## 0x02. ES6 classes



WayvaSariintg(/plaES6ng/me)



Projects(/projects/current)

₱ Project over - took place from Jun 27, 2024 6:00 AM to Jun 28, 2024 6:00 AM

🖊 An auto@AiRevielvesduoelnerhatke(loondleetions/to\_review)

? Evaluation quizzes(/dashboards/my\_current\_evaluation\_quizzes)



Curriculums(/dashboards/my\_curriculums)



Concepts(/concepts

### FOR ALL THE THINGS!



Conference rooms(/dashboards/video\_rooms)

### Resources

Servers(/servers)

- Classes (/rltoken/IDo2mlwrld8srxeBNEjftw)
- MSapplegrasi/hirgr\_(/protein/erg/seg-etr/bobjrRABVPVNZA)

## Learning Objectives

At the end of this project, you are expected to be able to explain to anyone \*\*Itoken/Ma9lyltun86unTeMpNFgnQ), \*\*without the help of Google: Video on demand/dashboards/videos)\*\*

- How to define a Class
- How to add methods to a class
- Why and how to add a static method to a class



- Нфидосуденте в пример в п
- Metaprogramming and symbols

## Require the district on /app)

- All your files will be executed on Ubuntu 18.04 LTS using NodeJS 12.11.x
- Allowed editors: vi, vim, emacs, Visual Studio Code
- All your files should end with a new line
- A README and file at the root of the folder of the project, is mandatory My Profile (users/my\_profile)
- Your code should use the js extension





- Your code will be tested using Jest and the command npm run test
- Your code will be verified against lint using ESLint
- Your code needs to pass all the tests and lint. You can verify the entire project running npm run

full-test

# Setup Home(/)

### nstall NodeJS 12.11.x

(in your home directory):

Projects(/projects/current)

curl -sL https://deb.nodesource.com/setup\_12.x -o nodesource\_setup.sh

sudo bash nodesource\_setup.sh

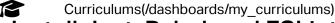
/sudo ୟହ୍ୟ Renview ହୋଇକାର ନ୍ୟୁନ୍ତ (/corrections/to\_review)

📍 \$ nodeti្សនាបេដtion quizzes(/dashboards/my\_current\_evaluation\_quizzes)

v12.11.1

\$ npm -v

6.11.3



### Install Jest, Babel, and ESLint

e your projected it and est and ESList by using the supplied package.json and run npm install.

## Conference rooms(/dashboards/video\_rooms)

Add the following files to your project directory. Servers(/servers)

### package.json

Sandboxes(/user\_containers/current)
Click to show/hide file contents

#### Abeilal@@shibagus/jus\_tools)

Click to show/hide file contents

Video on demand(/dashboards/videos)

