PROJECT MANAGEMENT TOOL

Collaborating tool for people
to work virtually

Application Setup and User Guide

TEAM 1: AVENGERS ASSEMBLE

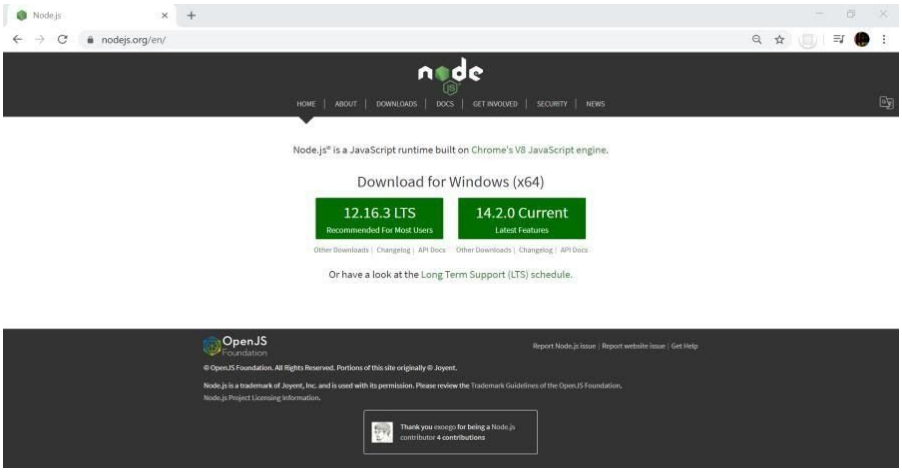
Set Up the Environment

Install NodeJS and NPM

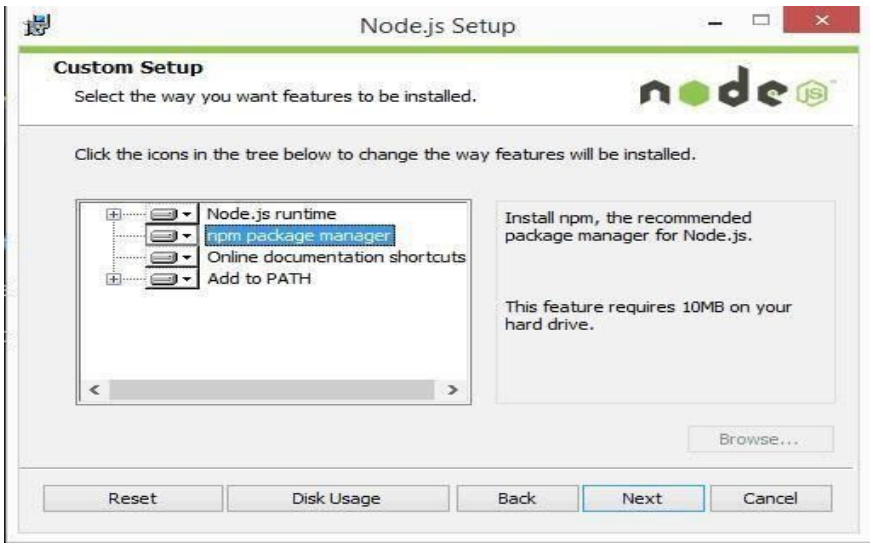
Installing Node and NPM is using the installer package available from the Node.js® website.

Installation Steps

1. Download the installer from the [Nodes.js® web site]() for your opera ng system.



2. Run the installer (the file you downloaded in the previous step.)
3. Follow the prompts in the installer (Accept the license agreement, click the NEXT button and accept the default installation).



4. Restart your computer. (Recommended).

Test NodeJS and NPM

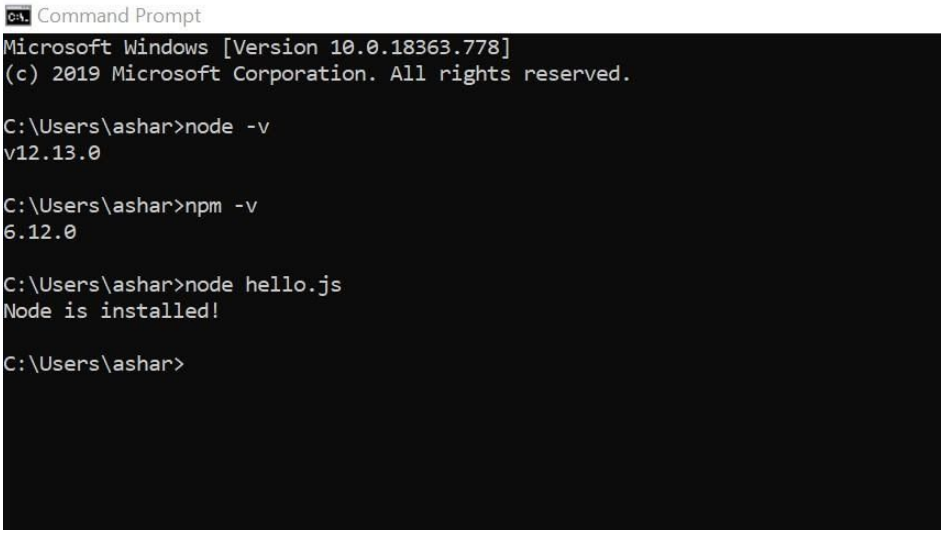
Make sure you have Node and NPM installed by running simple commands to see what version of each is installed and to run a simple test program:

Test Node. To see if Node is installed, open the Windows Command Prompt, Powershell or a similar command line tool, and type *node -v*. This should print a version number, so you'll see something like this v14.2.0 if you installed the latest version. In my case it is v12.13.0.

