



Weight: 1

旨

Projects(/projects/current)

■ Project over - took place from Aug 19, 2024 6:00 AM to Aug 21, 2024 6:00 AM

An auto **CPA** i Previebres al upalme that the flow or lieue tions / to review)

? Evaluation quizzes(/dashboards/my current evaluation quizzes) In a nutshell...

• Auto QA review: 30.6/32 mandatory

Altogether: 95.63%

Curriculums(/dashb.oards/my_curriculums)

o Optional: no optional tasks

Concepts(/concepts)

(dashboards/video rooms)

Sandboxes(/user containers/current)

Tools(/dashboards/my_tools)

NODEJSON THE APISERVER

Video on demand(/dashboards/videos)

Resources

Read or watch:

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- Ner ប្រាប់ ប្រទេស ប្រទេស ប្រទេស (/ritoken/hROgW3QO9jqFnFP-Nzwh8A)
 - Process API doc (/rltoken/Wt69QV2xygB4GEqob26AjQ)
 - Child process (/rltoken/IS4y9rRCbIX71W oeXpymw)
 - Express getting started with Refr Refr Bonk Luua TpVZIZv g)
 - Mocha documentation (/rltoken/EBGDj1FwLrK_y4kgxp8hfg)
 - Nodemon documentation (/rltoken/vnDSbLsicMDdxcf5YUSXIg)







earning Objectives

At the end of this project, you are expected to be able to explain to anyone (/ritoken/vXmxtc5JH CelWReMTNhDA), without the help of Google.



- rupjayasgript using NodeJS
- use NodeJS modules
- use specific Node JS module to read files



- uskelypPlacersisgt/placersesg/poenmand line arguments and the environment
- create a small HTTP server using Node JS
- create a small HTTP server using Express JS



- creanies and accident learning express JS
- use ES6 with Node JS with Babel-node
- use Nodemon to develop faster QA Reviews I can make(/corrections/to_review)

uizzes(/dashboards/my current evaluation quizzes)

- Allowed editors: vi, vim, emacs, Visual Studio Code
- All your files will be interpreted/compiled on Ubuntu 18.04 LTS using node (version 12.x.x)
- All your files should end with a new line



- A README and file at the root of the folder of the project, is mandatory Curriculums (dashboards/my curriculums)
- Your code should use the js extension
- Your code will be tested using Jest and the command npm run test



- YoQppodets@coepitsed against lint using ESLint
 - Your code needs to pass all the tests and lint. You can verify the entire project running npm run



Conference rooms/dashboards/video rooms)
All of your functions/classes must be exported by using this format: module.exports = myFunction;



Servers(/servers)

Provided files

Sandboxes(/user_containers/current) database.csv

firstnTanods(Idasshnlaonær,deden)yfieolds)

Johann, Kerbrou, 30, CS Guillaume, Salou, 30, SWE

Jonathan, Benou, 30, CS

Ariel Madealon deon ക്യൂട്ടി (/dashboards/videos)

Emmanuel, Turlou, 40, CS

Guillaume, Plessous, 35, CS

Joseph, Crisou, 34, SWE Paul, Schneider, 60, SWE

Tommy, Schoul, 32, SWE

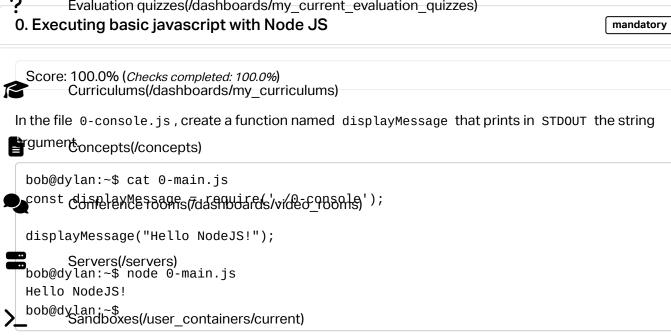
Katie, Shirou, 21, CS Discord(https://discord.com/app)

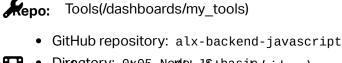
package.json

Click to show/hide file contents

My Profile(/users/my_profile)

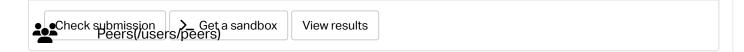
babel.config.js click to show/hide file contents click to show/hide file contents dnd. My Planning(/planning/me) Don't forget to run \$ npm install when you have the package.json Projects/(projects/current) QA Reviews I can make(/corrections/to_review) Tasks Pouluation quizzes(/dashboards/my_current_evaluation_quizzes) 0. Executing basic javascript with Node JS mandatory





