

Day9

Thursday, May 11, 2023 2:07 PM

BootStrap = CSS Library , many CSS classes

Node Project -----

| | |
|------|------------------------------|
| npm | Node package manager |
| init | To initialize a node project |

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|--------------|--|---|
| npm init | this command creates a package.json in the current folder | |
| package.json | It is a file written in json format , it has different properties about the project given in key:value pairs | Add a coma in the end and add "type" : "module" |

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| Instance variable | Non static Property of class | Every object will have a different copy of this property |
| Usage of object or this is compulsory for instance variable | | |

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| export default class Product | import Product from "./Product.js" |
| export class Product | import { Product } from "./Product.js" |

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| export default | ONLY one export default in a file is allowed |
| export | MANY export in a file are allowed |

We can provide **alias** in the import statement

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|---|---|
| Class or function that are export default | import aliasname from "./Product.js" |
| Class or function that are simple export | import { sayHi as welcome } from "./mylib.js" |

A class can have instance variables and class variables

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|--------------------|------------------------------------|------------------------|---------------------|
| instance variables | Non static properties and function | call using obj or this | One copy per object |
| class variables | static properties and functions | call using classname | One copy per class |

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| static function | Non static function |
| does not get "this" | Gets a "this" implicitly |
| Call using classname | Call using object |
| Cannot access non static properties | Can access non static properties |

| | |
|------------------------------|------------------------------|
| Can access static properties | Can access static properties |
|------------------------------|------------------------------|

| static property | Non static property |
|------------------------|-----------------------------------|
| Only one copy | Many copies - one copy per object |
| Access using classname | Access using object |

By default all properties and functions are PUBLIC in JS class

To make them **private** precede them with # = private fields can be accessed only within function inside the class . It is undefined outside the class

Encapsulation = Hiding data and making it available through getters and setters

Declaring Properties in a JS class -----

1. Inside the constructor

```
class XYZ
{
    constructor()
    { this.propName = v }
}
```

2. Directly inside the class

```
class XYZ
{
    propName=10
}
```

3. Create get and set functions

Writing a Server using express !!!

Express ? It is a JS library on server side . It is used to build a web server .

Web server is a program that runs continuously waiting for client request

On request it sends a response to the client and continues waiting.

Request and Responses are created using HTTP

| | |
|---------------------|---|
| How to get express? | npm install express |
| | In the node_modules folder -- it will add express library |
| | In package.json - express will be added in dependencies |

URL

<http://localhost:5000/>

do ipconfig on cmd

you will get IP address <http://192.168.1.53:5000/>

You get the IP address of your friend's machine fire request to friend's server from your machine