Recommended version is v12 or above

- **Test NPM.** To see if NPM is installed, type npm -v in Terminal. This should print NPM's version number, so you'll see something like this 6.5.2

Create a test file and run it. A simple way to test that node.js works is to create a JavaScript file: name it hello.js, and just add the code console.log ('Node is installed!'). To run the code simply open your command line program, navigate to the folder where you save the file and type node hello.js. This will start Node and run the code in the hello.js file. You should see the output Node is installed!

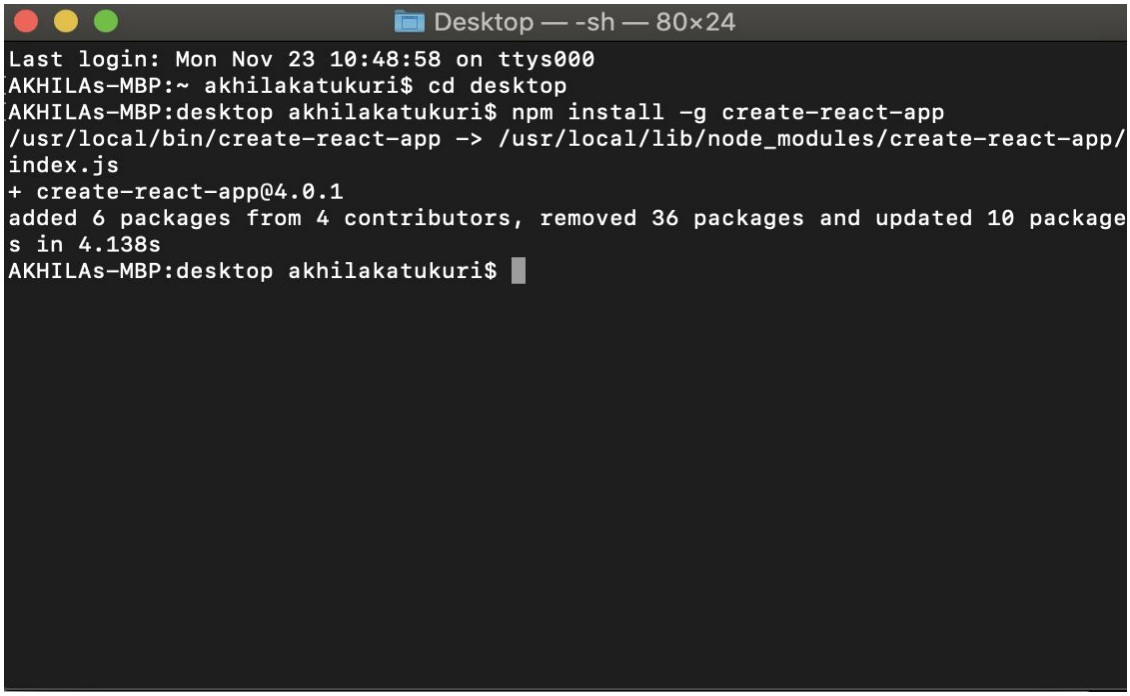


Install React and react DOM

1. Our main task is to install ReactJS, install it, and its dom packages, using **install react** and **react-dom** commands of npm respectively. You can add the packages we install, to **package.json** file using the **--save** option.
2. Setting up React Boilerplate. We will install the boilerplate globally. Run the below command in your terminal or command prompt to install the React Boilerplate.

```
npm install -g create-react-app
```

After running the above command and successfully installing the boilerplate your terminal will show some output as shown in below image:

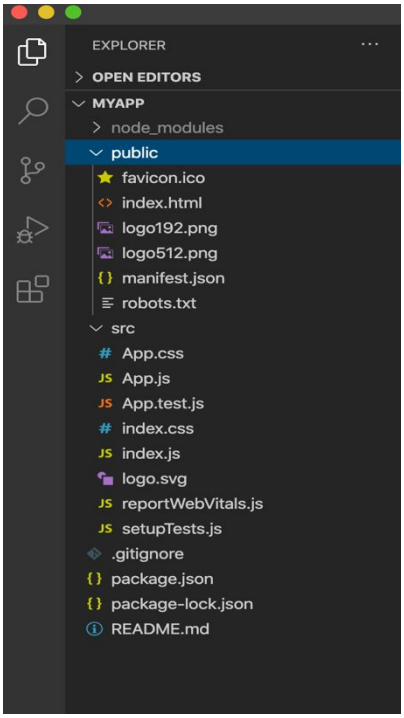


Create a react app. Now to create an app we will use the boilerplate we installed. Below command will create an app named *myapp*.

```
create-react-app myapp
```

The above statement will create a new directory named *myapp* inside your current directory with a bunch of files needed to successfully run a React app.

