



CJC

Complete Java Classes

by **Kunal Sir**

J S O N - D A T A B A S E

❖ What is JSON databases?

JSON (JavaScript Object Notation) database is a document-type database. Ideal for storing semi-structured data. It is much more flexible as compare to column and row format, which is fixed and expensive when it comes to implementing even small schema changes.

❖ What is semi-structured data?

Semi-structured data is a type of data that is not purely structured, but also not completely unstructured. It contains some level of organization or structure, but does not conform to a data model.

❖ What is json-server?

Json-server is use in front-end development to achieve rapid development, as if you have json document it will automatically generate several end-points as mentioned below.

For time while imagine you have User data inside one json document. Then the end-points are generated as below.

1. GET :- user
2. GET :- user/:id
3. POST :- user
4. PUT :- user/:id
5. DELETE :- user/:id

Using these endpoints we can perform complete CRUD operation in angular.



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❖ How to install JSON server in angular application?

1. Install json-server in order to run and communicate to JSON databases using command : **npm i json-server -g**

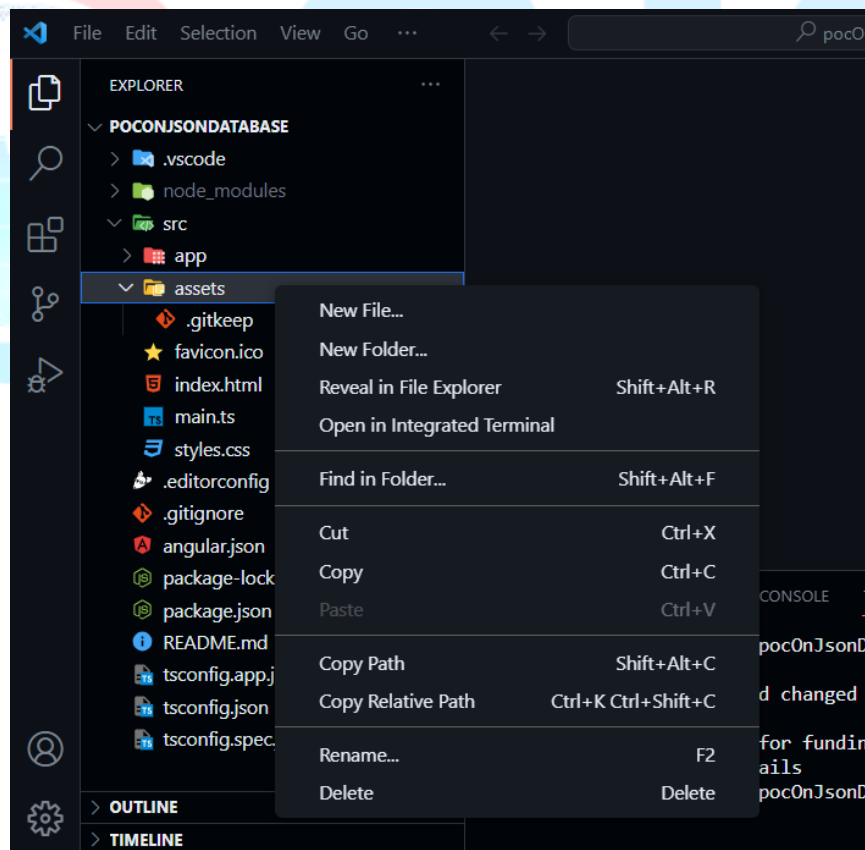
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS E:\Angular Workspace\pocOnJsonDatabase> npm i json-server -g
removed 202 packages, and changed 112 packages in 15s

12 packages are looking for funding
  run `npm fund` for details

```

2. Right click on src/accets directory to create JOSH Document .

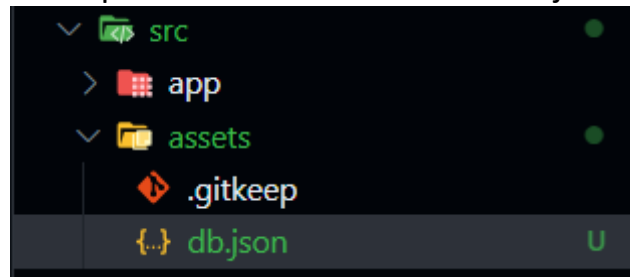




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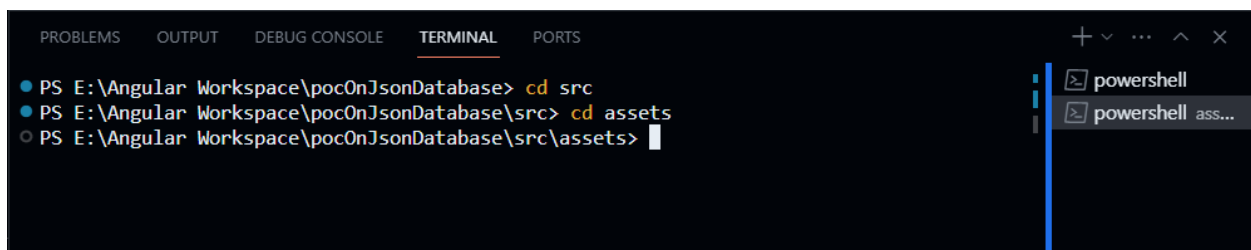
3. Choose 'New File...' option and name the file as db.json



4. Add employee details in db.json in json format as given below.



5. Open new terminal and change the terminal directory to src/assets as given bellow.





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6. Now run json-server using command : **json-server --watch db.json**

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
● PS E:\Angular Workspace\pocOnJsonDatabase> cd src
● PS E:\Angular Workspace\pocOnJsonDatabase\src> cd assets
○ PS E:\Angular Workspace\pocOnJsonDatabase\src\assets> json-server --watch db.json
```

7. After pressed Enter button you can see, json server has been compiled our db.json file

And also json server have an endpoint, from which we can read the data of db.json document.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
● PS E:\Angular Workspace\pocOnJsonDatabase> cd src
● PS E:\Angular Workspace\pocOnJsonDatabase\src> cd assets
○ PS E:\Angular Workspace\pocOnJsonDatabase\src\assets> json-server --watch db.json

\{^_^}/ hi!

Loading db.json
Done

Resources
http://localhost:3000/Employee

Home
http://localhost:3000

Type s + enter at any time to create a snapshot of the database
Watching...
```



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8. Open any of the browser window and use the endpoint, which is provided by json-server on terminal . in our scenario endpoint is -->

<http://localhost:3000/Employee>

(the default port number of json-server is 3000 .)

```
1 [
2   {
3     "id": 1,
4     "name": "abc",
5     "designation": "Dev"
6   },
7   {
8     "id": 2,
9     "name": "pqr",
10    "designation": "Prod"
11  }
12 ]
```