollection.courses.length > 0) {
42             resolve(dataCollection.courses)
43         } else {
44             reject("No results")
45         }
46     })
47 }
48 function getTAs() {
49     return new Promise((resolve, reject) => {
50         const tas = dataCollection.students.filter(student => student.TA)
51         if (tas.length > 0) {
52             resolve(tas)
53         } else {
54             reject("No results returned")
55         }
56     })
57 }
58 module.exports = {
59     initialize,
60     getAllStudents,
61     getCourses,
62     getTAs
63 }

```

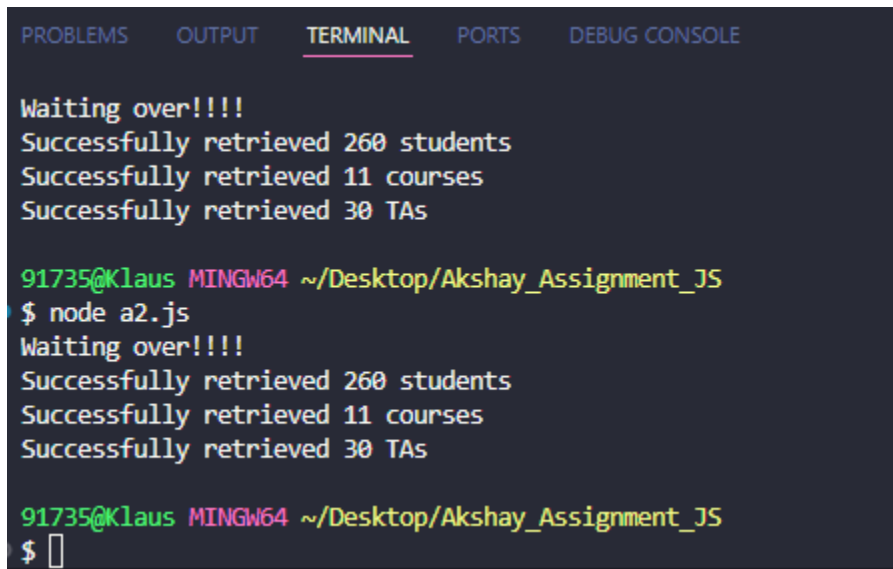
Figure 5 CollegeData.js –2



```
1 courses.json 2 students.json 3 JS collegeData.js 4 JS a2.js X
5
6 JS a2.js > collegeData
7
8 * I declare that this assignment is my own work in accordance with Seneca Academic Policy.
9 * No part of this assignment has been copied manually or electronically from any other source
10 * (including web sites) or distributed to other students.
11 *
12 * Name: AKSHAY NEDUMPARAMBIL UNNIKRISHNAN Student ID: 190685285 Date: 31-01-2025
13 *
14 *****/
15
16 let collegeData = require("./modules/collegeData")
17 collegeData.initialize().then(() => {
18   console.log("Waiting over!!!!")
19
20   collegeData.getAllStudents().then(students => {
21     console.log(`Successfully retrieved ${students.length} students`)
22   }).catch(err => {
23     console.log(err)
24   })
25
26   collegeData.getCourses()
27     .then(courses => {
28       console.log(`Successfully retrieved ${courses.length} courses`)
29     })
30     .catch(err => {
31       console.log(err)
32     })
33
34   collegeData.getTAs()
35     .then(tas => {
36       console.log(`Successfully retrieved ${tas.length} TAs`)
37     })
38     .catch(err => {
39       console.log(err)
40     })
41 })
42 .catch(err => {
43   console.log(err)
44 })
45 })
```

Figure 6 a2.js

Result:



```
PROBLEMS  OUTPUT  TERMINAL  PORTS  DEBUG CONSOLE
Waiting over!!!!
Successfully retrieved 260 students
Successfully retrieved 11 courses
Successfully retrieved 30 TAs

91735@Klaus MINGW64 ~/Desktop/Akshay_Assignment_JS
$ node a2.js
Waiting over!!!!
Successfully retrieved 260 students
Successfully retrieved 11 courses
Successfully retrieved 30 TAs

91735@Klaus MINGW64 ~/Desktop/Akshay_Assignment_JS
$
```