Let's have a look at the directory created by the above command:



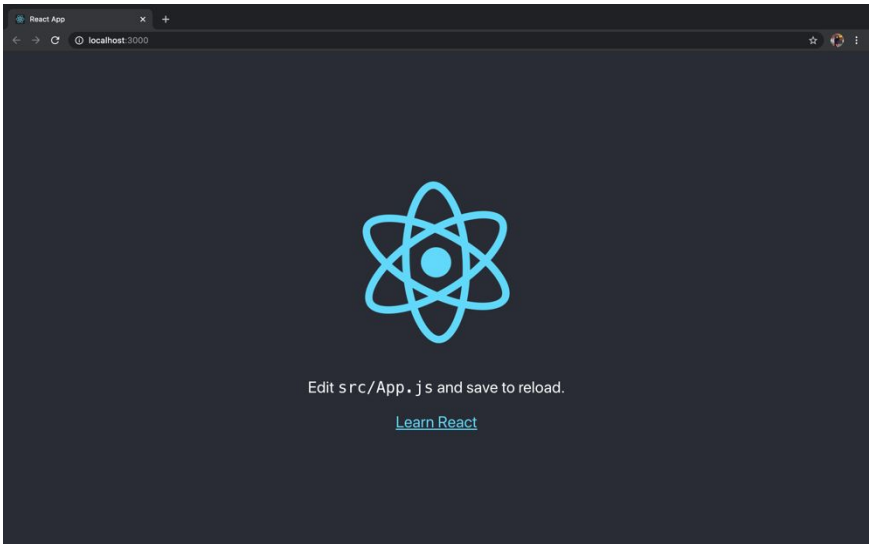
In the above directory, you can see a number of files. The main files we will be working with in the basic course are *index.html* and *index.js*. The index.html file will have a div element with id = “root”, inside which everything will be rendered and all of our React code will be inside the index.js file.

Now, that we have successfully set up the development environment. The last thing left is to **start the development server**.

Start the development server. To start the development server, go inside your current directory “myapp” and execute the below command:

```
npm start
```

You can go to the URL shown in the above message to see the changes you are making in your App. By default the above URL will show the below page:

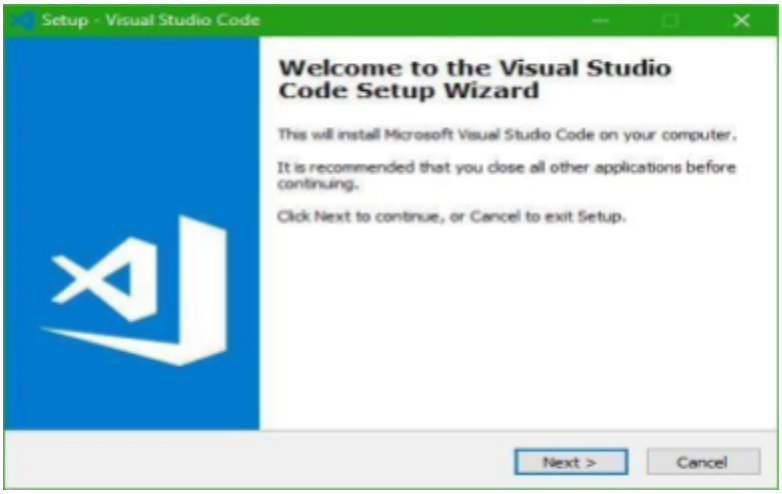


Install Visual Studio Code

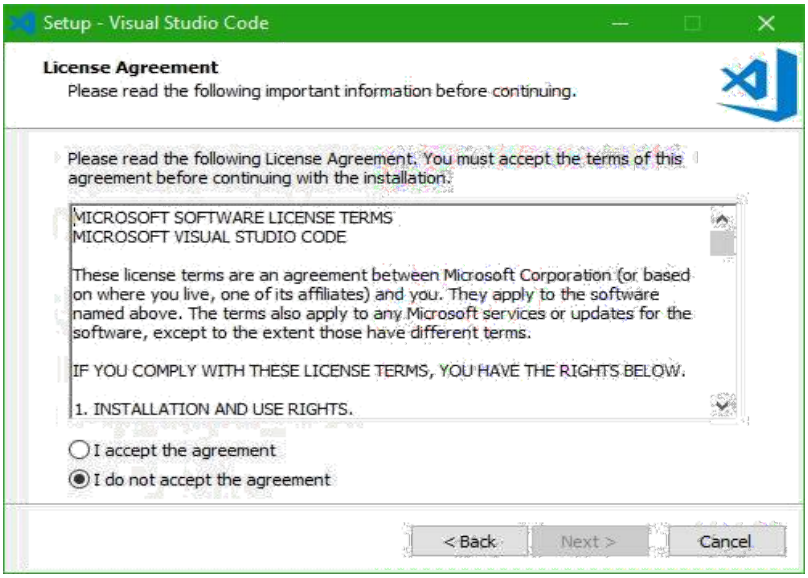
Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go).

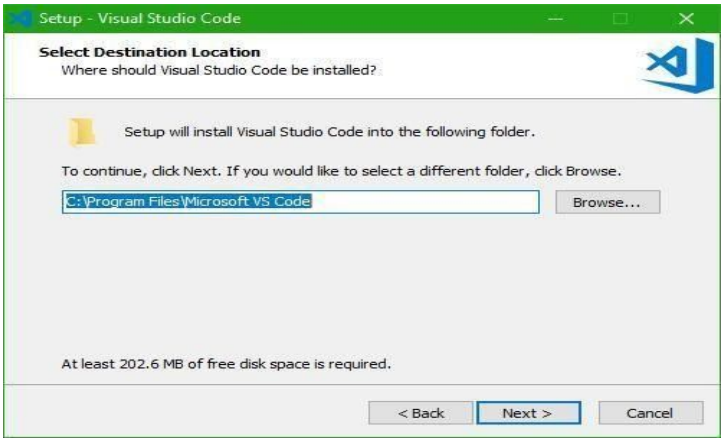
Downloading Visual Studio Code is simple. You just need to head to this webpage and choose the package that matches your needs and requirements.

