Mean Stack Application – Project Manager

Application Structure:

* Client side – Angular
* Server side – Express
* Database – MongoDB

Required Software’s:

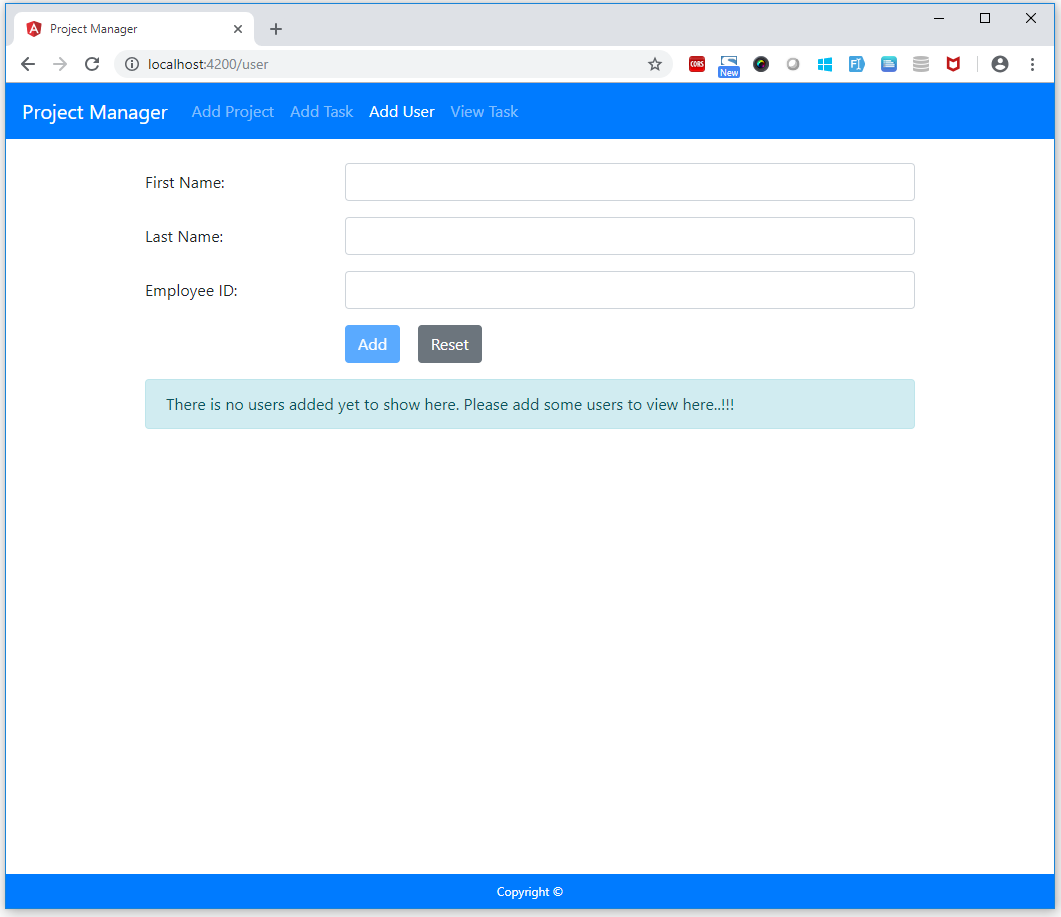
* Node JS
* MongoDB
* Visual Studio Code (Any IDE)
* Robo Mongo (Any IDE)
* Docker
* Jenkins

Client Side – Angular

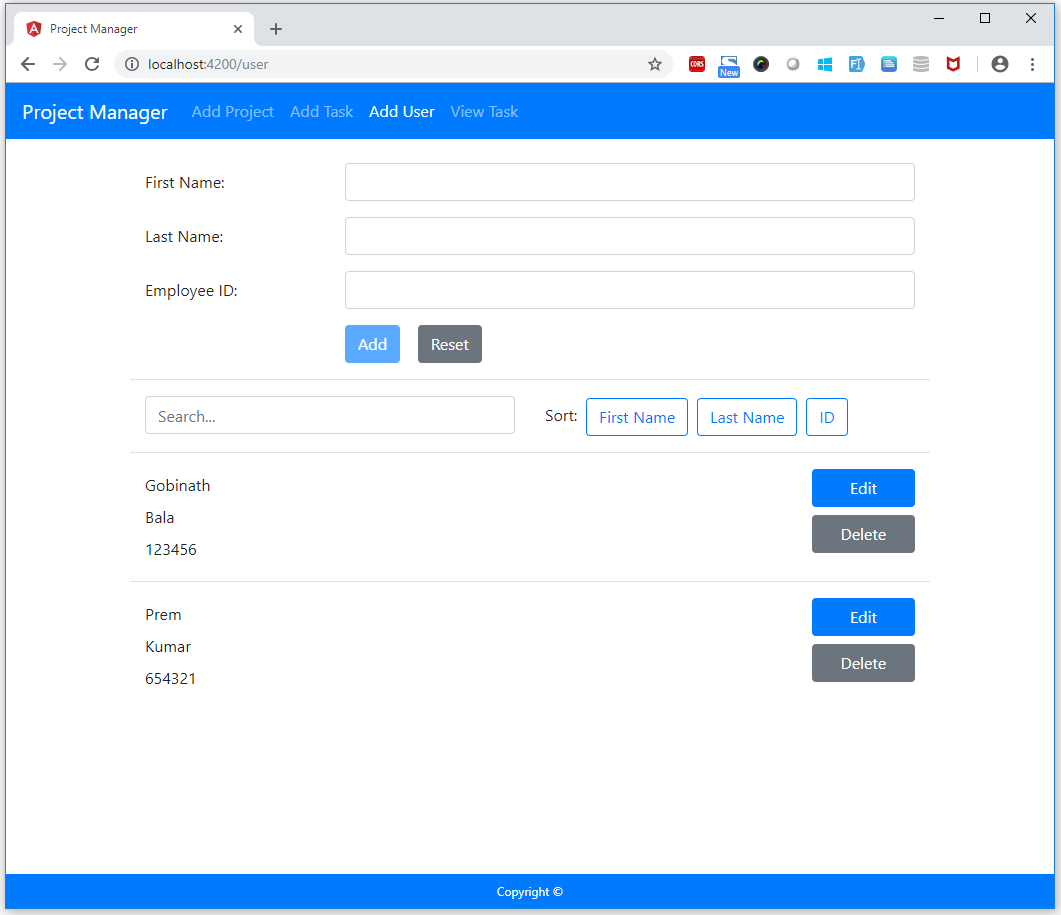
Angular CLI for building the UI and connects with REST endpoints exposed from server side (express)