.eslintrc.js

Click to show/hide file contents

## Peers(/users/peers)

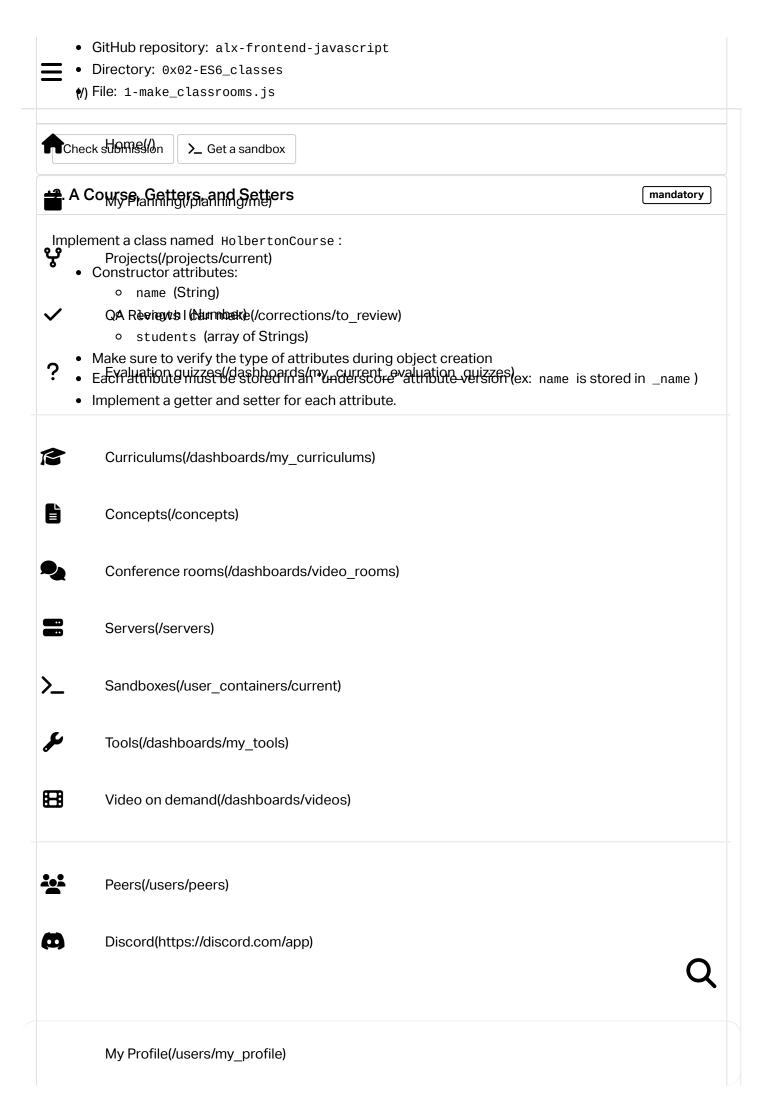
Don't forget to run \$ npm install when you have the package.json Discord(https://discord.com/app)

Q

### Tasks

My Profile(/users/my\_profile)

Repo:



```
bob@dylan:~$ cat 2-main.js
  import HolbertonCourse from "./2-hbtn_course.js";
   const c1 = new HolbertonCourse("ES6", 1, ["Bob", "Jane"])
   console.log(c1.name);
mc1.nameome(Aython 101";
   console.log(c1);
  try { My Planning(/planning/me)
       c1.name = 12;
 🛱 catch (Peroje)cts(/projects/current)
       console.log(err);
         QA Reviews I can make(/corrections/to_review)
   try {
       const c2 = new HolbertonCourse("ES6", "1", ["Bob", "Jane"]);
         Evaluation quizzes(/dashboards/my current evaluation quizzes)
   catch(err) {
       console.log(err);
   }
Fob@dyGurriculums(/dashboards/my_curriculums)
   bob@dylan:~$ npm run dev 2-main.js
Holber Concepts (Concepts)
     _name: 'Python 101',
     _length: 1,
    _stubenferencerpoms(/dashboards/video_rooms)
   TypeError: Name must be a string
       Servers(/servers)
   TypeError: Length must be a number
  _bob@dyStandbexes(/user_containers/current)
Repo:
         Tools(/dashboards/my_tools)
     • GitHub repository: alx-frontend-javascript

    Video on demand(/dashboards/videos)
    Directory: 0x02-ES6_c tasses

     • File: 2-hbtn_course.js
Check shears (beers/peers) a sandbox
    Methods, static methods, computed methods names..... MONEY Discord(https://discord.com/app)
                                                                                         mandatory
 Implement a class named Currency:
     Constructor attributes:
           o code (String)
         My Profile (ASSEITS) my profile)
```

Each attribute must be stored in an "underscore" attribute version (ex: name is stored in \_name)



amount (Number) **>**\_ Sandboxes(/user\_containers/current)

Each attribute must be stored in an "underscore" attribute version (ex: name is stored in \_name )

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Implement a getter and setter for each attribute.

Implement a method named displayFullPrice that returns the attributes in the following format amount currency\_name (currency\_code).

Ħ • Im**kilelanean aleratiod(detsbub aarde**d/id**eas**ertPrice . It should accept two arguments: amount (Number), conversionRate (Number). The function should return the amount multiplied by the conversion rate.