1. Once it is downloaded, run the installer (VSCodeUserSetup-{version}.exe). This will only take a minute.
2. For Windows system, Click on Next.

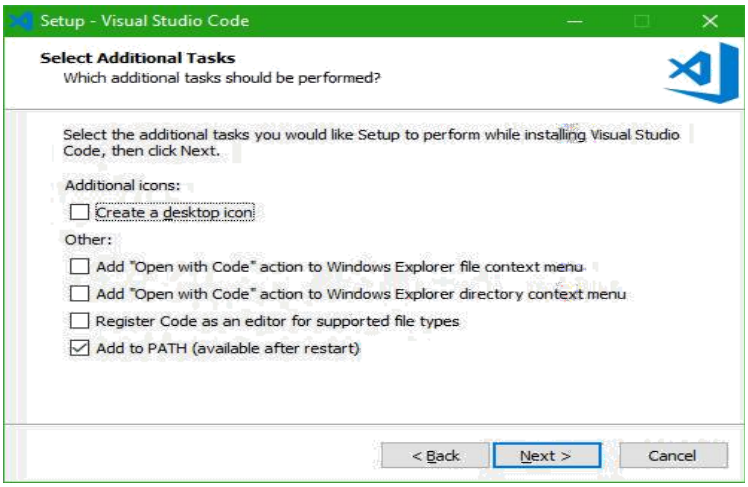


3. Click on the I accept the agreement radio button and then hit Next and Next again and again.

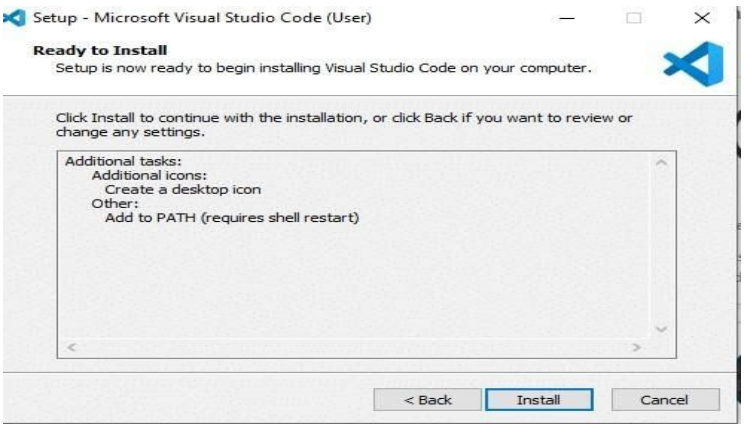




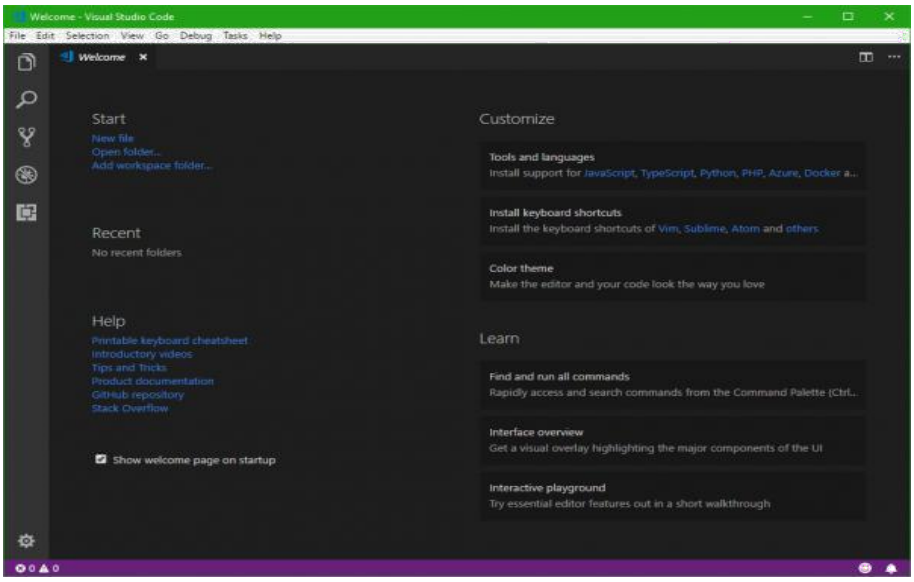
4. In the following window, check "Add to PATH (available after restart)"



5. After that, click on the install button.



6. Finally, after installation completes, click on the finish button, and the visual studio code will get open.



Install Python and Django

Django is a framework of python.
Installing Python is using the installer package available from the official python web site.

Installation Steps

1. Download the installer from the https://www.python.org/downloads. You can select the operating system according to your choice with the latest version. We are currently using the python 3.7 for this project.