**Add User:**

* **Before Adding User**

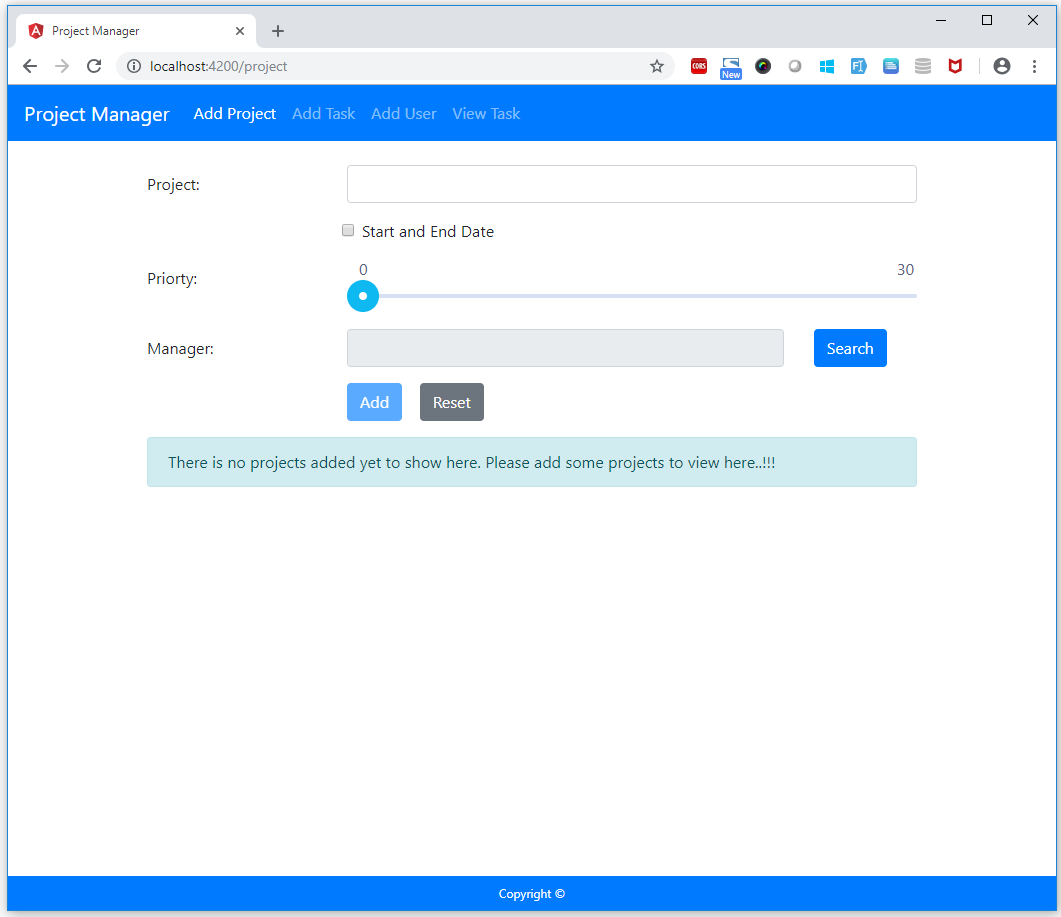


* **After adding User:**

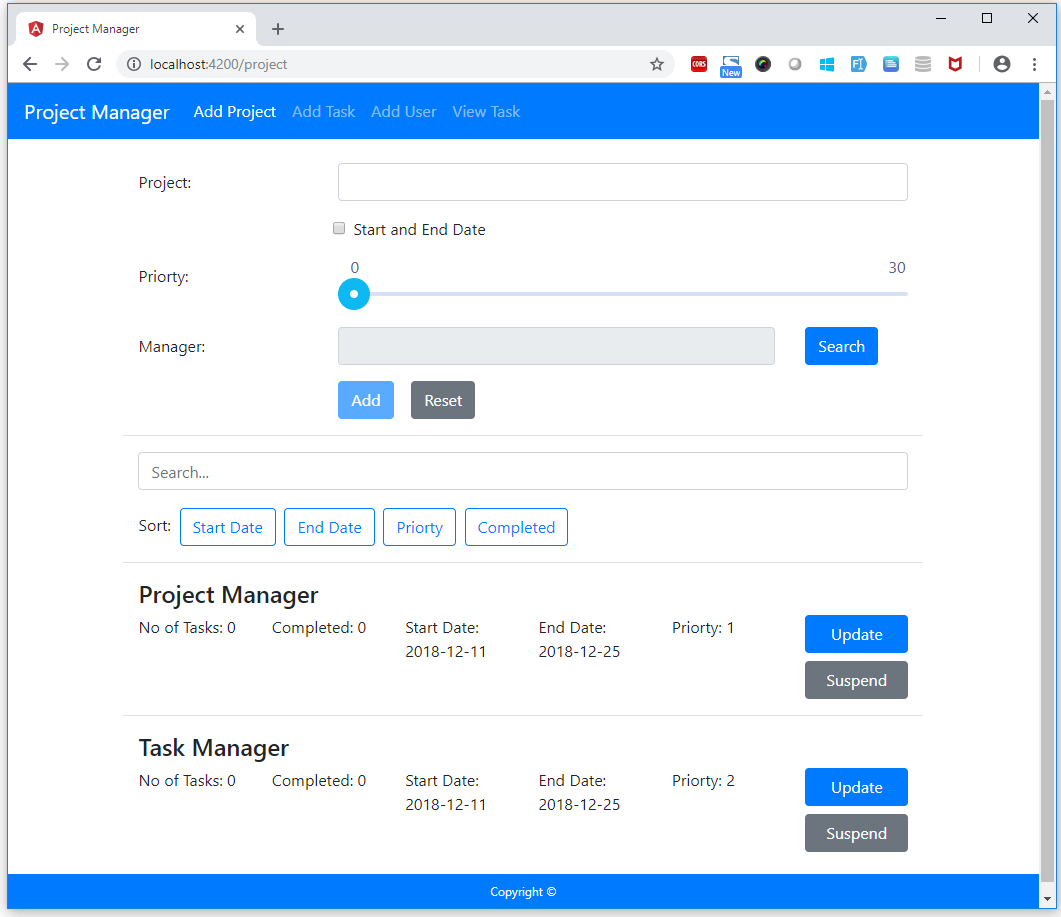


**Add Project:**

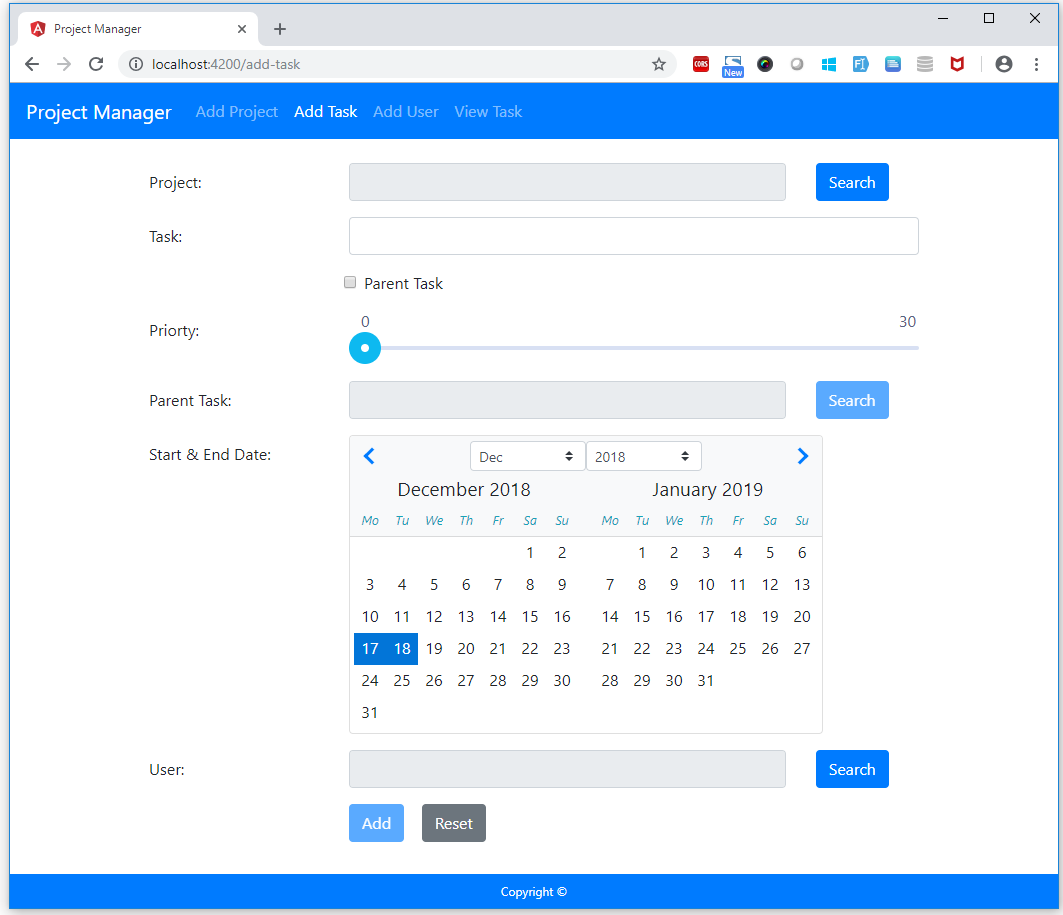
* **Before Adding Project:**

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* **After Adding Project:**

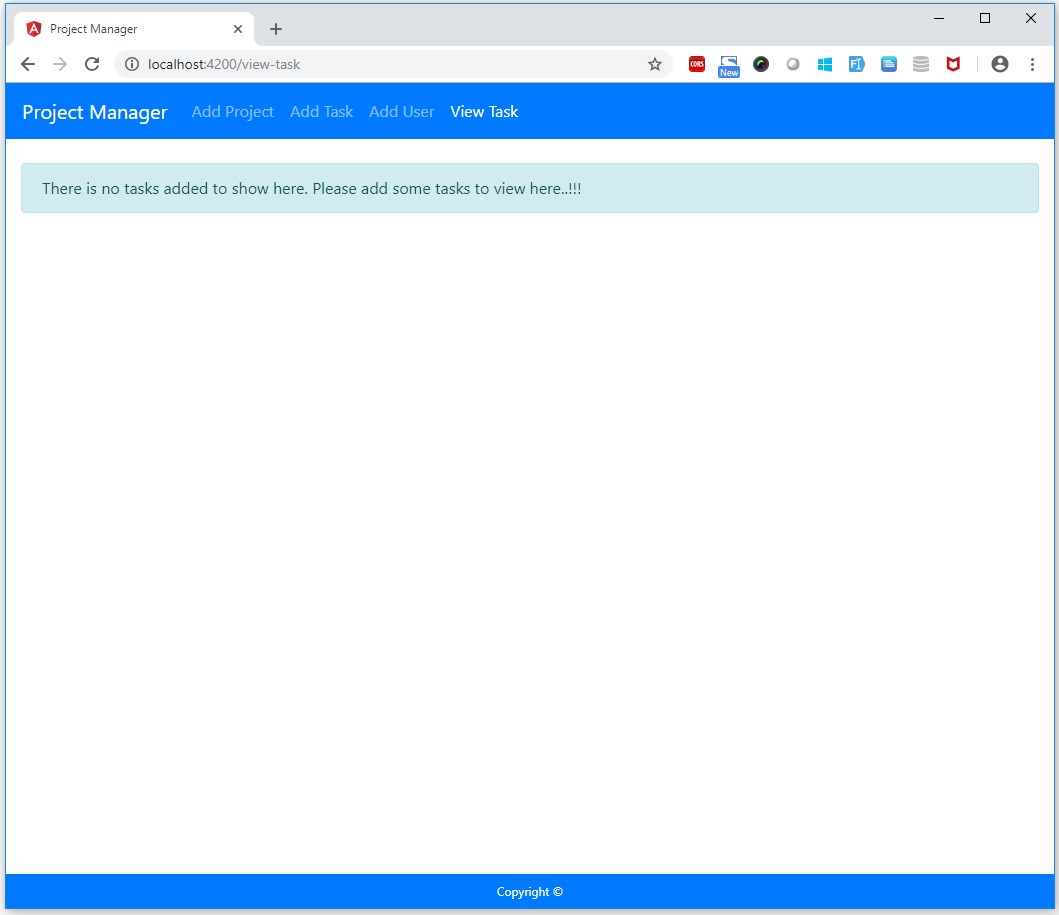


**Add Task:**

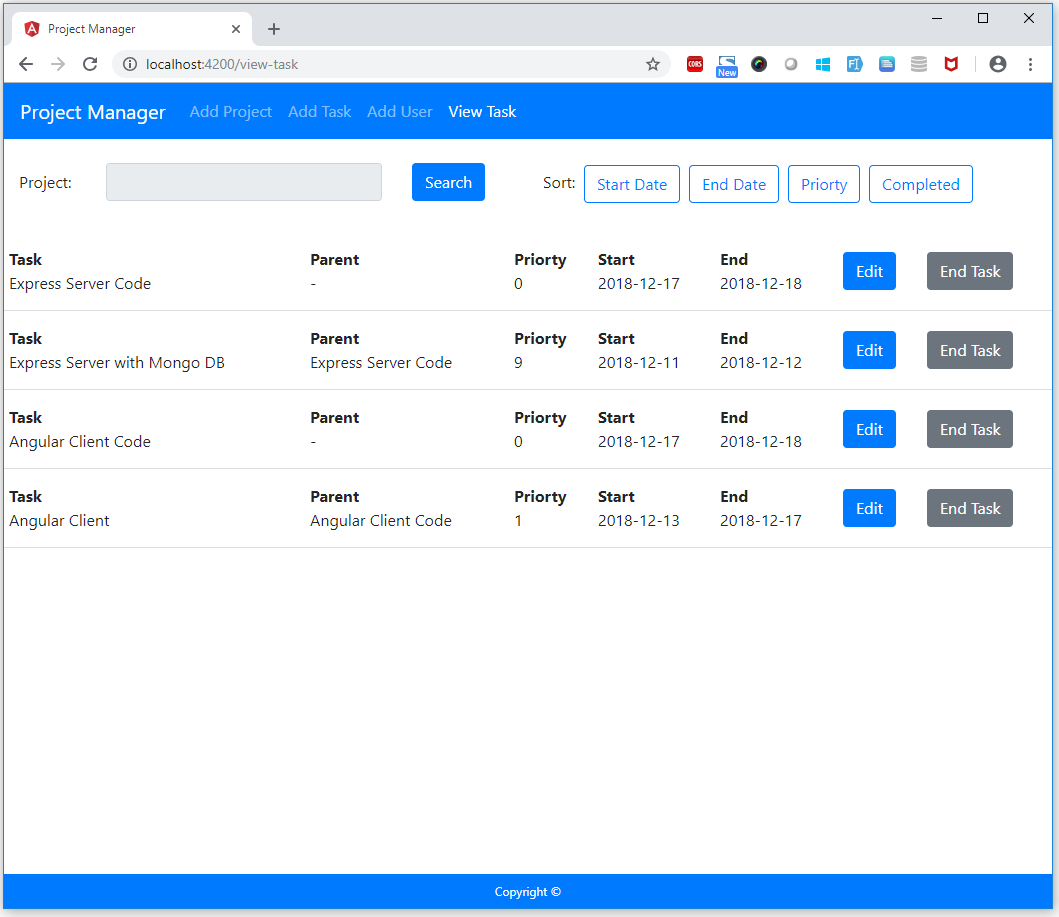
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**View Task:**

* **Before Adding Task:**

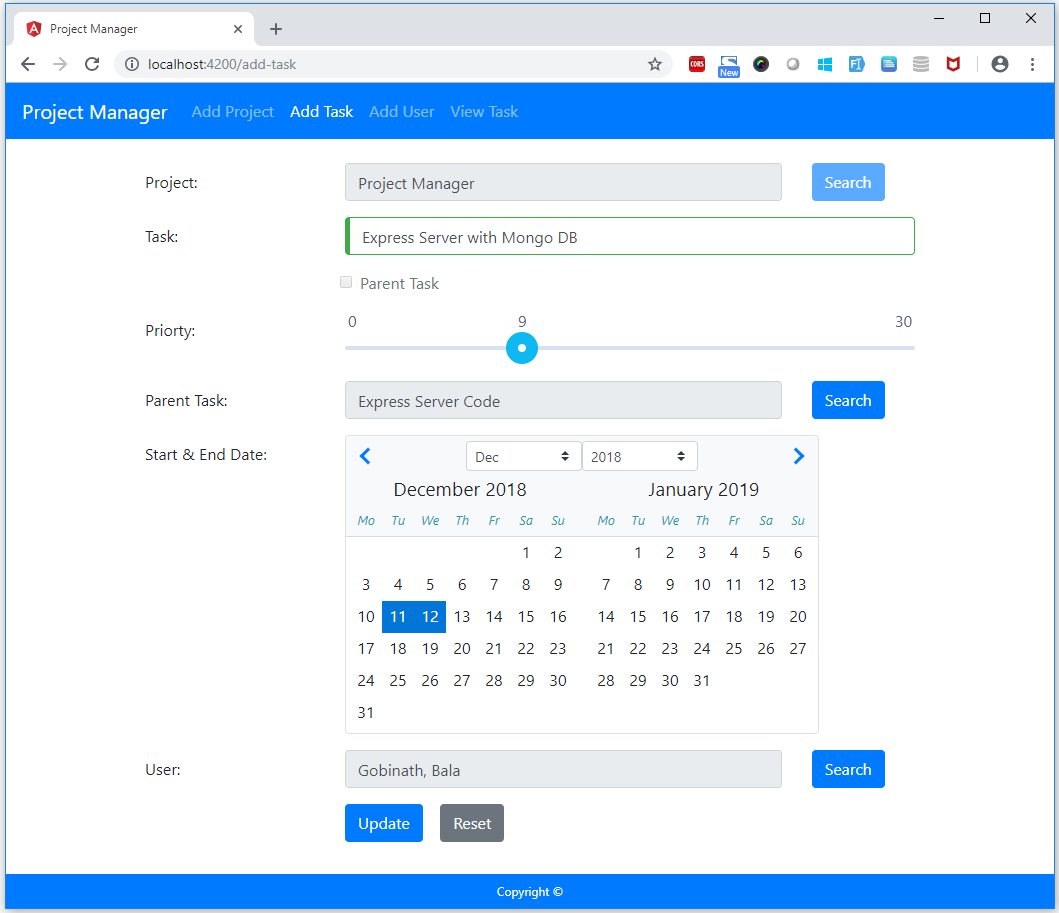
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* **After Adding Task:**

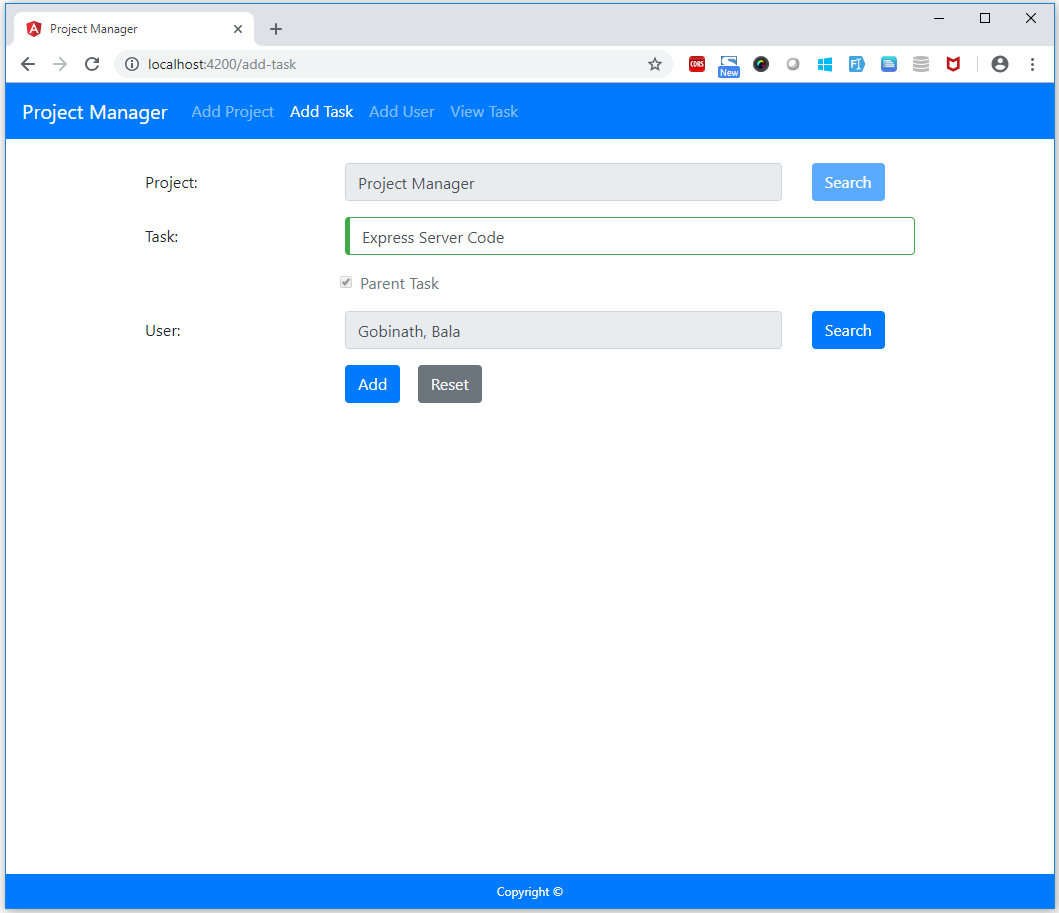
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**Edit Task:**

* **With Parent Task:**

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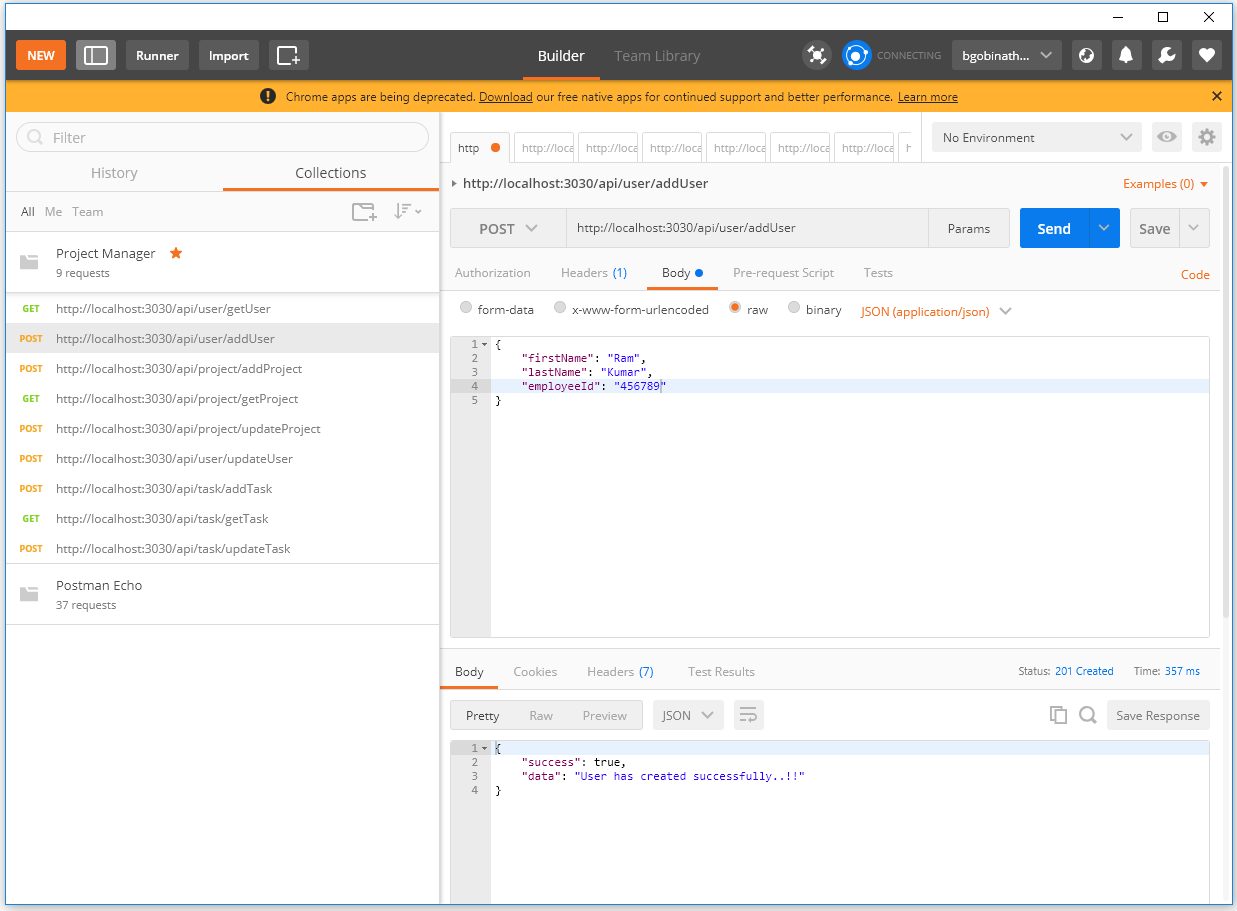
* **Without Parent Task:**