Divagtoryon@enhance(clashboaries/videos)

• File: 0-console.js



Discord(https://discord.com/app)

1. Using Process stdin



Score: 100.0% (Checks completed: 100.0%)

My Profile(/users/my_profile)
Create a program named 1-stdin.js that will be executed through command line:

 It should display the message Welcome to Holberton School, what is your name? (followed) by a new line)

The user should be able to input their name on a new line

• The program should display Your name is: INPUT



When the user ends the program, it should display This important software is now closing (followed by a new line)

Requirements:

My Planning(/planning/me) Your code will be tested through a child process, make sure you have everything you need for that

y bob@dylan:~\$,node 1-stdin is Projects(/projects/current) Welcome to Holberton School, what is your name?

Your name is: Bob QA Reviews I can make(/corrections/to_review) bob@dylan:~\$

bob@dylan:~\$ echo "John" | node 1-stdin.js

Welcome to Holberton School, what is your name? Evaluation quizzes(/dashboards/my_current_evaluation_quizzes) Your name is: John

This important software is now closing

bob@dy lan:~\$



Curriculums(/dashboards/my_curriculums)

Repo:



Giffuncentography:eats/backend-javascript

• Directory: 0x05-Node_JS_basic



File: 1-stdin.js Conference rooms(/dashboards/video_rooms)

Check submission > G
Servers(/servers) >_ Get a sandbox View results

2. Reading a file synchronously with Node JS

mandatory

Sandboxes(/user_containers/current)

Score: 100.0% (Checks completed: 100.0%)



Tools(/dashboards/my tools)

Using the database database.csv (provided in project description), create a function countStudents in the file 2-read_file.js

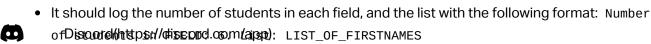


Video on demand(/dashboards/videos)

- Create a function named countStudent's. It should accept a path in argument
- The script should attempt to read the database file synchronously
- If the database is not available, it should throw an error with the text Cannot load the database



If the database is available, it should log the following message to the console Number of Peers (/users/beers) students: NUMBER_OF_STUDENTS



CSV file can contain empty lines (at the end) - and they are not a valid student!



```
bob@dylan:~$ cat 2-main_0.js
tonst countStudents = require('./2-read_file');
  countStudents("nope.csv");
mbob@d/Hame4 node 2-main_0.js
   2-read_file.js:9
       throw new Error('Cannot load the database');
       My Planning(/planning/me)
  Error: Cannot load the database
       Projects(/projects/current)
  bob@dylan:~$
  bob@dylan:~$ cat 2-main_1.js

√ const QAuRetsAewslercas make(/conectio/2s/toeacevfewle');

  countStudents("database.csv");
        Evaluation quizzes(/dashboards/my current evaluation quizzes)
  bob@dylan:~$ node 2-main_1.js
  Number of students: 10
  Number of students in CS: 6. List: Johann, Arielle, Jonathan, Emmanuel, Guillaum
Number Curriculums (dashboards/my_curriculums) laume, Joseph, Paul, Tommy
  bob@dylan:~$
首
        Concepts(/concepts)
 Repo:
```



Conference rooms(/dashboards/video rooms)
 GitHub repository: alx-backend-javascript

• Directory: 0x05-Node_JS_basic

Filgerversingefyers) js

Check submissiones (/use Get disearchers/curviewy esults

. Reading a file asynchronously with Node JS Tools(/dashboards/my_tools)

mandatory

10013(/da311b0a1d3/111y_t0013)

Score: 100.0% (Checks completed: 100.0%)

Video on demand(/dashboards/videos)

Using the database database.csv (provided in project description), create a function countStudents in the file 3-read_file_async.js