Peers(/users/peers)

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

```
bob@dylan:~$ cat 4-main.js
\equivimport Pricing from './4-pricing.js';
       im(p)ort Currency from './3-currency.js';
       const p = new Pricing(100, new Currency("EUR", "Euro"))
 mconsoteomo(()p);
       console.log(p.displayFullPrice());
     ■bob@dyMlxnPlarsning(/planning/me)
       bob@dylan:~$ npm run dev 4-main.js
       Pricing {
             _amd?rojects(/projects/current)
             _currency: Currency { _code: 'EUR', _name: 'Euro' }

√100 EuQtA RŒWeN/s I can make(/corrections/to review)

       bob@dylan:~$
  ?
                       Evaluation quizzes(/dashboards/my current evaluation quizzes)
   Repo:
             • GitHub repository: alx-frontend-javascript
• Dicartacyluans (Pates Pasans) curriculums)
             • File: 4-pricing.js
                       Concepts(/concepts)
        Check submission
                                                    >_ Get a sandbox
       A Building Conference rooms(/dashboards/video_rooms)
                                                                                                                                                                                                                            mandatory
 plementariask games Building:
             • Constructor attributes:
                  o sqft (Number)
Sandboxes(/user_containers/current)
Each attribute must be stored in an "underscore" attribute version (ex: name is stored in _name)
                 Implement a getter for each attribute.
                Consideration and the standard of the control of th
                   implement a method named evacuationWarningMessage.
                           o If a class that extends from it does not have a evacuationWarningMessage method, throw
 H
                       Video of the Wall Charles age videos) extending Building must override
                                 evacuationWarningMessage
                       Peers(/users/peers)
                       Discord(https://discord.com/app)
```

```
bob@dylan:~$ cat 5-main.js
  import Building from './5-building.js';
         const b = new Building(100);
         console.log(b);
                           Home(/)
         class TestBuilding extends Building {}
     try { My Planning(/planning/me)
                       new TestBuilding(200)
        catch (Peroje)cts(/projects/current)
                      console.log(err);
                           QA Reviews I can make(/corrections/to review)
         bob@dylan:~$
         bob@dylan:~$ npm run dev 5-main.js
  🧖 BuildiEvaluation ប៉ុប្បែនវម៌ស៊ី/dashboards/my_current_evaluation_quizzes)
         Error: Class extending Building must override evacuationWarningMessage
         bob@dylan:~$
Curriculums(/dashboards/my_curriculums)
     Repo:
                Concepts(/concepts)
GitHub repository: alx-frontend-javascript
                   Directory: 0x02-ES6_classes
                   File of fereing in the fereing of the File of fereing in the fereing of the ferei
   ₽Check s9emiesis//iservers€et a sandbox
6. Inheritance
                                                                                                                                                                                                                                                                  mandatory
                           Sandboxes(/user_containers/current)
     Import Building from 5-building.js.
Implementa class hards kny High Building that extends from Building:

    Constructor attributes:

 田
                           Vide some of the parent class Building)
                               floors (Number)
```

- Each attribute must be stored in an "underscore" attribute version (ex: name is stored in \_name)
- Implement a getter for each attribute.
- Over the wave of the number of the number
- Discord(https://discord.com/app)

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```
bob@dylan:~$ cat 6-main.js
<del>__</del>import SkyHighBuilding from './6-sky_high.js';
   const building = new SkyHighBuilding(140, 60);
   console.log(building.sqft);
mconsotenney(building.floors);
   console.log(building.evacuationWarningMessage());
 ■bob@dyMyxrPlargning(/planning/me)
   bob@dylan:~$ npm run dev 6-main.js
   140
Ψ<sub>60</sub>
         Projects(/projects/current)
   Evacuate slowly the 60 floors
   bob@dylan:~$
        QA Reviews I can make(/corrections/to_review)
 Repo:
         Evaluation quizzes(/dashboards/my current evaluation quizzes)
     • GitHub repository: alx-frontend-javascript

    Directory: 0x02-ES6_classes

     File: 6-sky_high.js
Curriculums(/dashboards/my_curriculums)
   Check submission
                      >_ Get a sandbox
Ħ
         Concepts(/concepts)
 7. Airport
                                                                                            mandatory
         Conference rooms(/dashboards/video_rooms)
 Implement a class named Airport:
       Constructor attributes: Servers(/servers)

    name (String)

    code (String)

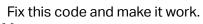
    Eastratibility (must be started in can "dun) dersone" attribute version (ex: name is stored in _name)