****

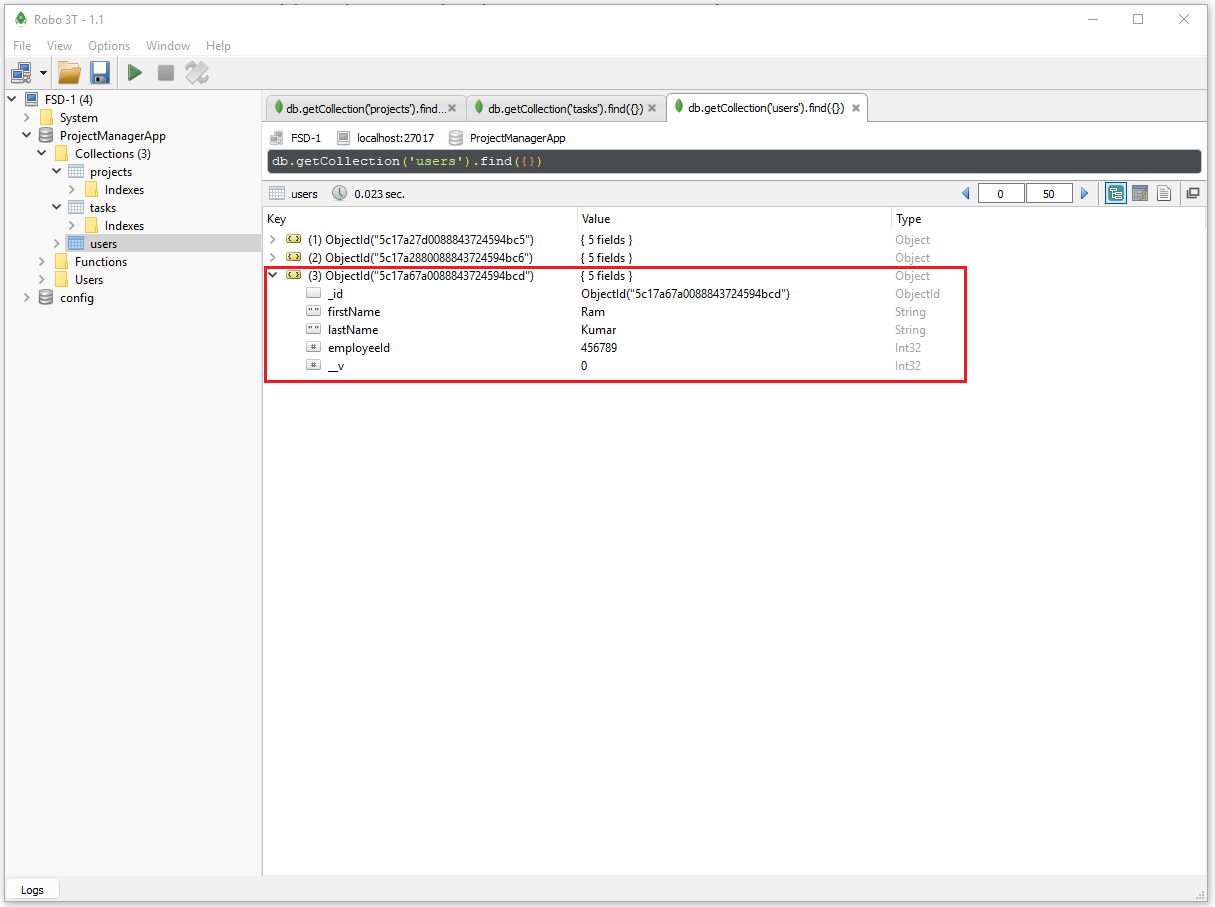
Server Side – Express

Express JS for exposing REST endpoints with MongoDB.

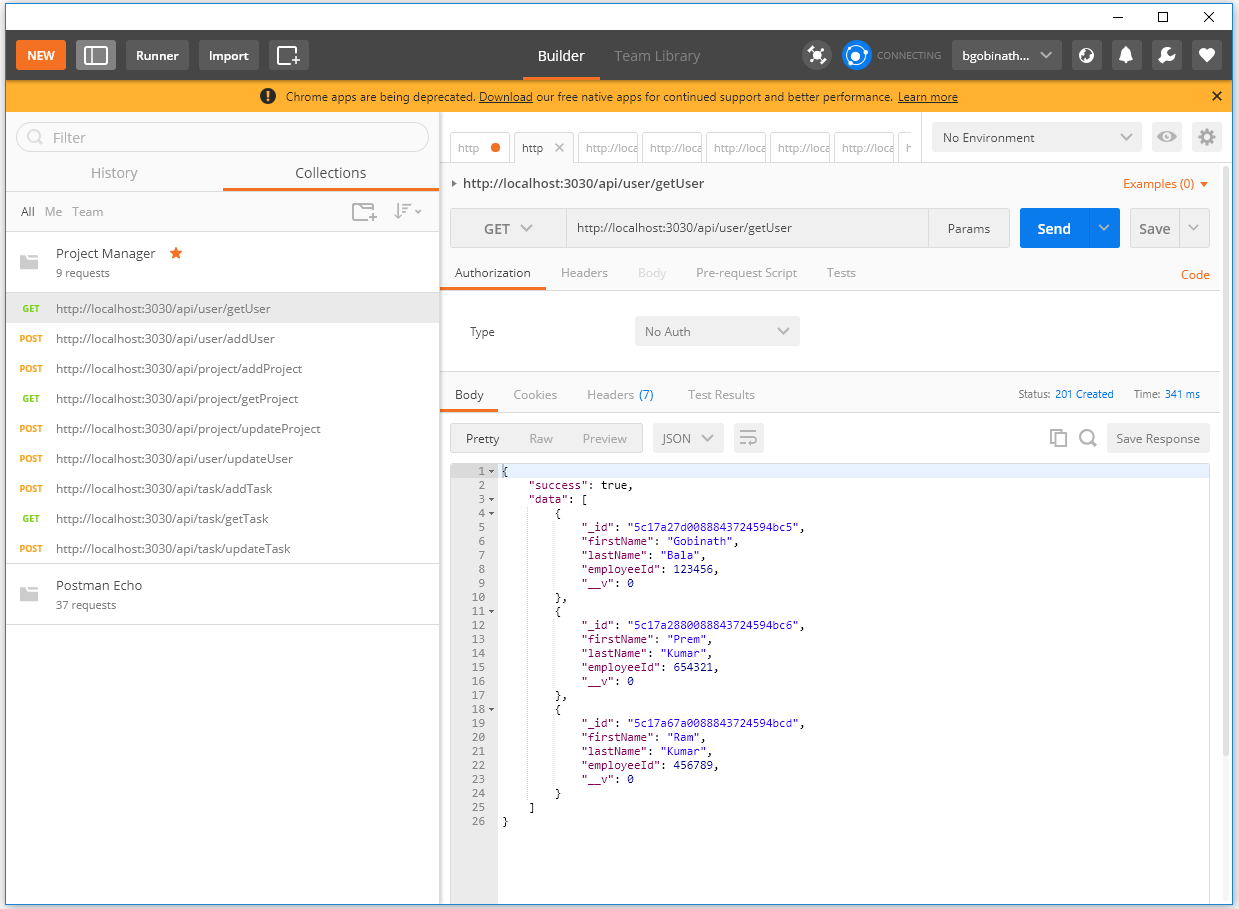
**Add User – POSTMAN:**

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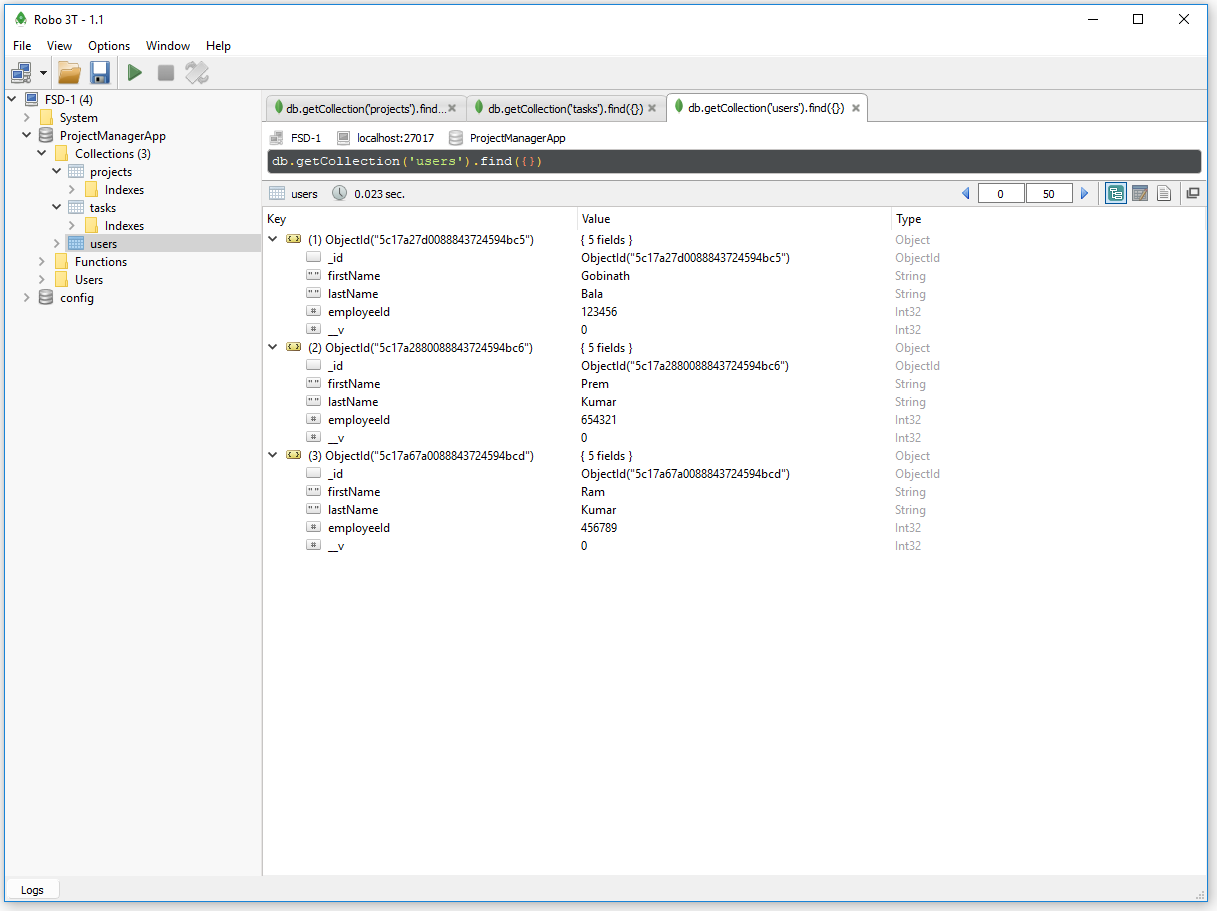
**Add User – MongoDB:**

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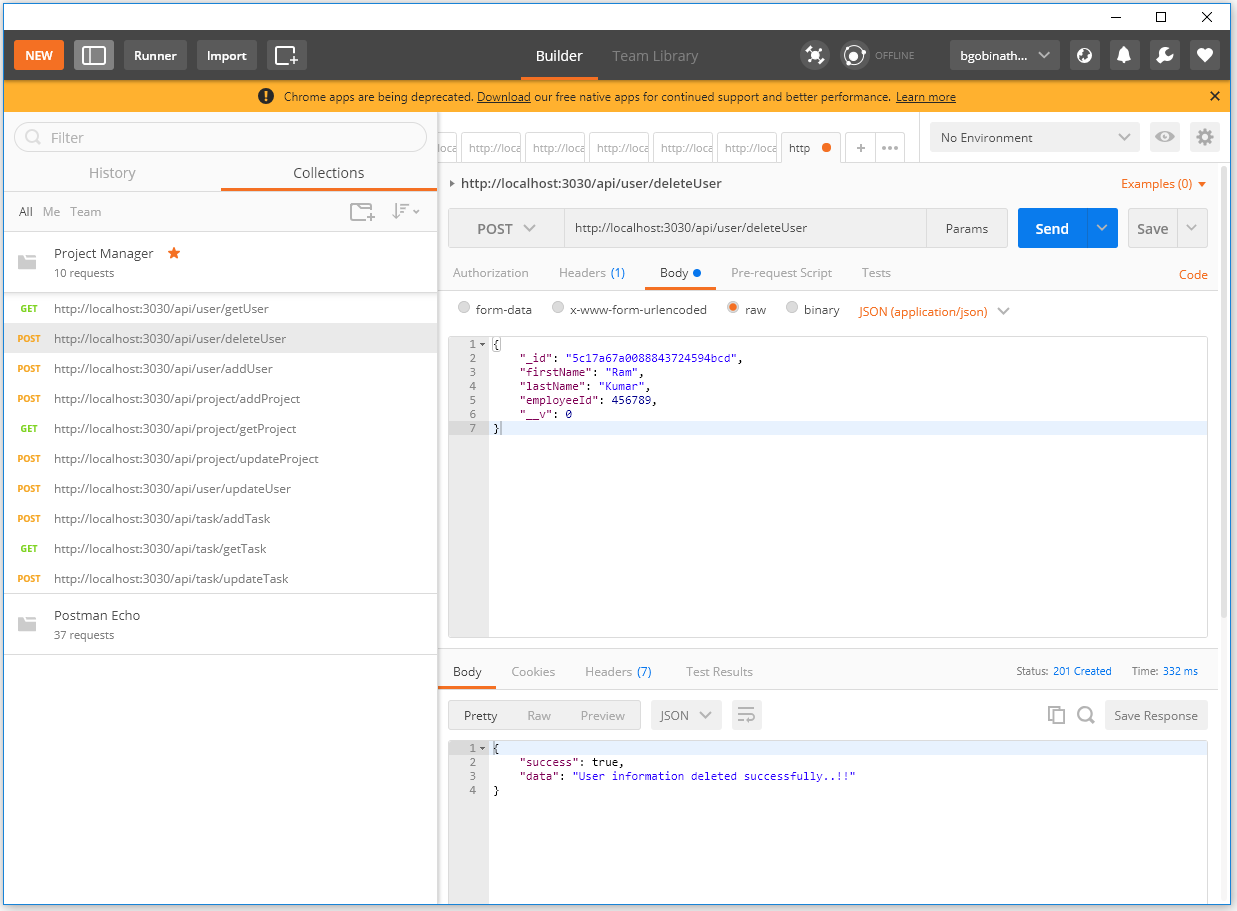
**View User – Postman:**