- Create a function named countStudents . It should accept a path in argument (same as in 2-read_file.js)
 - The script should attempt to read the database file asynchronously
 - The succession to a representation of the succession of the succession
 - If the database is not available, it should throw an error with the text Cannot load the database
 - If the database is available, it should log the following message to the console Number of students: NUMBER_OF_STUDENTS
 - It should log the number of students in each field, and the list with the following format: Number of Myther its reference is a LIST_OF_FIRSTNAMES
 - CSV file can contain empty lines (at the end) and they are not a valid student!

```
bob@dylan:~$ cat 3-main_0.js
<del>__</del>const countStudents = require('./3-read_file_async');
   countStudents("nope.csv")
       .then(() => {
         Hore Gole.log("Done!");
            .catch((error) => {
         My Hanning (/planeing/me)
       });
$bob@d√Præjects(/poodjects/ncutre_not)js
   Error: Cannot load the database
 ✓ bob@dyQArRevSews I can make(/corrections/to_review)
   bob@dylan:~$ cat 3-main_1.js
   const countStudents = require('./3-read_file_async');
         Evaluation quizzes(/dashboards/my current evaluation quizzes)
   countStudents("database.csv")
       .then(() => {
            console.log("Done!");
Curriculums//dashboards/my_curriculums)
            console.log(error);
       });
conso Concepts/concepts)
   bob@dylan:~$ node 3-main_1.js
After Conference rooms (/dashboards/video_rooms)
   Number of students: 10
  Number of students in CS: 6. List: Johann, Arielle, Jonathan, Emmanuel, Guillaum
 e, Katarvers(/servers)
   Number of students in SWE: 4. List: Guillaume, Joseph, Paul, Tommy
   Done!
  _bob@dySandbexes(/user containers/current)
 Tips:
         Tools(/dashboards/my tools)
       Using asynchronous callbacks is the preferred way to write code in Node to avoid blocking
       threads
H
         Video on demand(/dashboards/videos)
 Repo:

    GitHub repository: alx-backend-javascript

    • DiPertral(Wisex 6 to the is basic
     • File: 3-read_file_async.js
M
         Discord(https://discord.com/app)
   Check submission
                    >_ Get a sandbox
                                      View results
 4. Create a small HTTP server using Node's HTTP module
                                                                                     mandatory
```

My Profile(/users/my profile) Score: 100.0% (Checks completed: 100.0%)

In a file named 4-http.js, create a small HTTP server using the http module: • It should be assigned to the variable app and this one must be exported HTTP server should listen on port 1245 Displays Hello Holberton School! in the page body for any endpoint as plain text Home(/) bob@dylan:~\$ node 4-http.js My Planning(/planning/me) पूर्व terminal 2: Projects(/projects/current) bob@dylan:~\$ curl localhost:1245 && echo "" Hello Holberton School! QA Reviews I can make(/corrections/to_review) bob@dylan:~\$ bob@dylan:~\$ curl localhost:1245/any_endpoint && echo "" PHello Holberton School! Evaluation quizzes(/dashboards/my_current_evaluation_quizzes) bob@dylan:~\$ Curriculums(/dashboards/my_curriculums) • GitHub repository: alx-backend-javascript Directory: 0x05-Node_JS_basic Concepts(/concepts)
File: 4-http.js 🔜 Creatളംമുന്തുമുളായതുplex HTTP server using Node's HTTP module mandatory Score: 100.0% (Checks completed: 100.0%)
Sandboxes(fuser containers/current) In a file named 5-http.js, create a small HTTP server using the http module: Tools(/dashboards/my_tools) It should be assigned to the variable app and this one must be exported HTTP server should listen on port 1245 • It should return alain/text hoords/videos) 用 When the URL path is /, it should display Hello Holberton School! in the page body When the URL path is /students it should display This is the list of our students followed by the same content as the file 3-read_file_async.js (with and without the database) - tpe names of the database must be passed as argument of the file CSV file can contain empty lines (at the end) - and they are not a valid student! [erminal 1: Discord(https://discord.com/app) bob@dylan:~\$ node 5-http.js database.csv In terminal 2: My Profile(/users/my_profile)

bob@dylan:~\$ curl localhost:1245 && echo "" $\overline{lacktriangleright}$ Hello Holberton School! bo(b)@dylan:~\$ bob@dylan:~\$ curl localhost:1245/students && echo "" This is the list of our students NumberHomesHudents: 10 Number of students in CS: 6. List: Johann, Arielle, Jonathan, Emmanuel, Guillaum e, Katie Numbe MbPPanningWpJanningWme)4. List: Guillaume, Joseph, Paul, Tommy bob@dylan:~\$ Projects(/projects/current) Repo: Giffa Begjevstlegn makel/corrections/to-regiew) • Directory: 0x05-Node_JS_basic File: 5-http.js Evaluation quizzes(/dashboards/my current evaluation quizzes) Check submission >_ Get a sandbox View results Curriculums(/dashboards/my_curriculums)

6. Create a small HTTP server using Express mandatory Score: 900.99916 Meens epts) leted: 100.0%) Install Express and in a file named 6-http_express.js, create a small HTTP server using Express Conference rooms(/dashboards/video_rooms) module: • It should be assigned to the variable app and this one must be exported Servers (/servers)
 HTTP server should listen on port 1245 • Displays Hello Holberton School! in the page body for the endpoint / \in termin Sandboxes(/user_containers/current) bob@dylan:~\$ node 6-http_express.js Tools(/dashboards/my tools) In terminal 2: Video on demand(/dashboards/videos) Peers(/users/peers) Discord(https://discord.com/app)