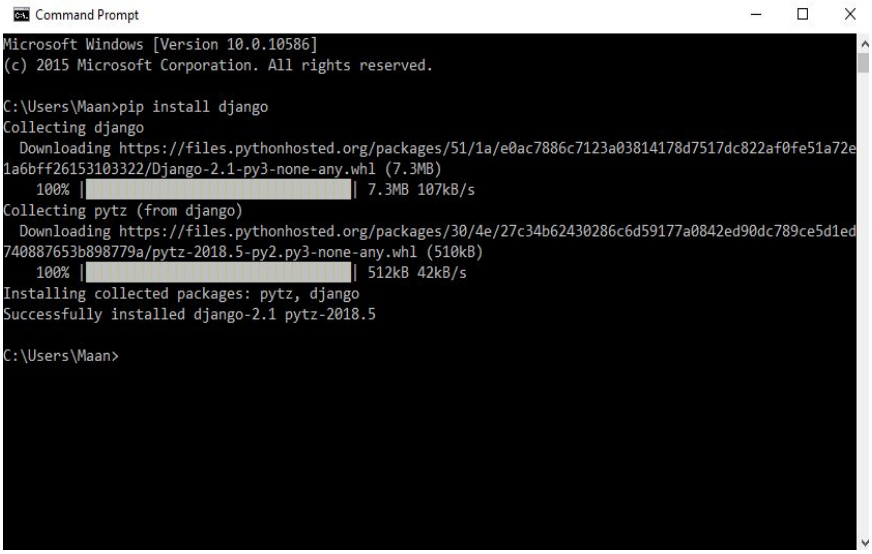
2. Run the installer (the file you downloaded in the previous step.)
3. Follow the prompts in the installer (Accept the license agreement, click the NEXT button and accept the default installation).

4. Restart your computer. (Recommended).

Install Pip and Django:

- PIP is a package manager for Python that uses the Python Package Index to install Python packages. PIP will later be used to install Django from PyPI.
- Open a command prompt and execute **install pip**. This will install **pip** on your system. This command will work if you have successfully installed Setuptools.
- Django can be installed easily using **pip**.
- In the command prompt, execute the following command: **pip install django**. This will download and install Django.

- After the installation has completed, you can verify your Django installation by executing **django-admin --version** in the command prompt.



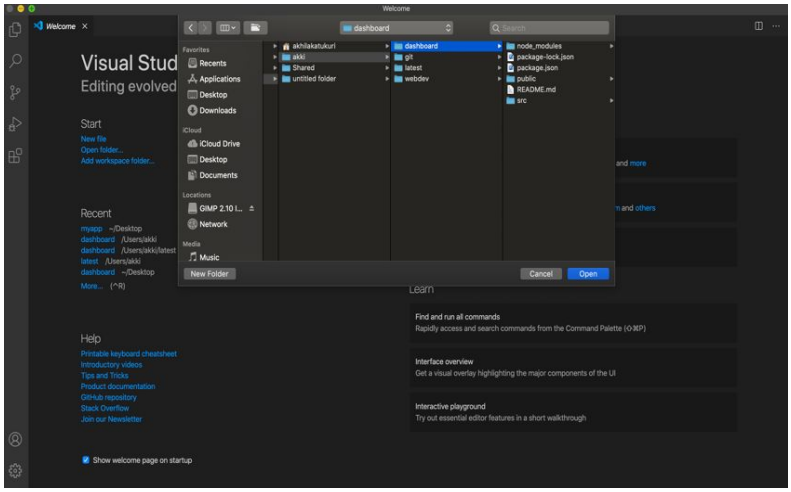
Setting up virtual environment:

- After installing django we need to set up the virtual environment.The development environment is an installation of Django on your local computer that you can use for developing and testing Django apps prior to deploying them to a production environment.
- Installing virtualenvwrapper-win is even simpler than setting up *virtualenvwrapper* because you don't need to configure where the tool stores virtual environment information (there is a default value). All you need to do is run the following command in the command prompt:
- pip3 install virtualenvwrapper-win
- Now you can create a new virtual environment with the mkvirtualenv command
- $ mkvirtualenv any_name_for_enviroment

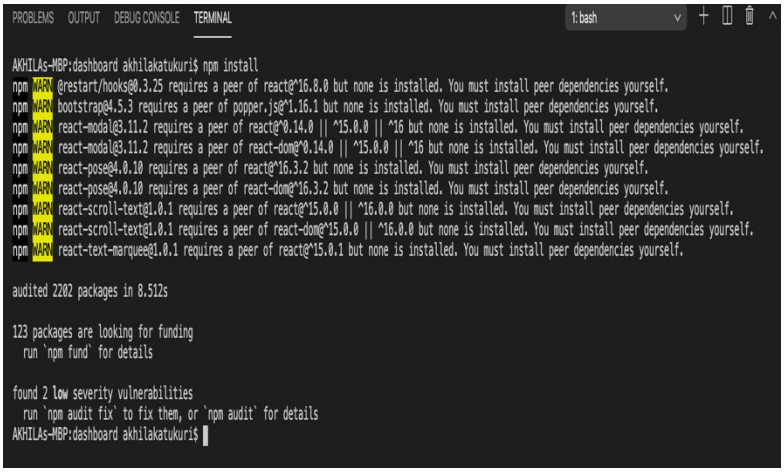
Starting the Application

Run User Interface

1. Download Project code from https://github.com/Vamshi399/dashboard and save in a folder. OR you can also clone the project if you have git bash using the following command: *git clone* https://github.com/Vamshi399/dashboard
2. Open WebStorm or VS code and open the project folder where you downloaded or cloned