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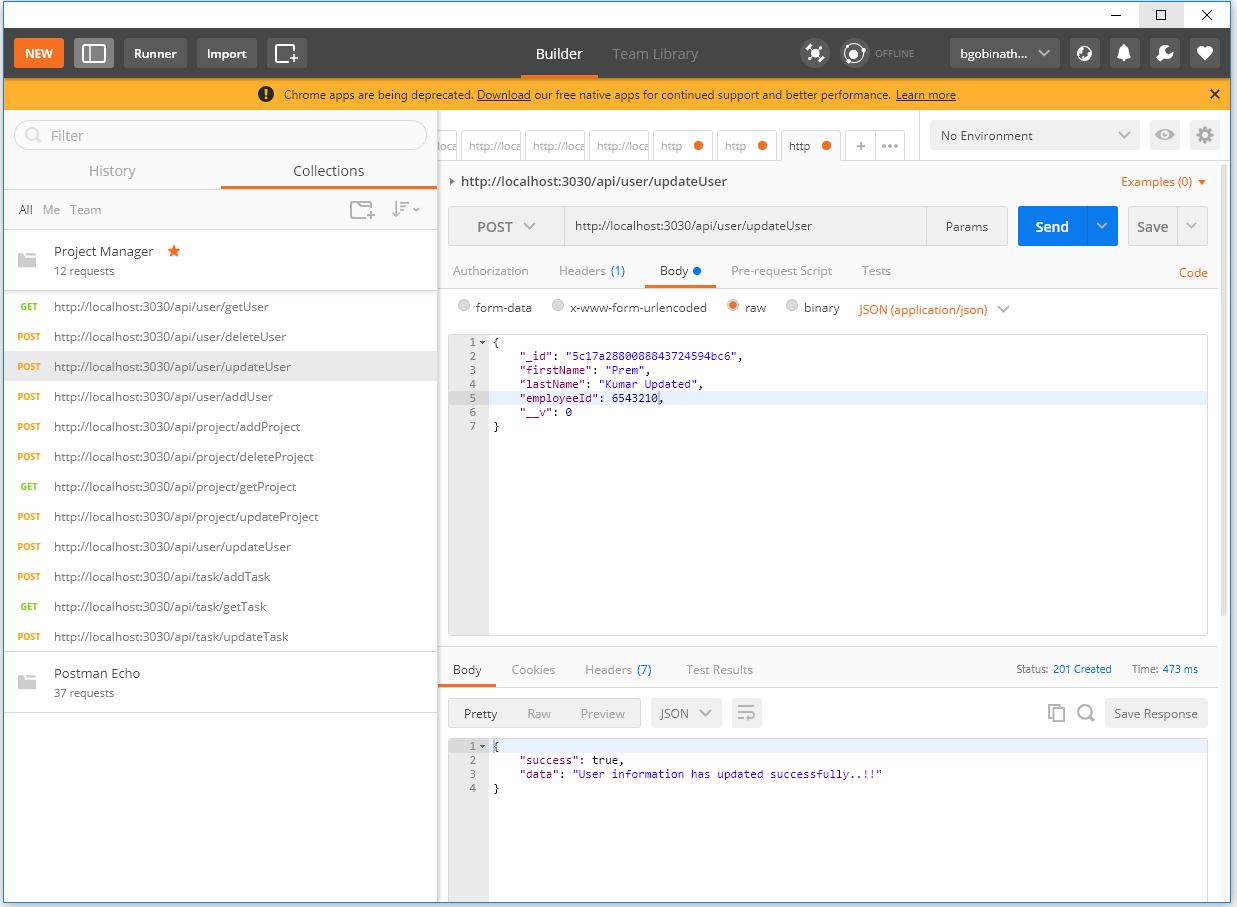
**View User – MongoDB:**

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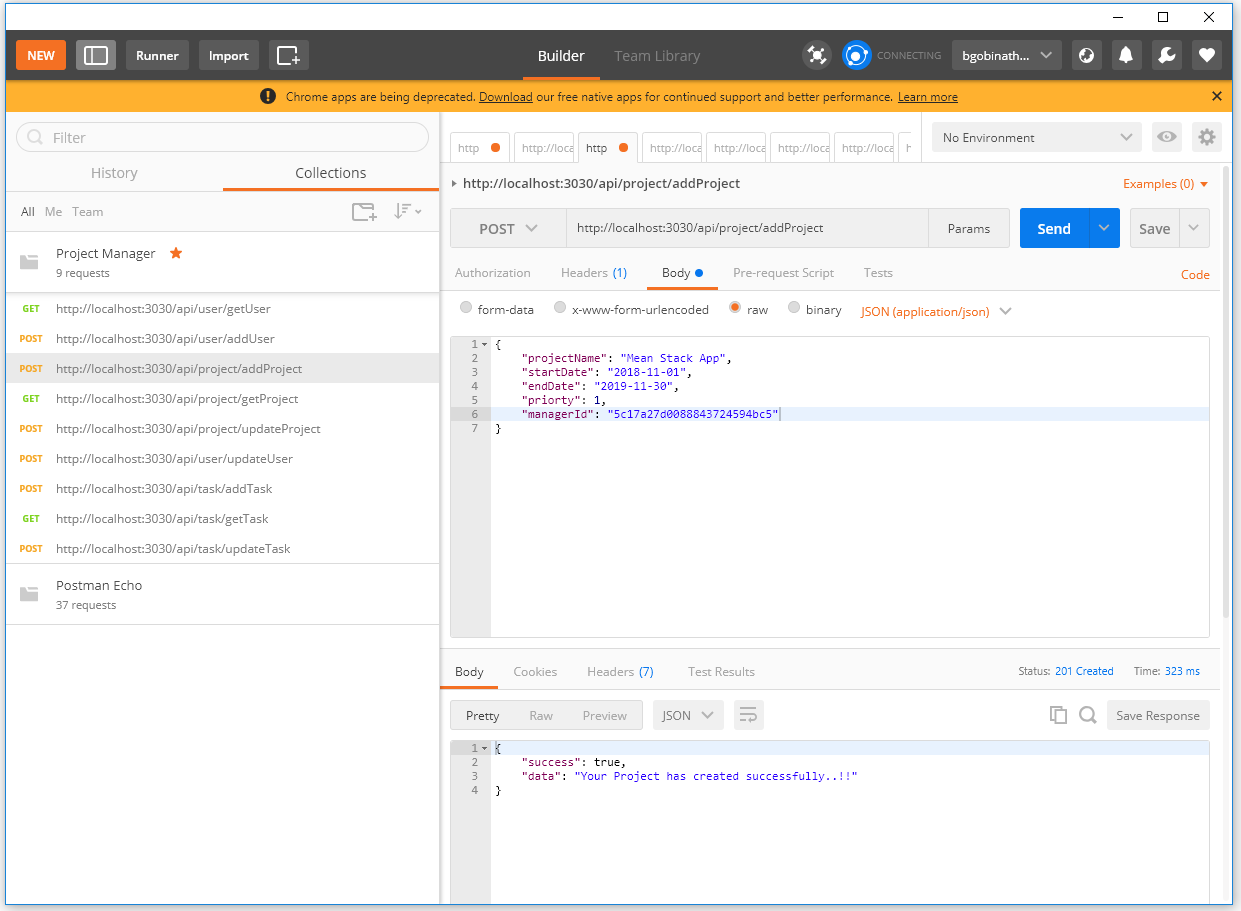
**Delete User – Postman:**

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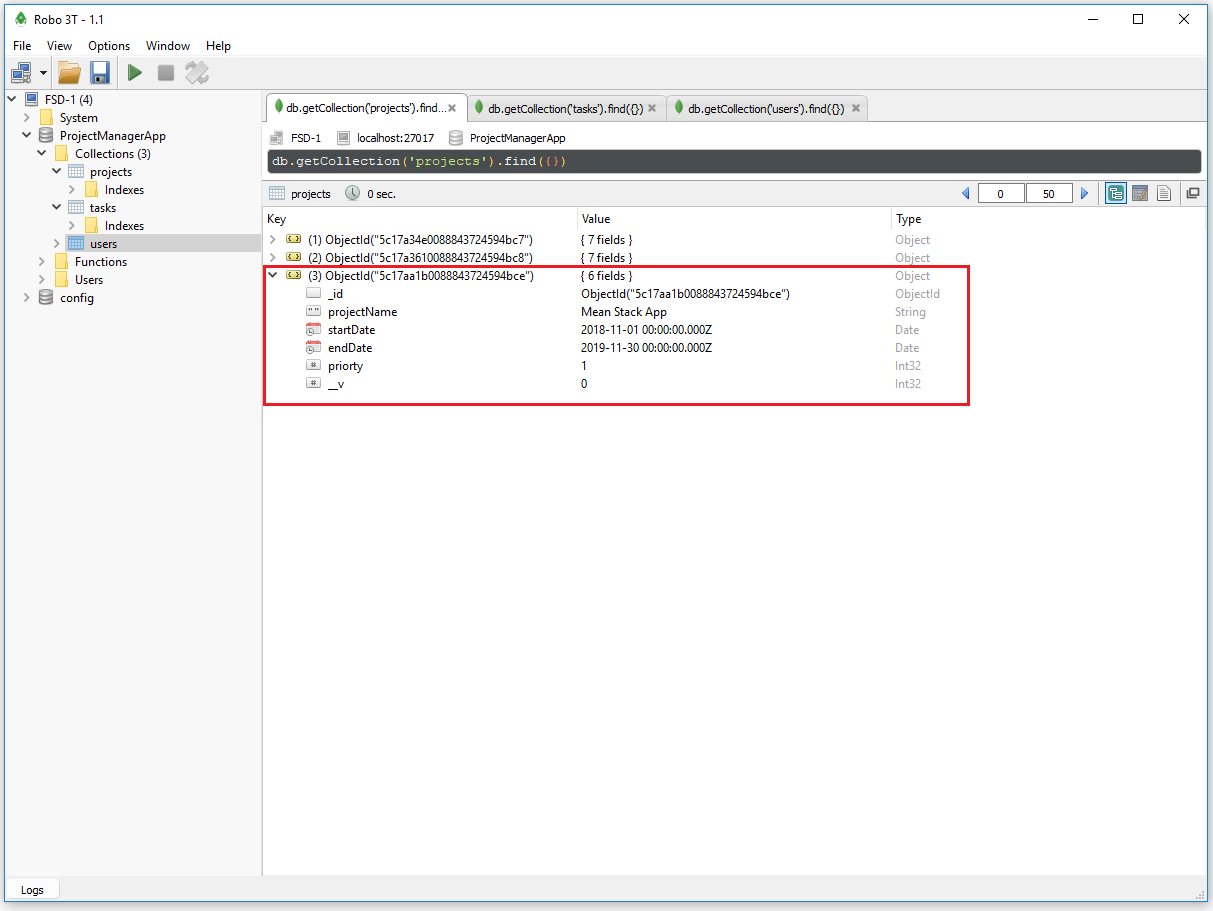
**Update User – Postman:**

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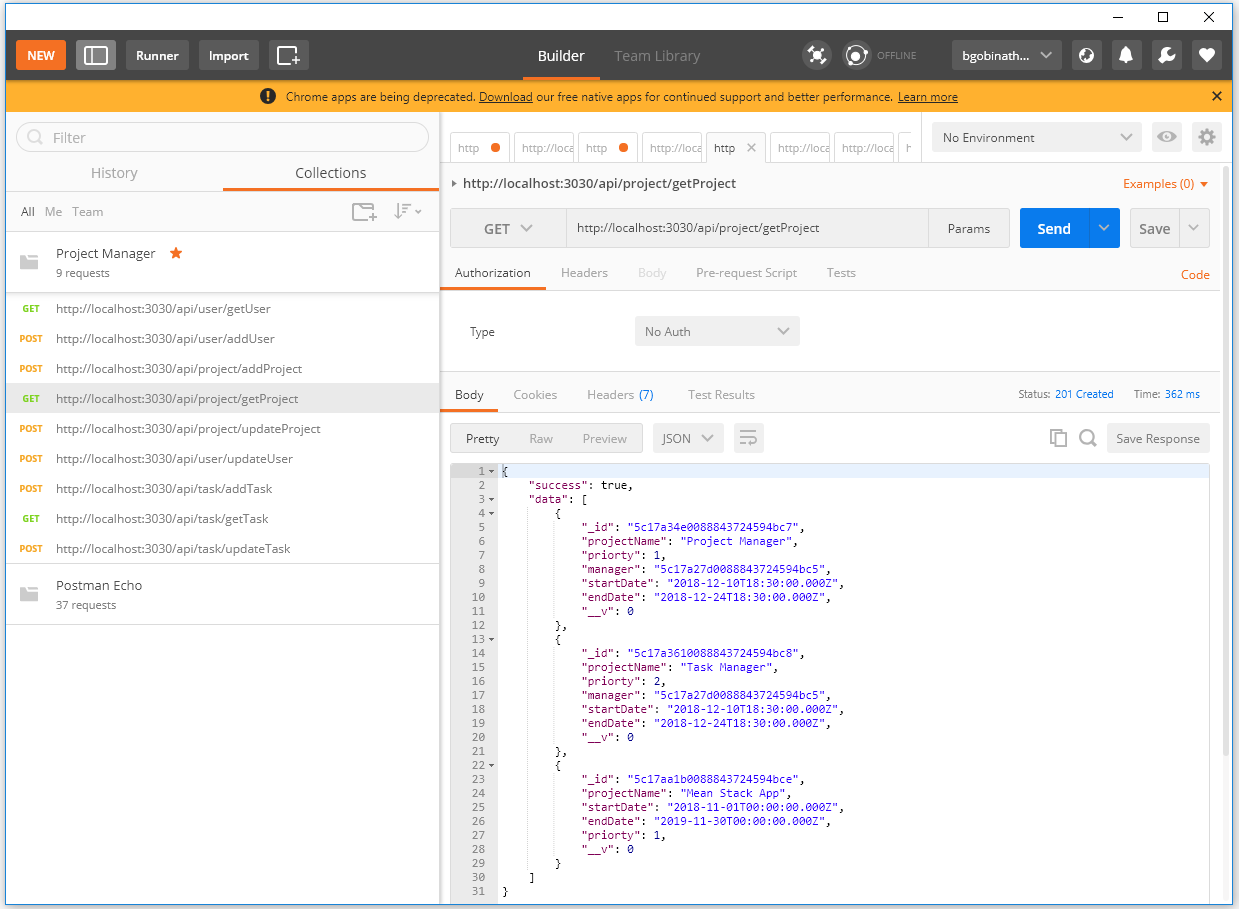
**Add Project – Postman:**