My Profile(/users/my_profile)



bob@dylan:~\$ curl localhost:1245 && echo ""

Hello Holberton School!

bot@dylan:~\$

bob@dylan:~\$ curl localhost:1245/students && echo ""

This is the list of our students

Number Hothethudents: 10

Number of students in CS: 6. List: Johann, Arielle, Jonathan, Emmanuel, Guillaum e, Katie

Number My Planning/me)4. List: Guillaume, Joseph, Paul, Tommy bob@dylan:~\$

<u>ፈ</u>

Projects(/projects/current)

Repo:

/

- GiPA Bexious to an make (Accrete tipas to review)
- Directory: 0x05-Node_JS_basic
- File: 7-http_express_is Evaluation_quizzes(/dashboards/my_current_evaluation_quizzes)

Check submission > Get a sandbox View results

mandatory

Curriculums(/dashboards/my_curriculums)
8. Organize a complex HTTP server using Express

Score: 80.0% (EALERS ESM) Seted: 100.0%)

Obviously writing every part of a server within a single file is not sustainable. Let's create a full server in a Conference rooms(/dashboards/video_rooms) and full_server.

Since you have used ES6 and Babel in the past projects, let's use babel-node to allow to use ES6 Tunctions like import or export.

8.1 Organize the structure of the server

Sandboxes(/user_containers/current)

- Create 2 directories within:
 - controllers

L

Tools (Adais no ards/my tools)

• Create a file full_server/utils.js, in the file create a function named readDatabase that accepts a file path as argument:

Video shodomand (dashbaards videos) ronously

- It should return a promise
- When the file is not accessible, it should reject the promise with the error
- When the file can be read, it should return an object of arrays of the firstname of students

Peense/rusieldspeers)

8.2 Write the App controller

side the iffe red https://discreb.ppm/apps/Appcontroller.js:

- Create a class named AppController . Add a static method named getHomepage
- The method accepts request and response as argument. It returns a 200 status and the message Hello Holberton School!

8.3 Writie Hotel Students controller

Inside the file full_server/controllers/StudentsController.js, create a class named tudentsController. Add two static methods:

The first one is getAllStudents:



- The method accepts request and response as argument
- Home(/)It should return a status 200
- It calls the function readDatabase from the utils file, and display in the page:



My Filiating/plataining/mtale list of our students

 And for each field (order by alphabetic order case insensitive), a line that displays the number of students in the field, and the list of first names (ordered by appearance in the



Projects/varsigates/voutrent/following format: Number of students in FIELD: 6. List:

LIST_OF_FIRSTNAMES



 If the database is not available, it should return a status 500 and the error message Cannot load QA Reviews I can make(/corrections/to_review) the database

The second one is getAllStudentsByMajor:

Evaluation quizzes(/dashboards/my_current_evaluation_quizzes)

- The method accepts request and response as argument
- It should return a status 200
- It uses a parameter that the user can pass to the browser major. The major can only be CS or SWEurlichense/dashssinganotheurparameter, the server should return a 500 and the error Major parameter must be CS or SWE



• It calls the function readDatabase from the utils file, and display in the page the list of first names of the street (ordered by appearance in the database file) in the specified field List: LIST_OF_FIRSTNAMES_IN_THE_FIELD



 If the database is not available, it should return a status 500 and the error message Cannot load Conference rooms(/dashboards/video_rooms)
 the database

2.4 Write the routes Servers(/servers)

Inside the file full_server/routes/index.js:



- Link the route / to the AppController Sandboxesi/user containers/current
- Link the route /students and /students/:major to the StudentsController

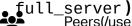
8.5 Write the server reusing everything you created lools(/dashboards/my tools)

Inside the file named full_server/server.js, create a small Express server:



- It should use the multipastering divided by server/routes/index.js
- It should use the port 1245

8.6 Update package. json (if you are running it from outside the folder



Peers(/users/peers)

If you are starting node from outside of the folder full_server, you will have to update the command dev by: nodemon --exec babel-node --presets babel-preset-env ./full_server/server.js databDiscord(https://discord.com/app)

Warning:



- Don't forget to export your express app at the end of server.js (export default app;)
- The database filename is passed as argument of the server.js BUT, for testing purpose, you shidyl@redite(westhis/file_narotile) the execution (when getAllStudents or getAllStudentsByMajor are called for example)