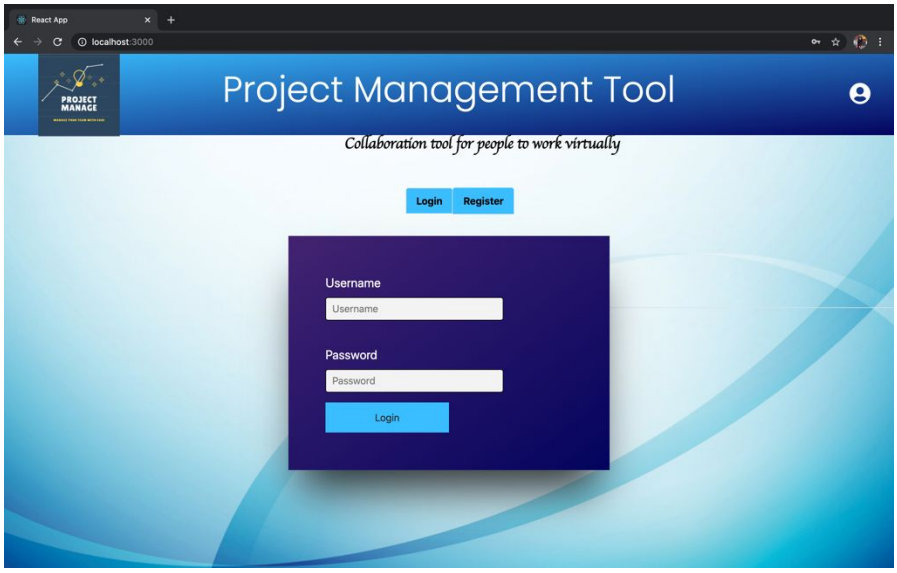
3. After loading the project, run *npm install* in VS code Terminal.



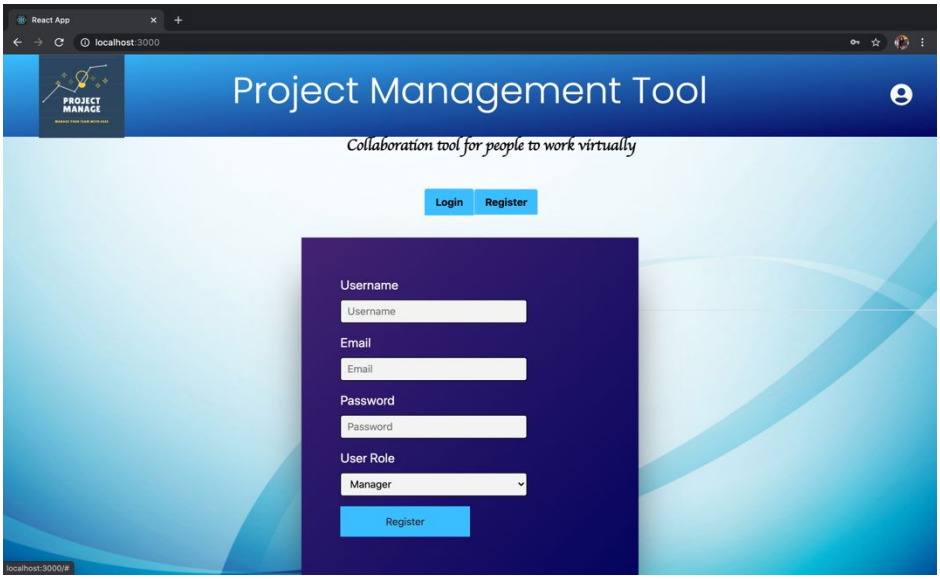
4. Run npm start to start the application in https://localhost:3000

Using the Application

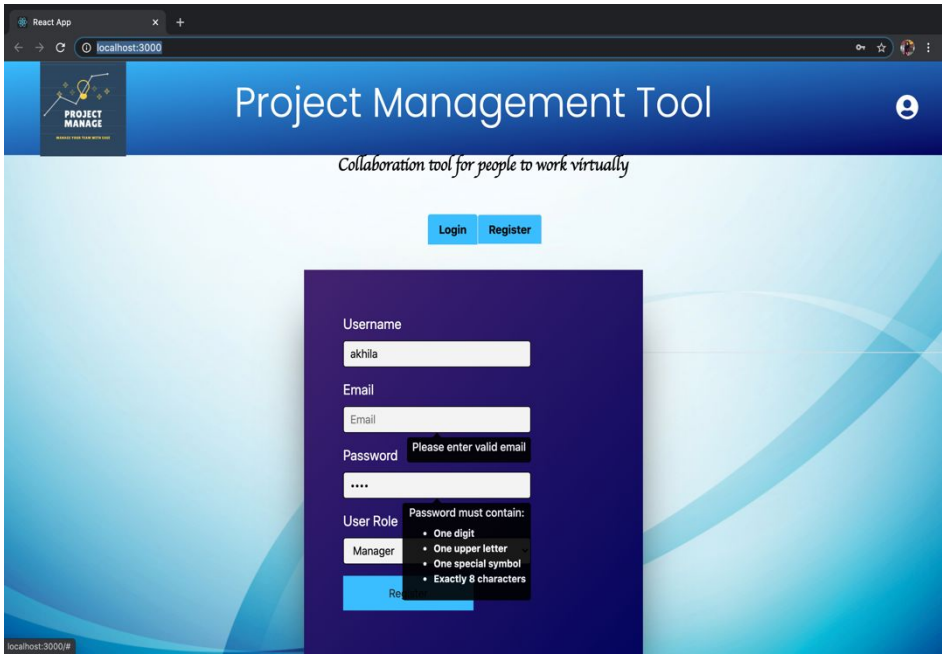
1. Project Management Tool front page.