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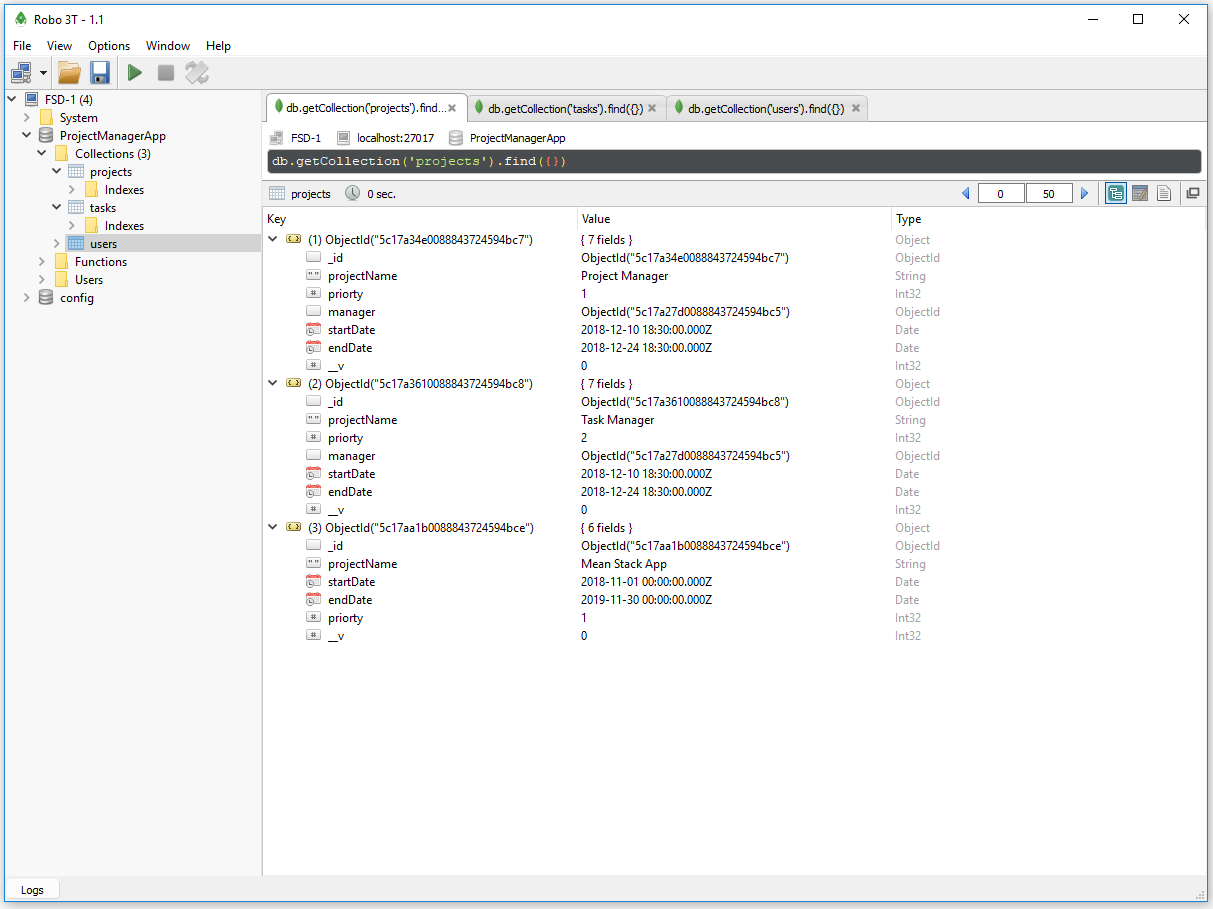
**Add Project – MongoDB:**

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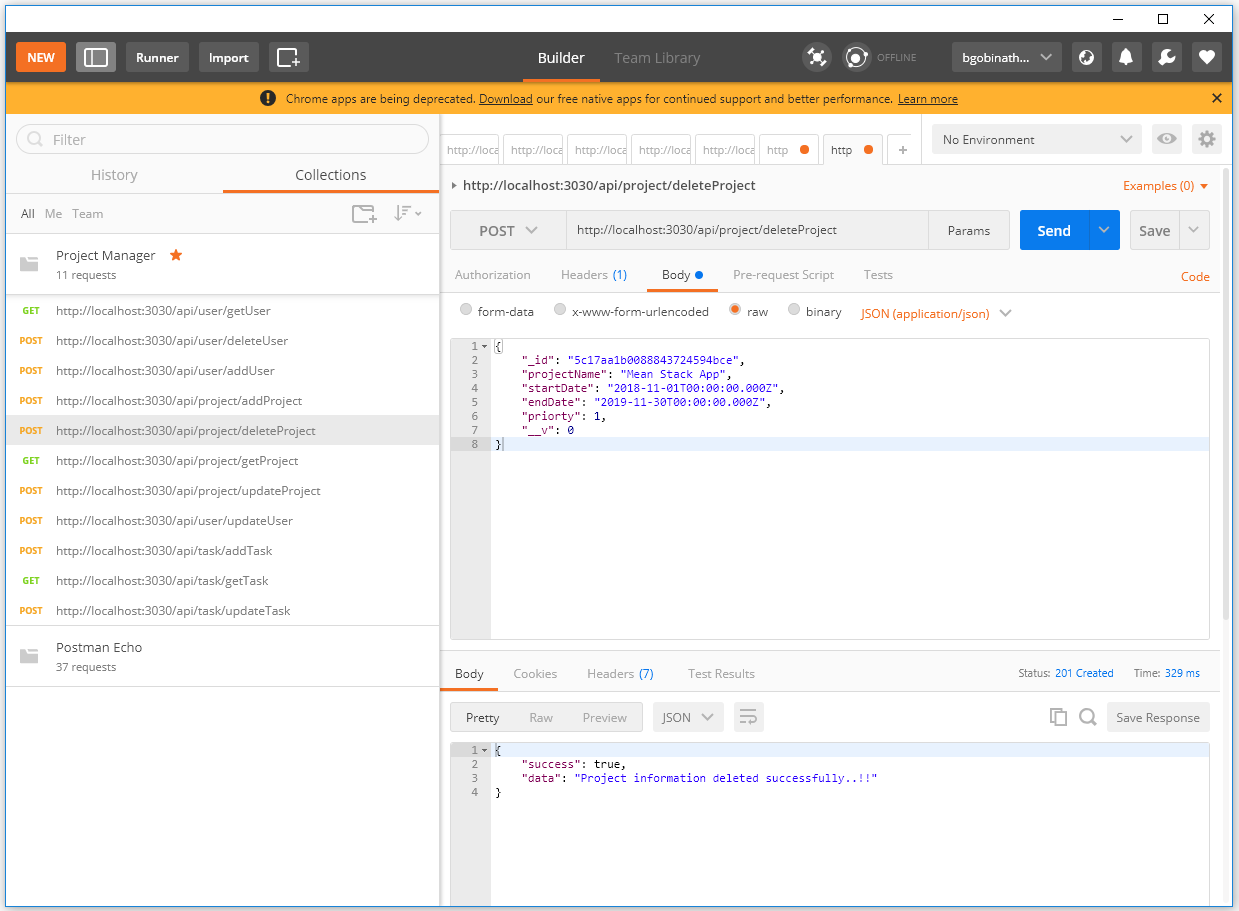
**View Project – Postman:**

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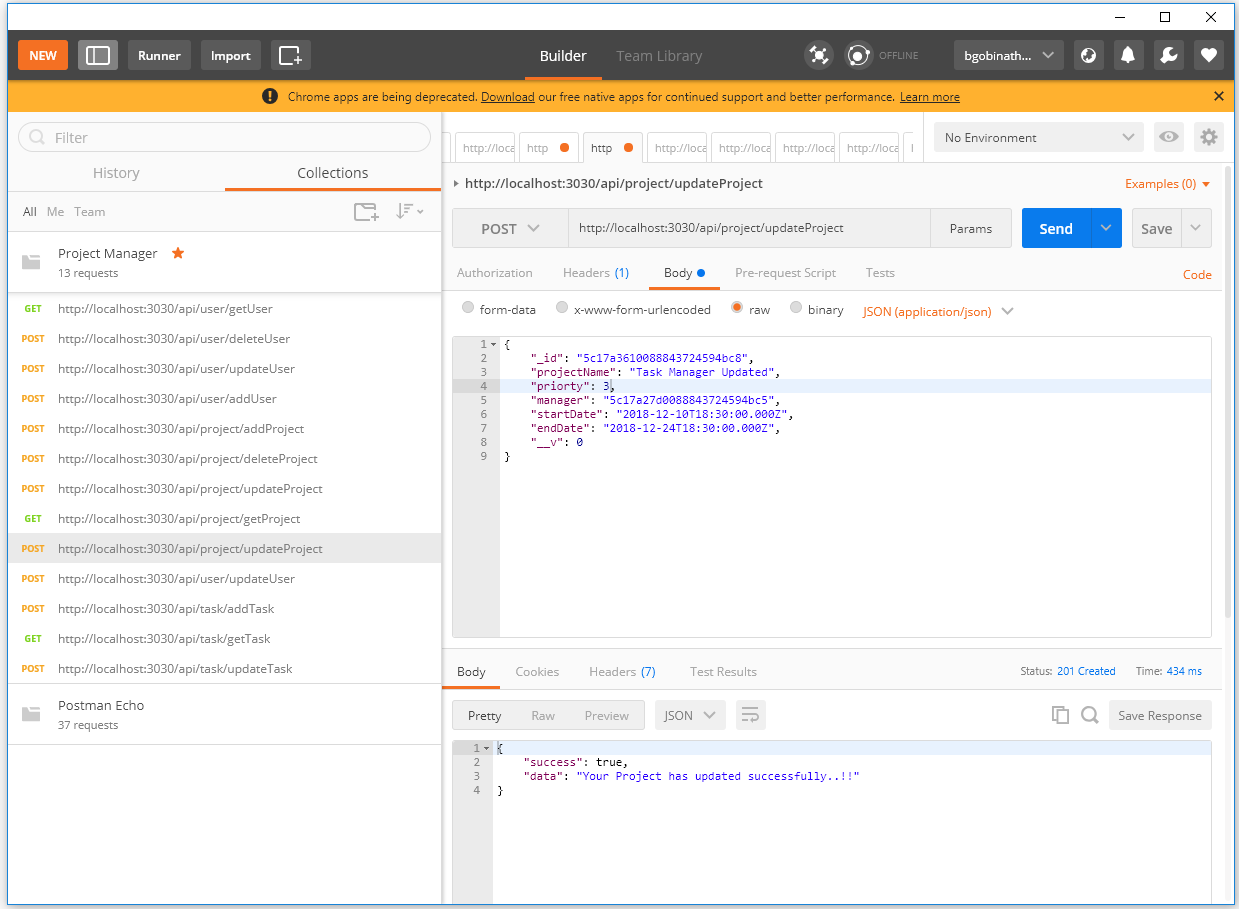
**View Project – MongoDB:**

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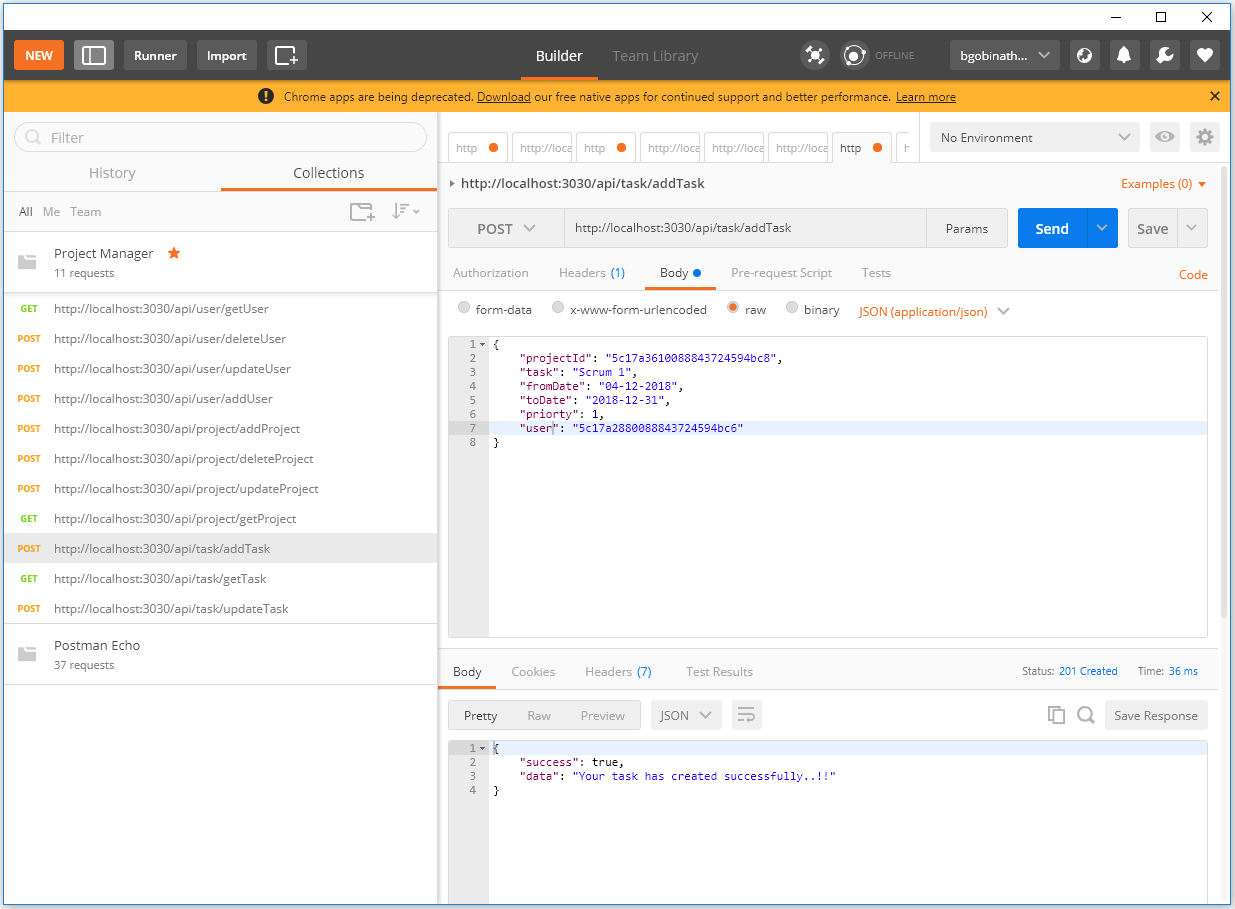
**Delete Project – Postman:**