In terminal 1: bob@dylan:~\$ npm run dev termindb2ne(/) bob@dylan:~\$ curl localhost:1245 && echo "" Hello Myn Pobærntionog (Asoctanomo ing/me) bob@dylan:~\$ bob@dylan:~\$ curl localhost:1245/students && echo "" This Protects/bostojecofs/courrenti)dents Number of students in CS: 6. List: Johann, Arielle, Jonathan, Emmanuel, Guillaum e, Katie 🖊 Number**္AfRextenden էց**րվարգ**են Մ**Հօգրբ**զենց է**չ/**են կաշխիշա**յրը, Joseph, Paul, Tommy bob@dylan:~\$ bob@dylan:~\$ curl localhost:1245/students/SWE && echo "" ? List: Evaluation@uiz2es(MashBoakds/Mymevurrent_evaluation_quizzes) bob@dylan:~\$ bob@dylan:~\$ curl localhost:1245/students/French -vvv && echo "" Trying 127.0.0.1... * TCP_NODELAY set * Conferrigulyms/6/ashboards/my_6urigulums/t 1245 (#0) > GET /students/SWES HTTP/1.1 > Host: localhost:1245 = > User Cancalets (GANCED to 8.0 > Accept: */* HTTP/conference robers/adasherovends/video rooms) < X-Powered-By: Express < Date: Mon, 06 Jul 2020 03:29:00 GMT ∺< ConnSeentviewsn(/sekneveeprs)alive < Content-Length: 33 >_* Conr**Seatchoo**x#5(/utserhoothtaineas/loogsterhteft intact Major parameter must be CS or SWE bob@dylan:~\$ Tools(/dashboards/my_tools) If you want to add test to validate your integration, you will need to add this file: .babelrc ick to shawbhided@manatenatenboards/videos)

Repo:



- 🚉 Giphelepsஅழகுந்து 🕳 🕒 Gipheleps இந்து இந
 - Directory: 0x05-Node_JS_basic
 - File: full_server/utils.js, full_server/controllers/AppController.js, full_server/controllers/studentsController.js, full_server/routes/index.js,

full_server/server.js

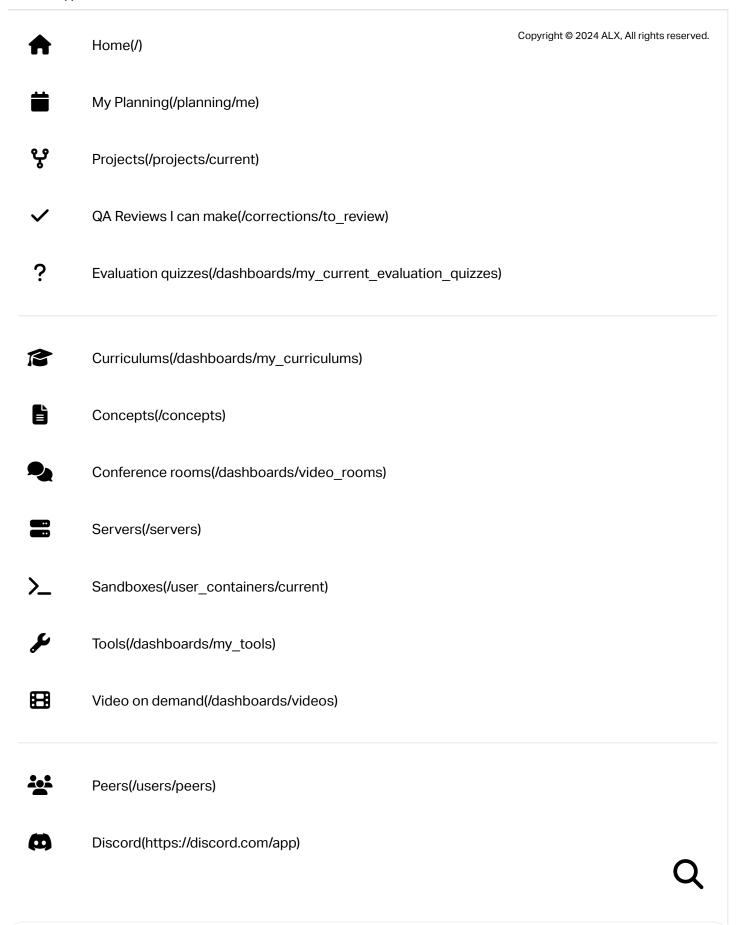


Check submission

>_ Get a sandbox

View results





My Profile(/users/my_profile)