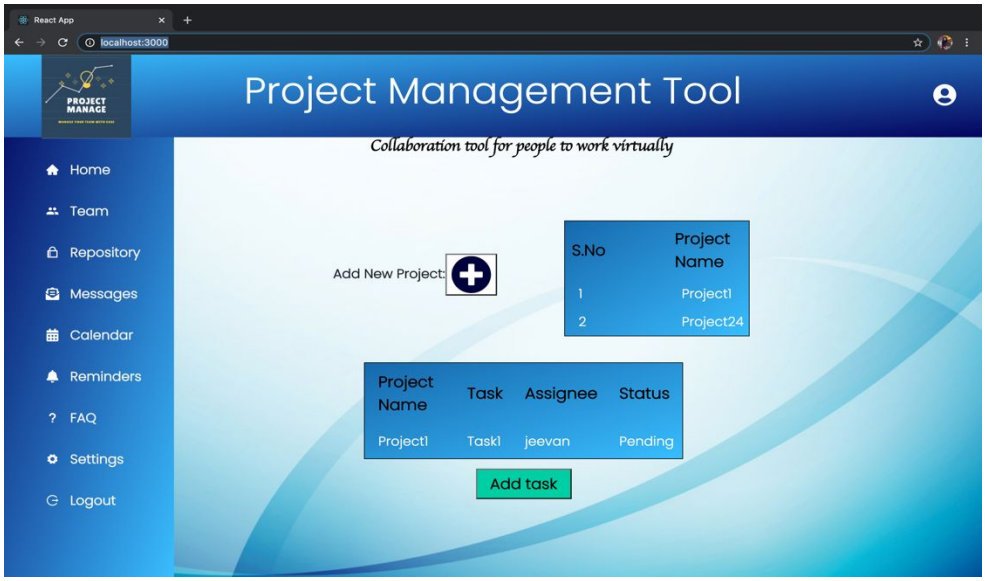
2. Now you can Register and login to the application.



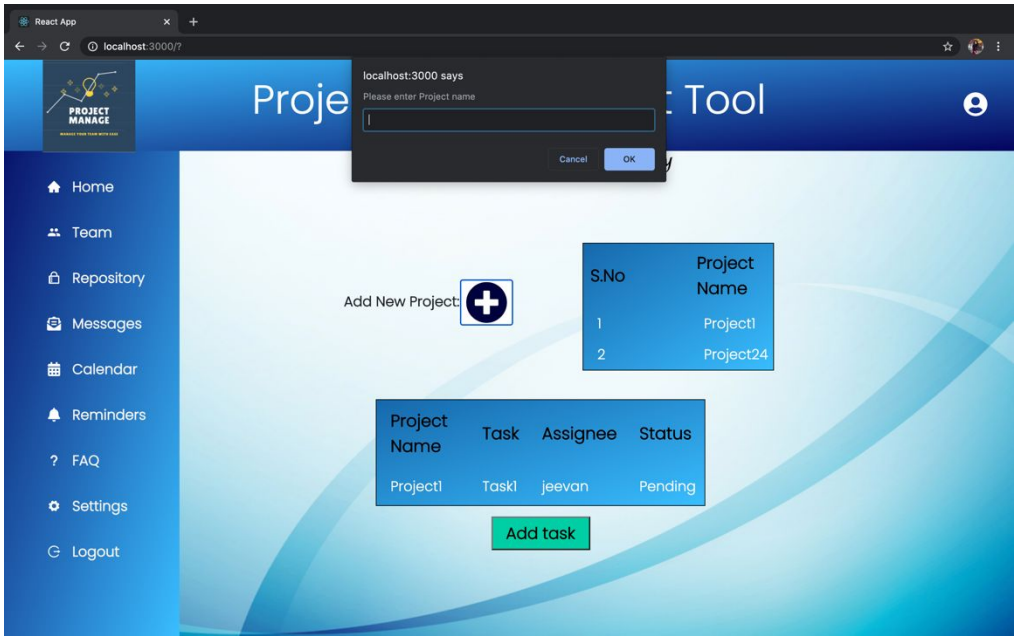
3. Enter valid Email and password to register.



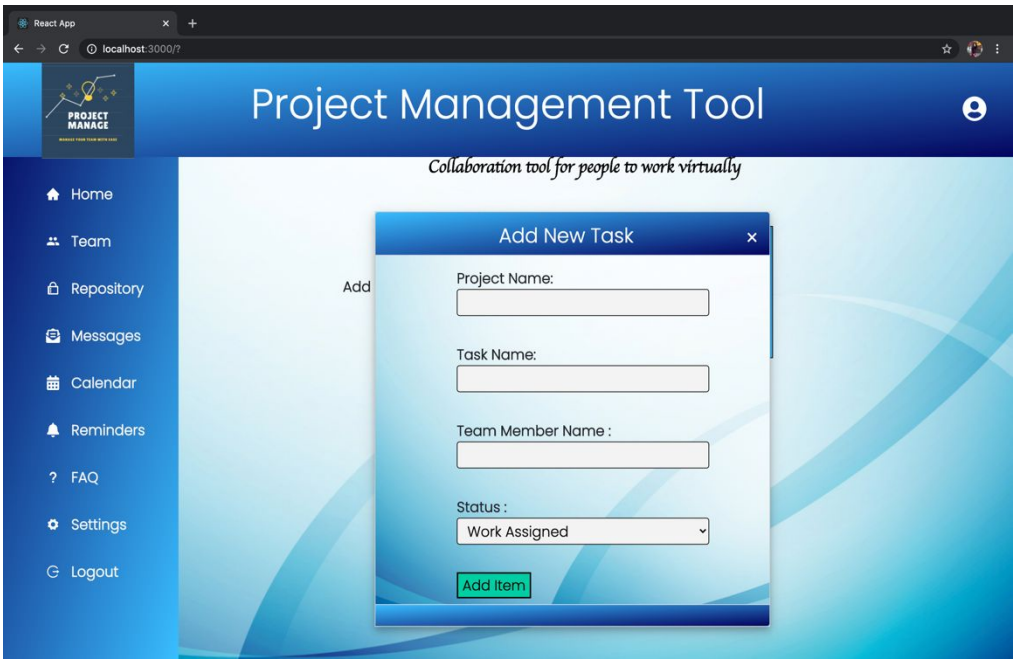
4. Once you login, you will see the dashboard page.