****

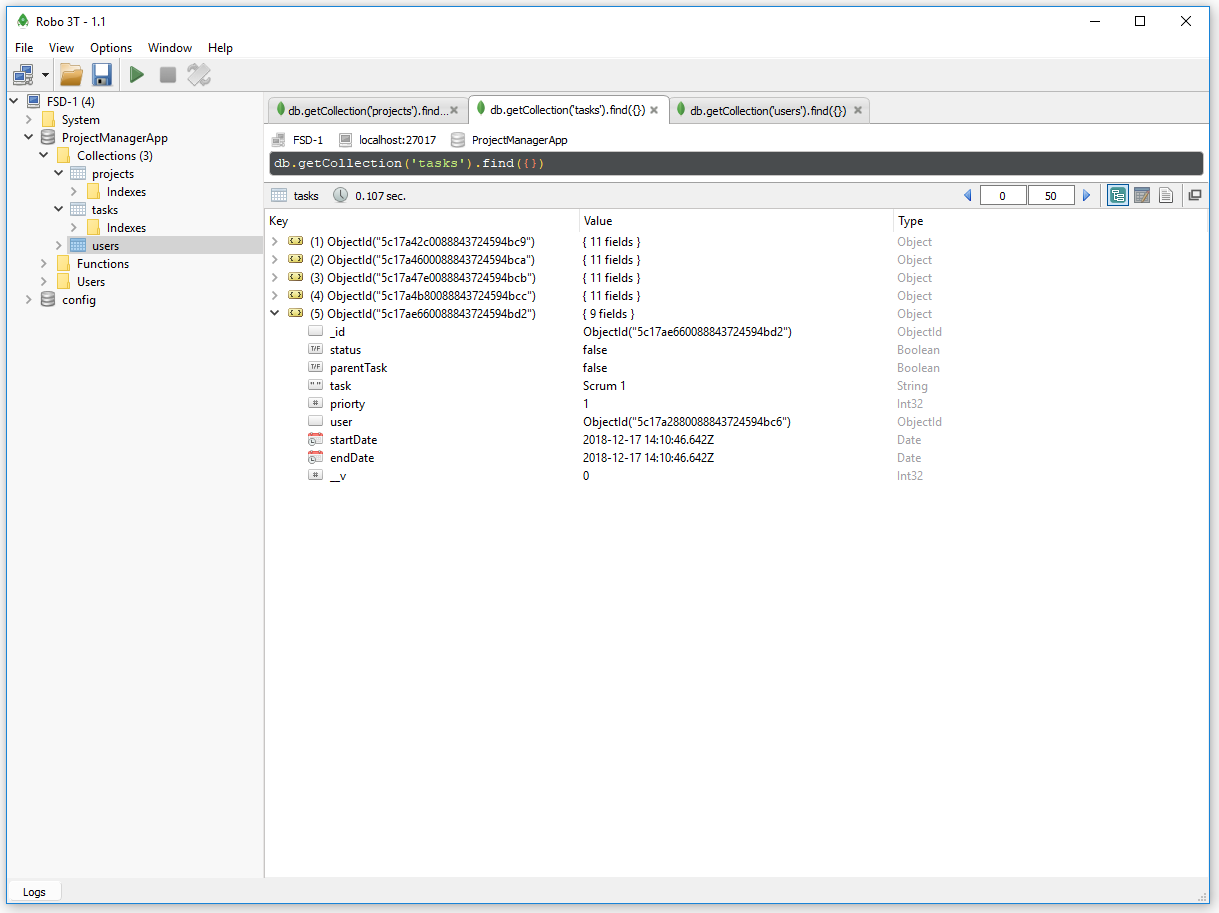
**Update Project – Postman:**



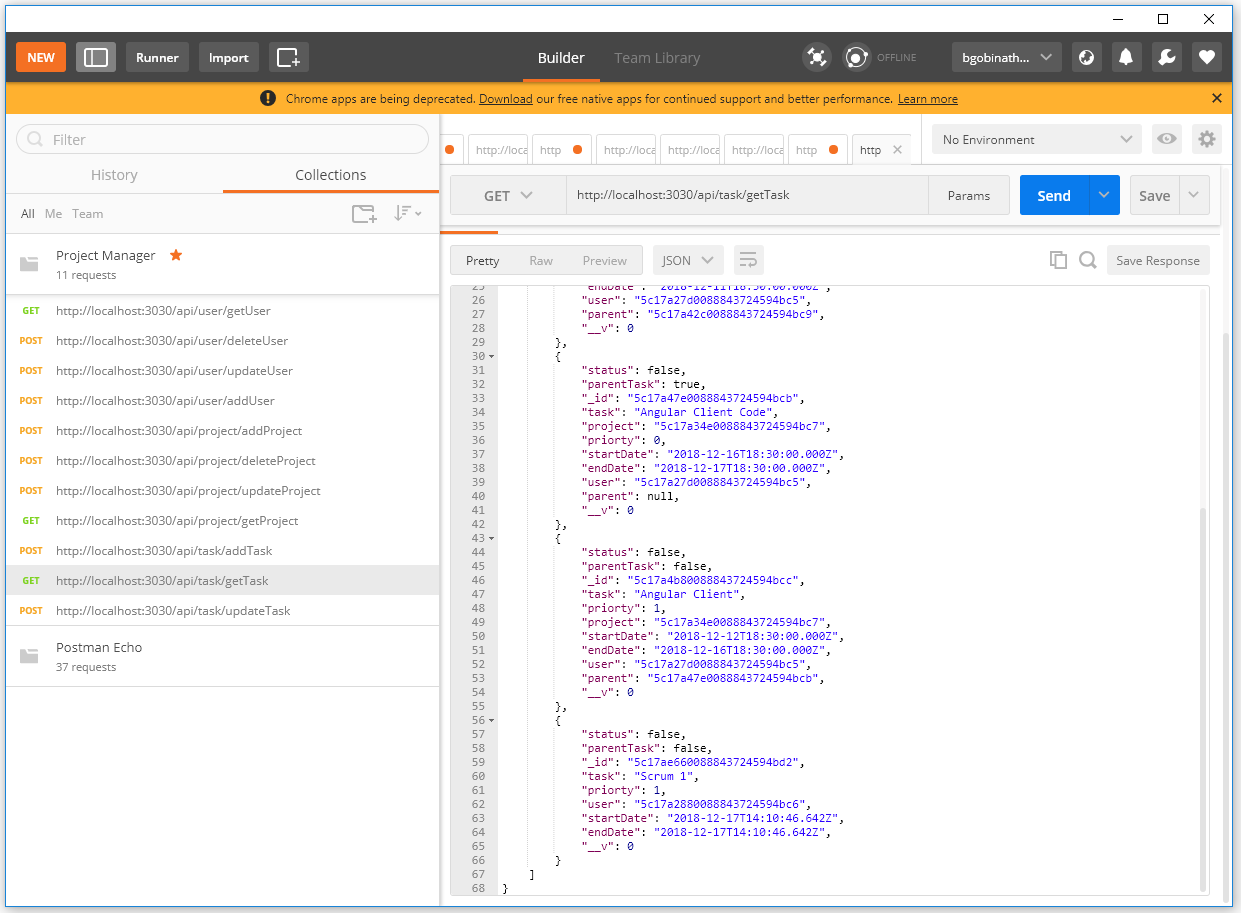
**Add Task – Postman:**

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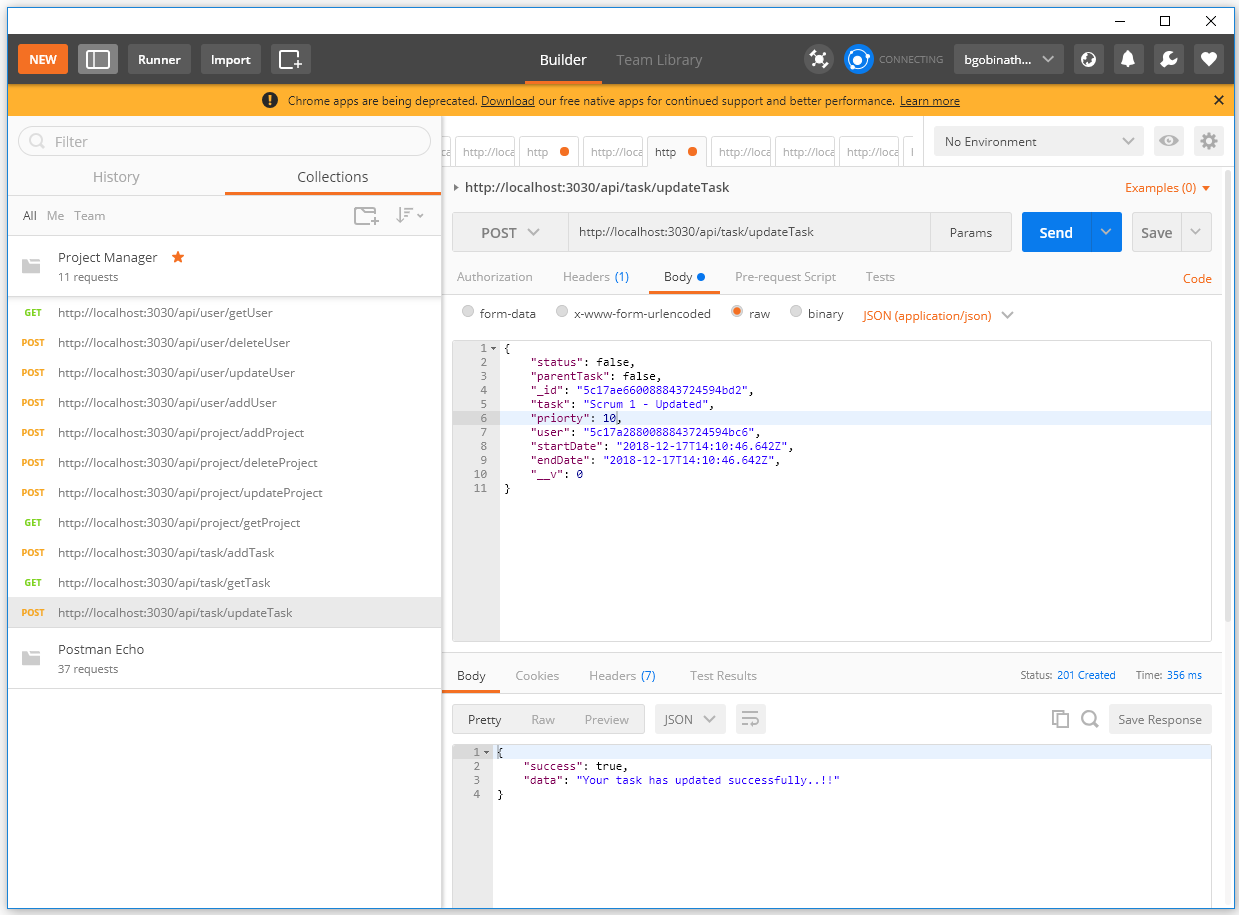
**Add Task – MongoDB:**

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**Get Task – Postman:**

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**Update Task – Postman:**

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Start Application:

**Client Side – Angular:**

npm install

npm start

Hit <http://localhost:4200/> this url in browser

**Database – MongoDB:**

***Set DB path to run MongoDB:*** mongodb-4.0\bin>mongod –dbpath “...\project-manager\db”

**Server Side – Express:**

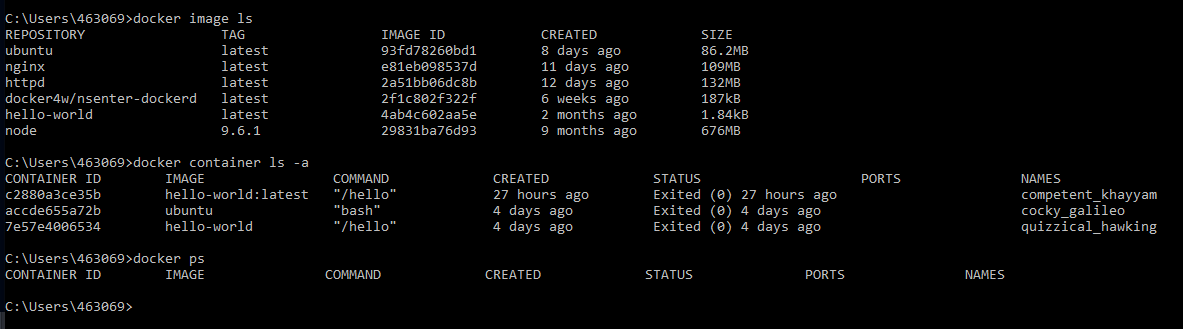
npm install

node app.js

Hit <http://localhost:3030/api/task/getTask> this url in POSTMAN to view the list tasks in GET method

Docker:

We have the below listed images and containers are available in Docker before we start implement.