     • The default string description of the class should return the airport code (example below).
₽bob@d√Tpals(/dashatoarda/my_tools)
   import Airport from "./7-airport.js";
Enconst VaidepoontslemameWdashhpoand(s/sideona)ancisco Airport', 'SFO');
   console.log(airportSF);
   console.log(airportSF.toString());
bob@dylan:~$
Peers(/users/peers)
bob@dylan:~$ npm run dev 7-main.js
   Airport [SF0] { _name: 'San Francisco Airport', _code: 'SF0' }
[object SF0]
Discord(https://discord.com/app)
 Repo:
```

Githlub repository: alx-frontend-javascript

Directory: 0x02-ES6\_classes





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

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```
const class2019 = new HolbertonClass(2019, 'San Francisco');
\pmconst class2020 = new HolbertonClass(2020, 'San Francisco');
  export class HolbertonClass {
    constructor(year, location) {
      th Gme Wear = year;
      this._location = location;
        My Planning(/planning/me)
    get year() {
     return this._year;
    } Projects(/projects/current)
    get location() {
      rectantevitewis L chocantake (/corrections/to review)
    }
        Evaluation quizzes(/dashboards/my current evaluation quizzes)
  const student1 = new StudentHolberton('Guillaume', 'Salva', class2020);
  const student2 = new StudentHolberton('John', 'Doe', class2020);
  const student3 = new StudentHolberton('Albert', 'Clinton', class2019);
  const student4 = new StudentHolberton('Donald', 'Bush', class2019);
Curriculums/dashboards/my-curriculums/ason', 'Sandler', class2019);
  export class StudentHolberton {
constructors (Construction) {
      this._firstName = firstName;
      this._lastName = lastName;
      tifigniferengeregmealdashbaardadyidaaciagosis)
    }
== getSnentanname(n)ve(rs)
      return `${this._firstName} ${this._lastName}`;
    }
        Sandboxes(/user_containers/current)
    get holbertonClass() {
      return this.holbertonClass;
    } Tools(/dashboards/my tools)
    get fullStudentDescription() {
      ${self._holbertonClass.location}`;
  }
        Peers(/users/peers)
  export const listOfStudents = [student1, student2, student3, student4, student5];
        Discord(https://discord.com/app)
```

```
bob@dylan:~$ cat 9-main.js
import listOfStudents from "./9-hoisting.js";
   console.log(listOfStudents);
const Hamewinted = listOfStudents.map(
       student => student.fullStudentDescription
         My Planning(/planning/me)
   console.log(listPrinted)
$\frac{1}{2}\text{bob@dyPrajects(/projects/current)}$
   bob@dylan:~$ npm run dev 9-main.js
    Studenthe least can (make (/corrections/to review)
       _firstName: 'Guillaume',
       _lastName: 'Salva',
       _hevelocation glasses (https://www.cirreyreaevar.org.org.co.) 'San Francisco' }
     },
     StudentHolberton {
       _firstName: 'John',
       _lastName: 'Doe'
_Curriculums(/dashboards/my_curriculums)
_houbertonclass: houbertonclass { _year: 2020, _location: 'San Francisco' }
     },
     StudentHolberton {
       _Gorgenatal/conceptst ,
       _lastName: 'Clinton',
       _holbertonClass: HolbertonClass { _year: 2019, _location: 'San Francisco' }
    }, Conference rooms(/dashboards/video_rooms)
     StudentHolberton {
       _firstName: 'Donald',
       _1Sestmentaleservenish:,
       _holbertonClass: HolbertonClass { _year: 2019, _location: 'San Francisco' }
     },
    Stucentellockes(/tuser{containers/current)
       _firstName: 'Jason',
       _lastName: 'Sandler',
       _https://dashtblasks/htm/lteots/nClass { _year: 2019, _location: 'San Francisco' }
Video on demand(/dashboards/videos)
     'Guillaume Salva - 2020 - San Francisco',
     'John Doe - 2020 - San Francisco',
     'Albert Clinton - 2019 - San Francisco',
     'Donald Bush - 2019 - San Francisco',
     'Jason Sandter/Peers - San Francisco'
   bob@dylan:~$
         Discord(https://discord.com/app)
```

