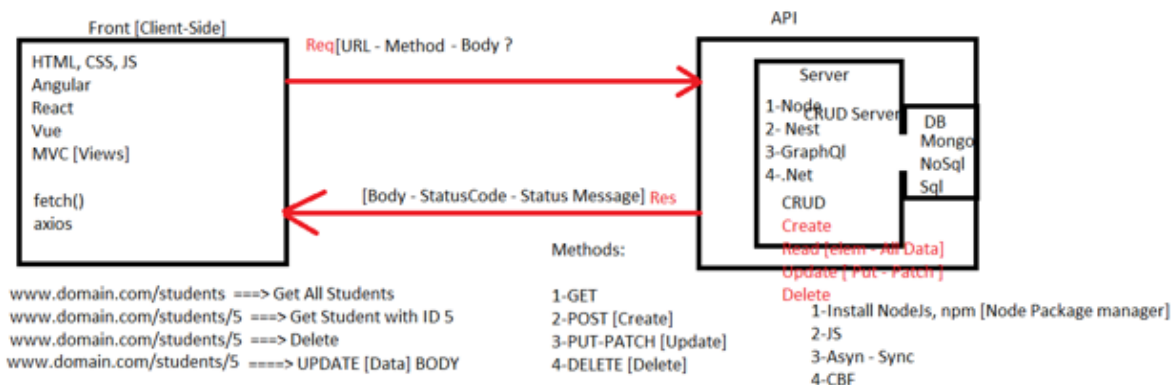


# Day1 ✨ Node Js

Js code run in server side



Server it is a layer between frontend and database

Apply all crud operation

**\*\*By Node Can do**

- Http server
- Tcp server
- Web chat app

**Steps:**

1. Install Node Js , npm

Some command 😊

**Ctrl+c → to logout from node**

**.editor → to enter editor mode**

**Ctrl+d → finish the code**

**.save filename.js**

**.load filename.js**

**Asyn** ⇒ یعنی مش ه block عند الحتة دى دا هرميها فى thread ويكمل شغلها عادى

**In Node → Single thread && Non Blocking**

In js there 4 main categories

1. Built in Object [Array, Number, Function, ...]
2. DOM [Document]
3. BOM
4. Custom Objects

In Node there 4 Modules

1. Global [without required]
2. Built in Module
3. Third Party Module
4. Custom Module

### 1) Global Module

بدل ال **import** يعنى فيها شوية حاجات بستخدمها على طول من غير ما اكتب **required**

Ex:

Console

Set Time Out

### 2) Built in ⇒ Need Required

Ex 1: **os** → **require("os")**

كدا بتعمل **import** للفايل ده

```
const os=require("os");  
console.log(os.hostname);
```

Ex 2:fs→require("fs")

Read / Create / Update / Delete

2.1)

```
const fs=require("fs");
fs.readFile("Hamada.txt","utf-8",(err,data)=>{
    if(err)
    {
        console.log(err);
    }else{
        console.log(data);
    }
})
```

2.2) writeFile⇒do override on the file

(لو الفايل مكنش موجود هيعملو كريت)

2.3)to appendFile ⇒add to the file

2.4)unlink⇒ to delete file

**\*\*علشان نقوم ال server محتاجين " required" http , port**

```
const Server= http.createServer((req,res)=>{

  if(req.url !== "/favicon.ico"){
    //step 1 need to split url
    //step 2 know operator
    let inputs=req.url.split('/');
    let operator=inputs[1];
    let nums=inputs.slice(2);
    let result=0;
    switch(operator)
    {
      case 'add':
        result=add(...nums)
        break;
      case 'sub':
        result=sub(...nums)

        break;
      case 'mult':
        result=mult(...nums)

        break;
      case 'divid':
        result=divid(...nums)

        break;
      default:
        result="Sorry Can't detect this operation";
        break;
    }

    fs.writeFileSync("Hamada.txt","Your Result =
"+result.toString()+"\n")

  }

  res.end()
}).listen(7000,()=>{console.log("lise")})
```