**Run:**

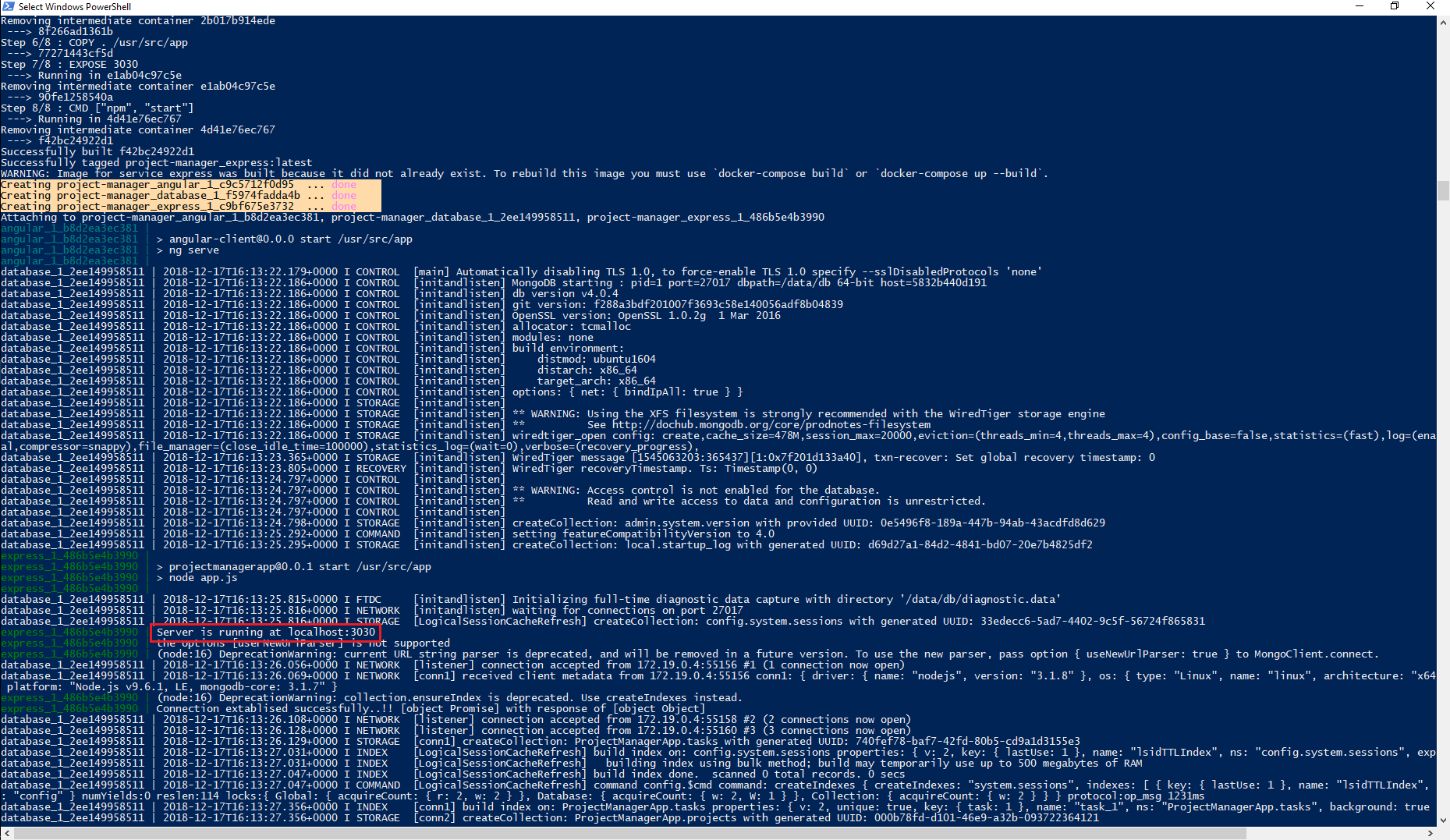
docker-compose up

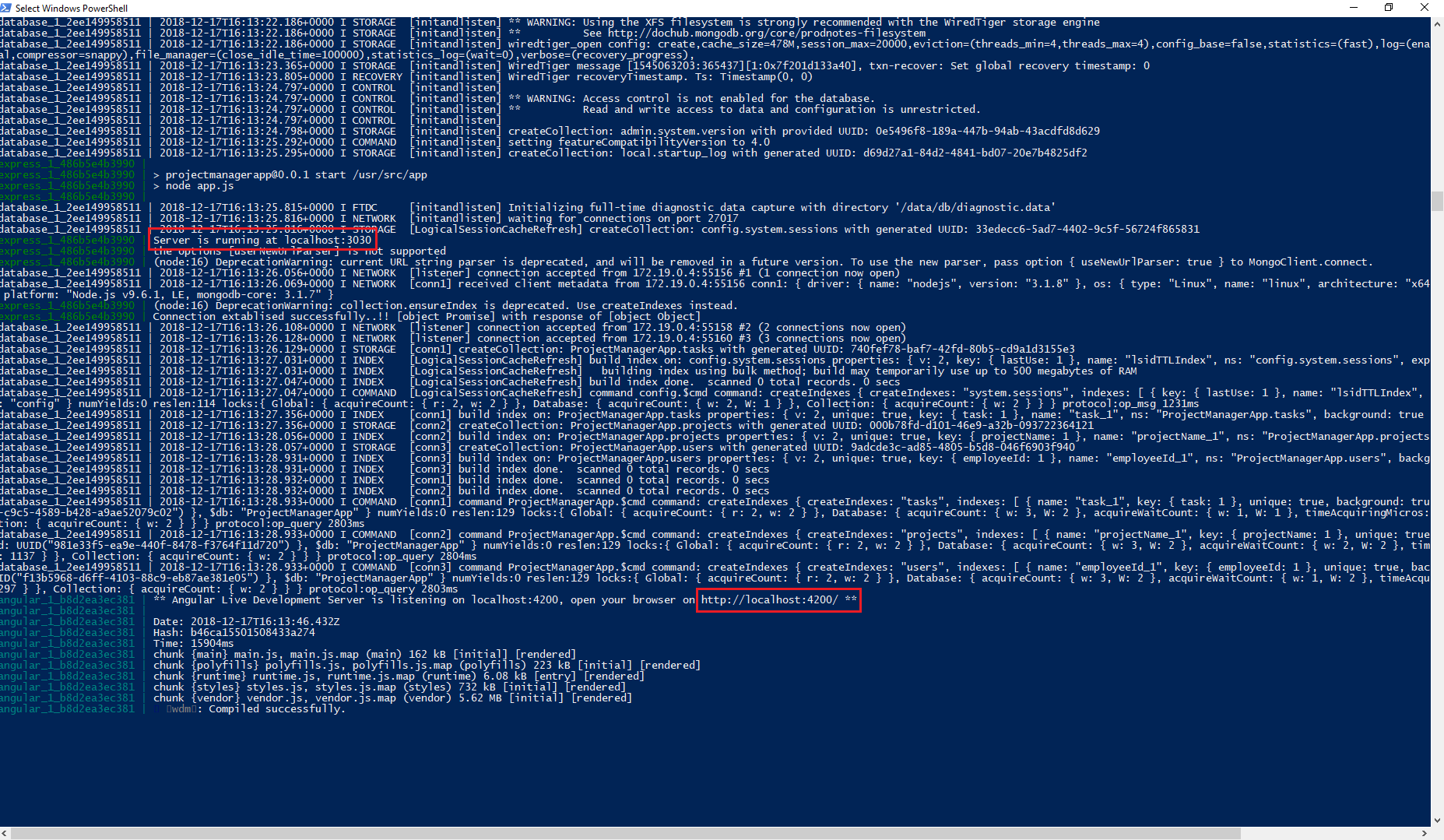
This will install all the required packages for Angular, Express and MongoDB.

The below highlighted images are created and server is running to corresponding ports.

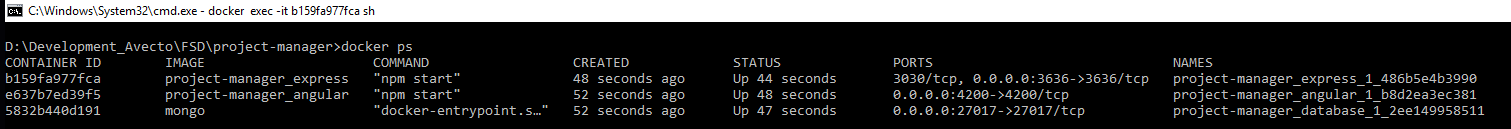
Client – Angular: <http://localhost:4200/>

Server – Express: <http://localhost:3030/api/task/getTask>

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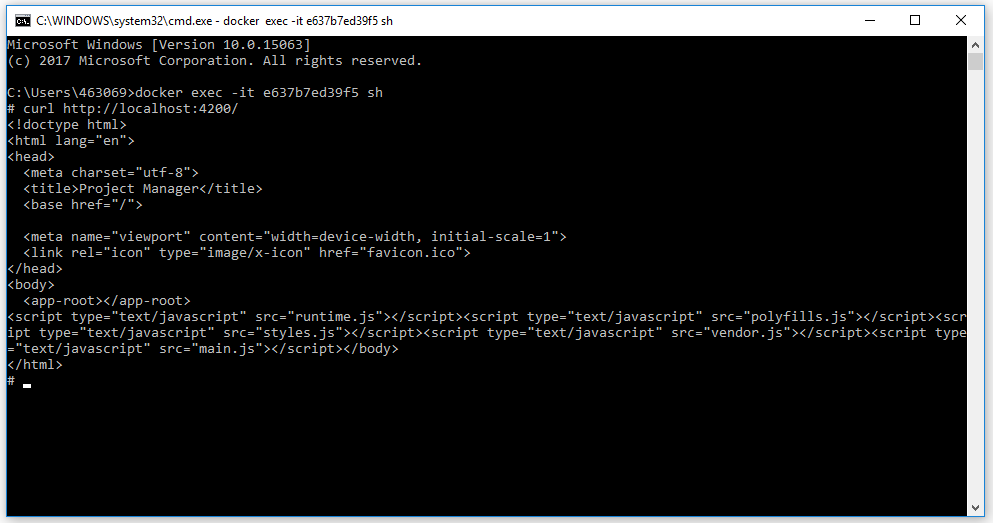
The below highlighted containers are up and running now.

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**To hit the URL’s:**

docker exec –it <container\_id> sh (Angular container\_id e637b7ed39f5)

curl <http://localhost:4200/>

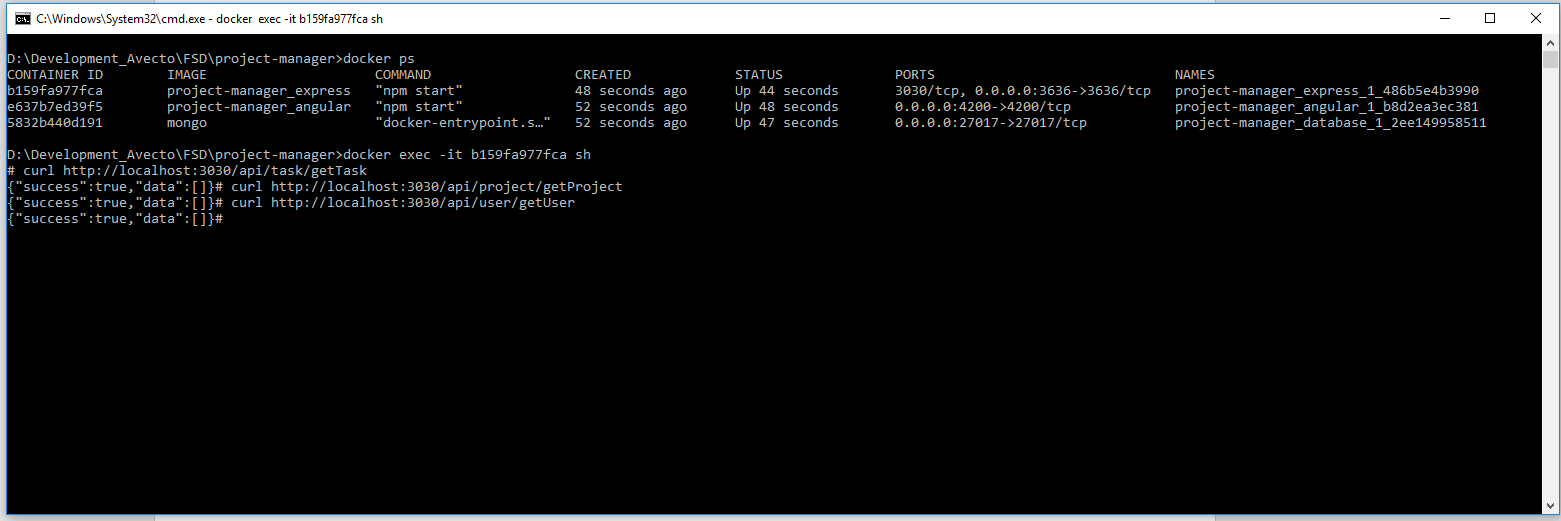


docker exec –it <container\_id> sh (Express container\_id b159fa977fca)

curl <http://localhost:3030/api/task/getTask>

curl <http://localhost:3030/api/project/getProject>

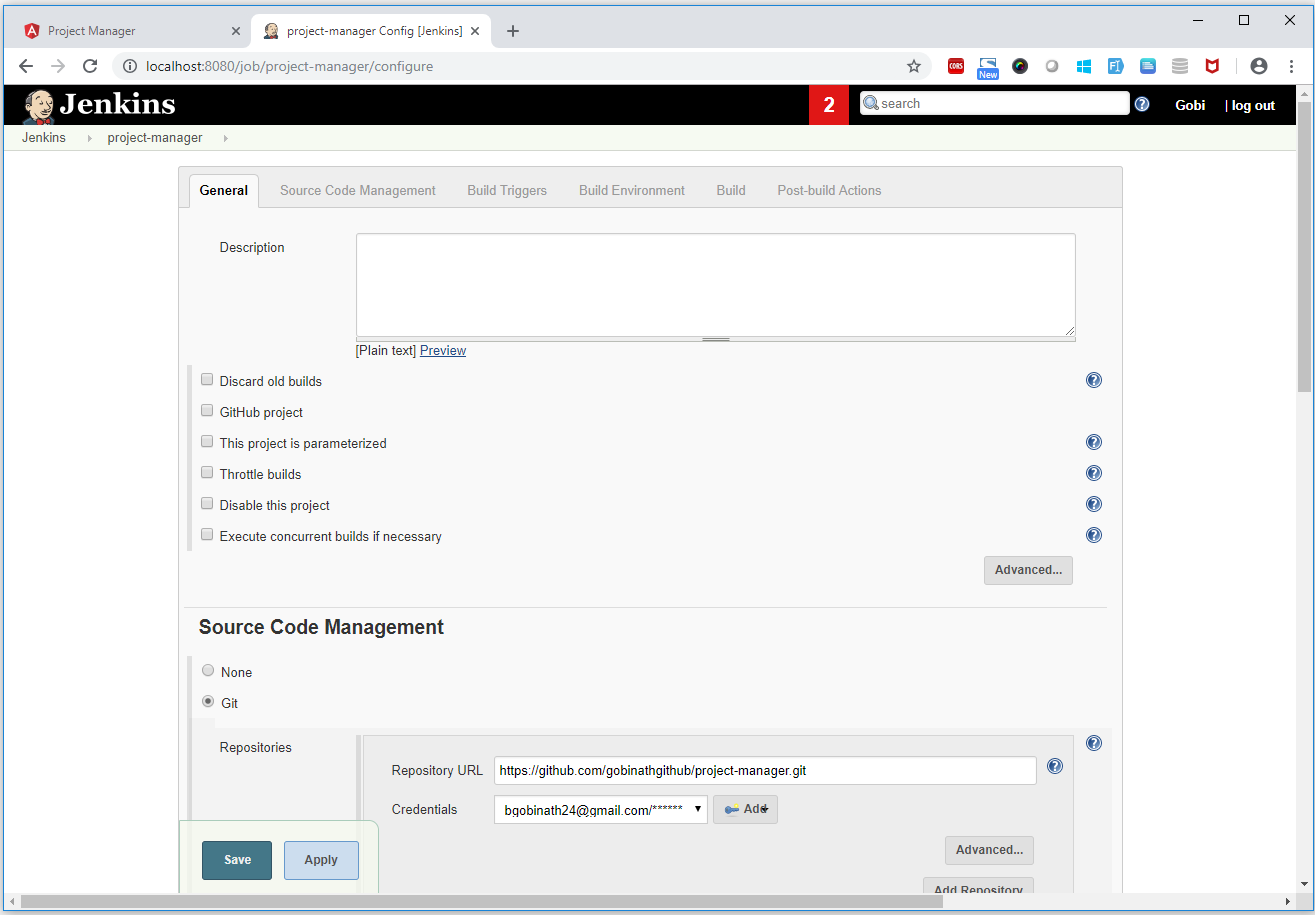
curl <http://localhost:3030/api/user/getUser>