#### Repo:

- GitHub repository: alx-frontend-javascript
- Directory:ile(%03eFs)fnyclassffle)

```
File: 9-hoisting.js
   Check submission
                       > Get a sandbox
O. Vroome(/)
                                                                                               mandatory
 #nplementaclassing/peahrliag/me)

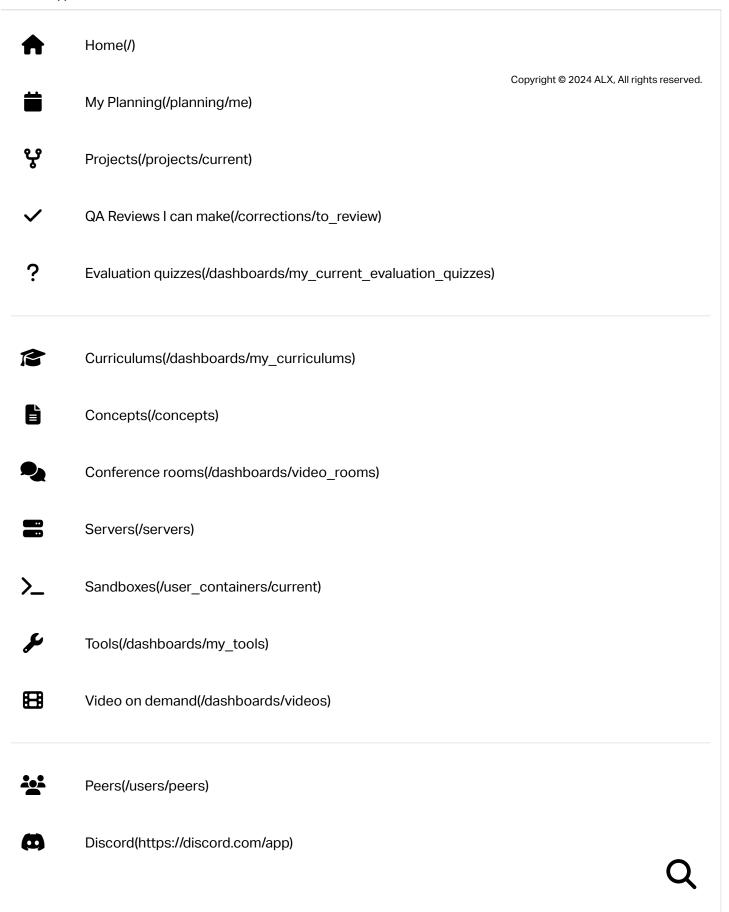
    Constructor attributes:

          brand (String)Projects(/projects/current)motor (String)
           o color (String)
    • EaQA Attiviteurs notanthacket/accdriectaino/fus/hiddenscapes/) attribute version (ex: name is stored in _name)

    Add a method named cloneCar. This method should return a new object of the class.

 🎙 lint: Syne balsatា ត្ ទី ឲ្យ uizzes (/dashboards/my_current_evaluation_quizzes)
   bob@dylan:~$ cat 10-main.js
   import Car from "./10-car.js";
င္ lass Gurriculums//dashboards/my_curriculums)
   const tc1 = new TestCar("Nissan", "Turbo", "Pink");
aconst Geoceptal/cencontelar();
   console.log(tc1);
conso Contenence rooms/dashboards/video rooms)
   console.log(tc2);
 ∷consoSeerlveng$(t/se2rvienrs)tanceof TestCar);
   console.log(tc1 == tc2);
          Sandboxes(/user_containers/current)
   bob@dylan:~$
   bob@dylan:~$ npm run dev 10-main.js
FrestCapods(始語明的ards)解解artools)motor: 'Turbo', _color: 'Pink' }
   TestCar { _brand: undefined, _motor: undefined, _color: undefined }
Htrue Video on demand(/dashboards/videos)
   false
   bob@dylan:~$
          Peers(/users/peers)
 Repo:
       GitHub repository: alx-frontend-javascript
Discord(https://discord.com/app)
Directory: 0x02-ES6_classes
     • File: 10-car.js
   Check submission
                       >_ Get a sandbox
          My Profile(/users/my_profile)
```





My Profile(/users/my\_profile)