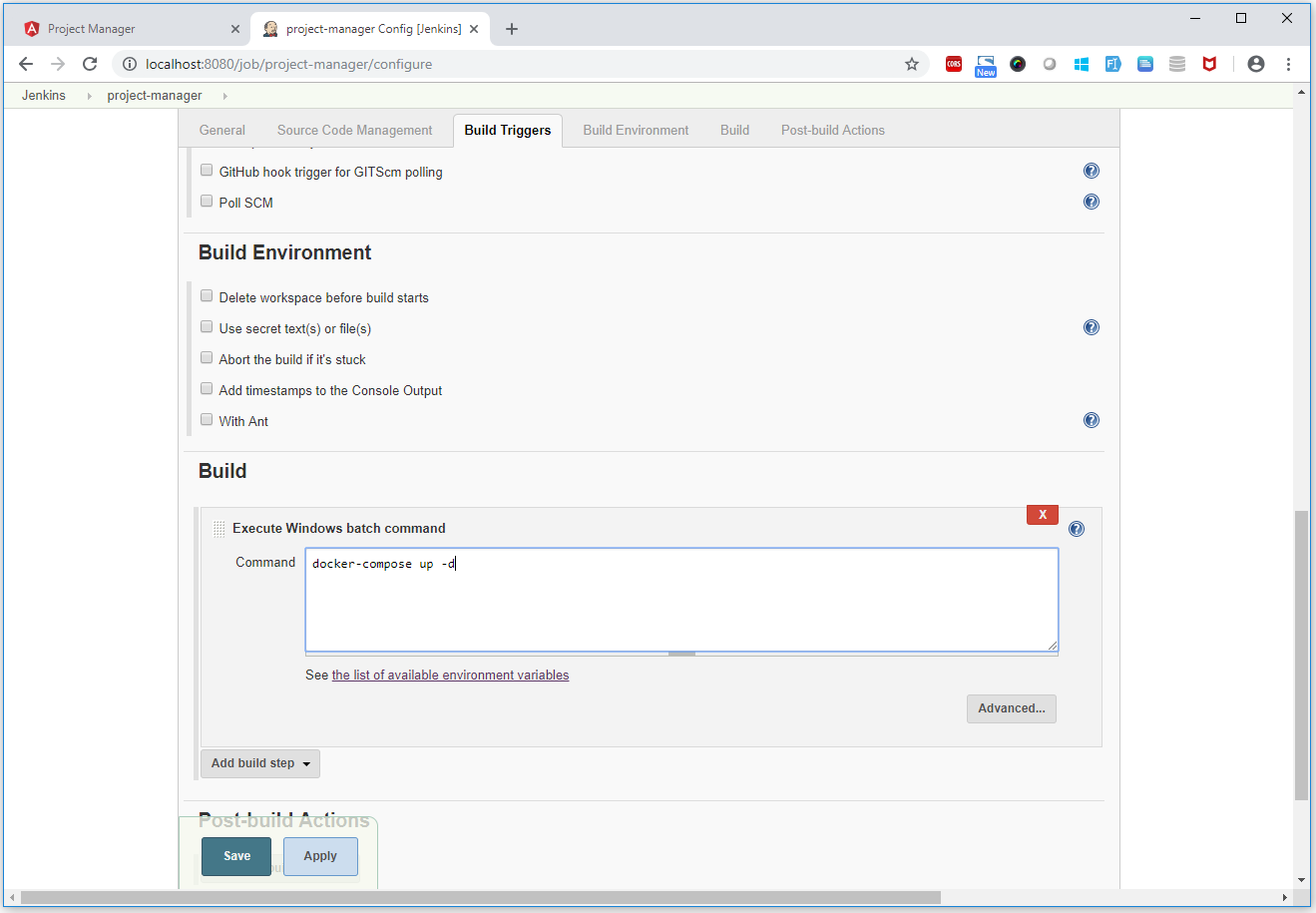
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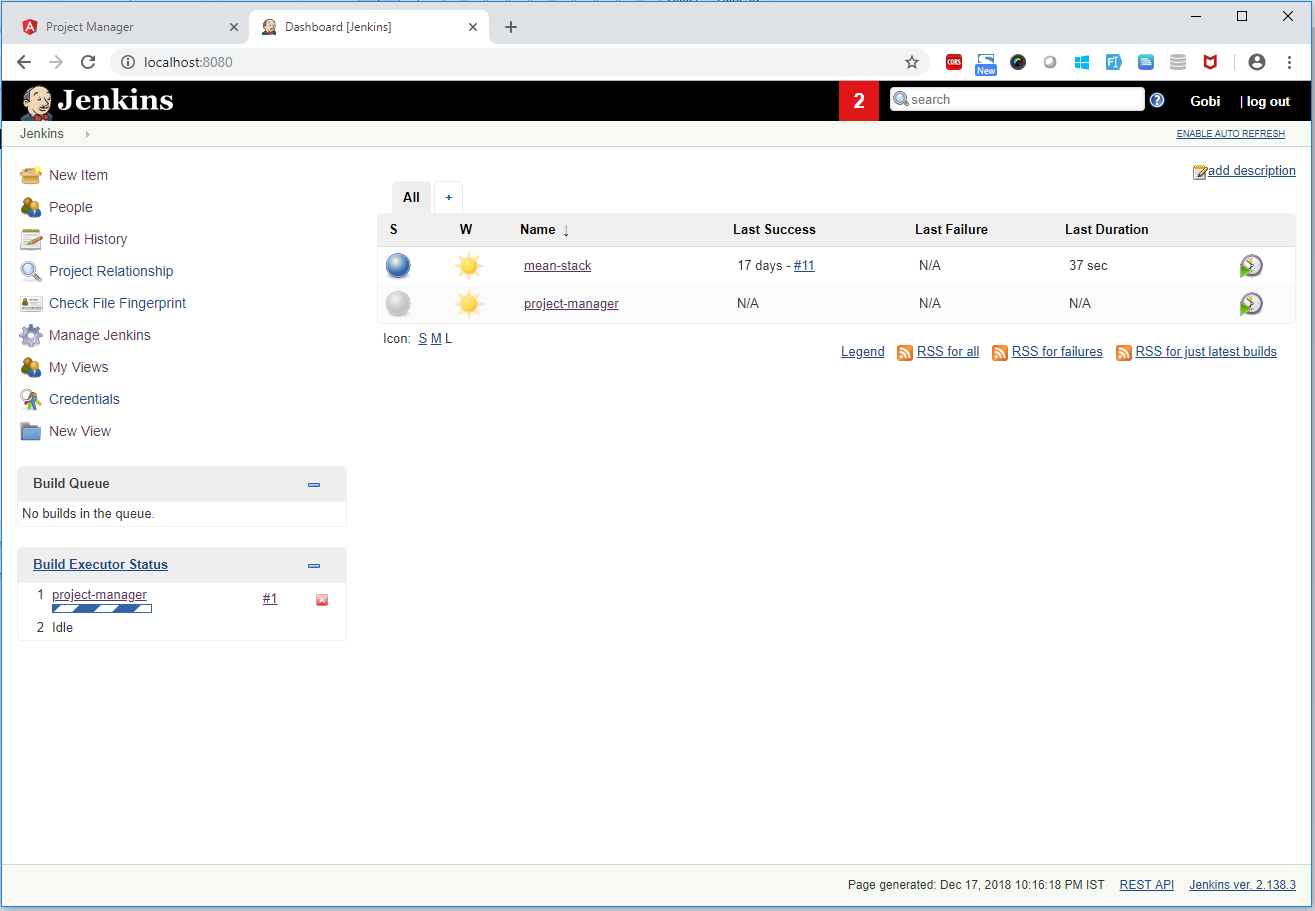
**Note:** I used windows 10 docker, windows port forwarding is not happening to check the URL in browser (application). So, I checked in curl and we are getting the proper response.

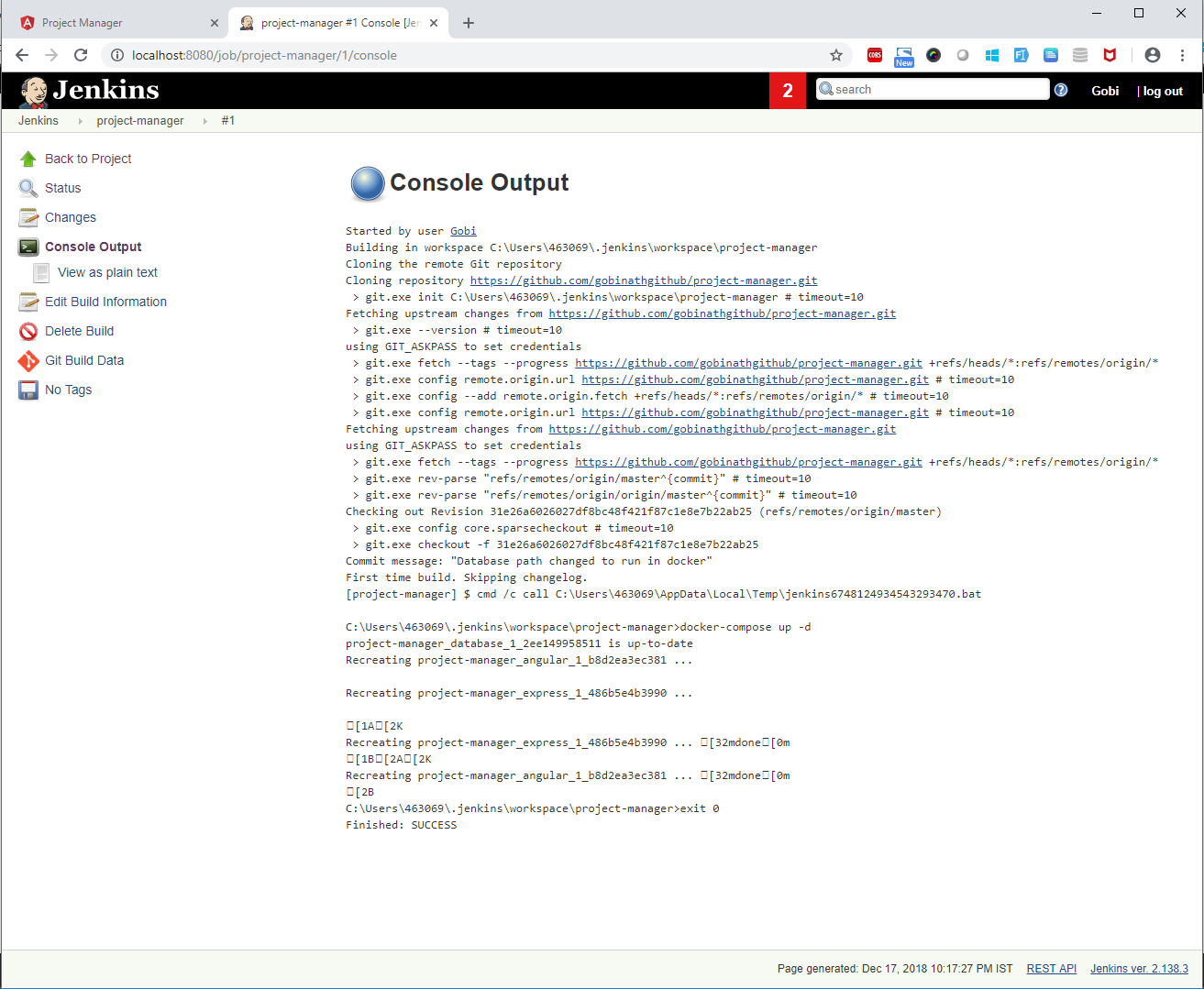
Git Repository: <https://github.com/gobinathgithub/project-manager.git>

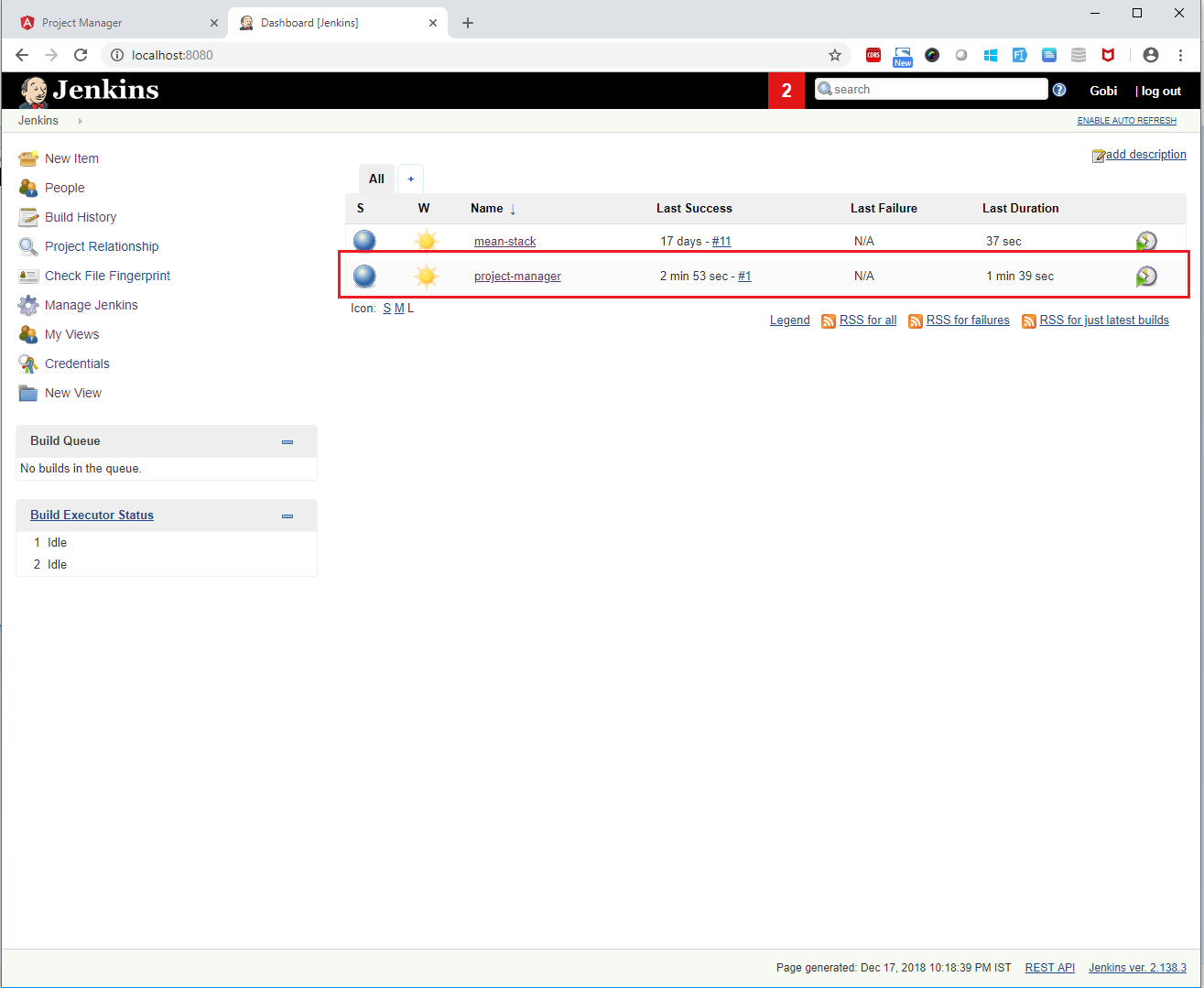
Jenkins:

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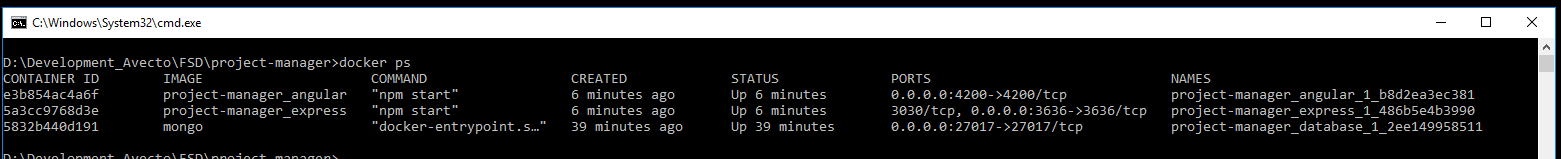
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**Log file:**

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**Container status**

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