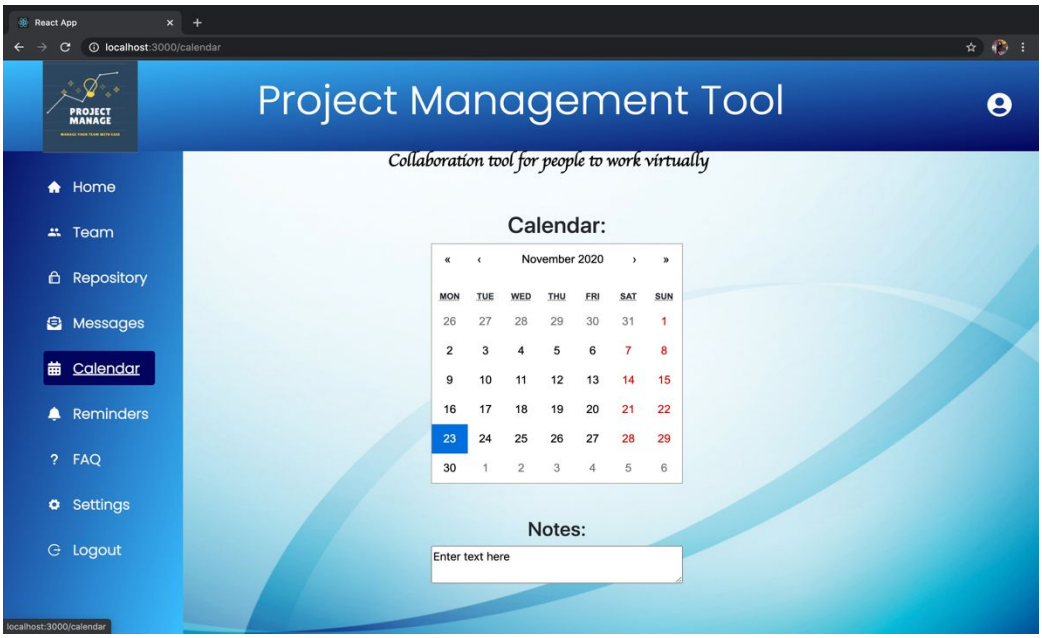
5. When you click on add new project , a popup is displayed with Enter Project name.
Enter project name and click ok. Now the added project will be displayed in project table.



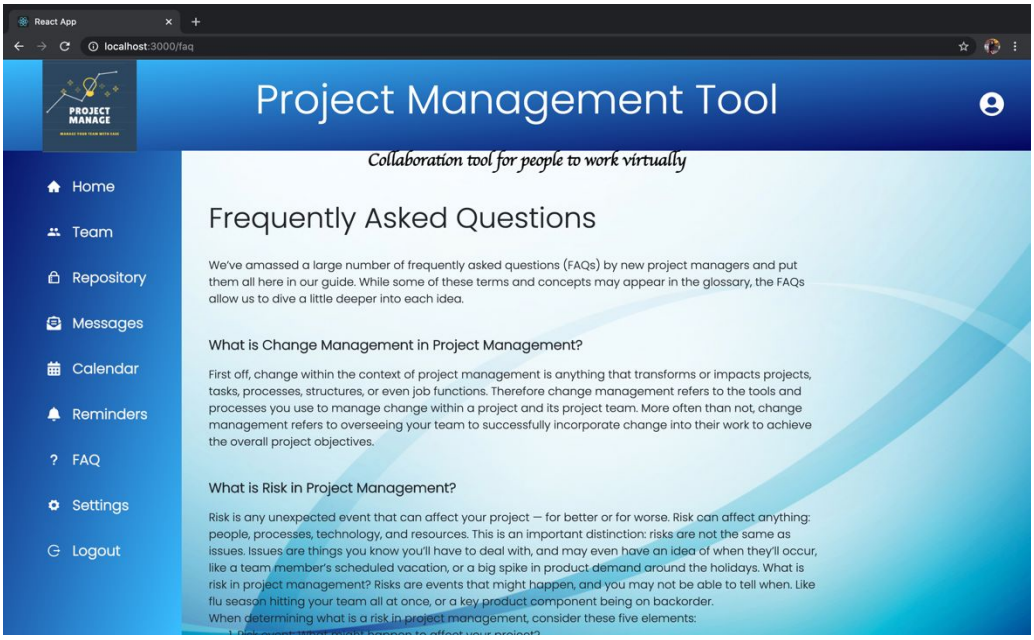
6. Click on add task button to open the modal. Enter all the details and click on add item to add a new task.



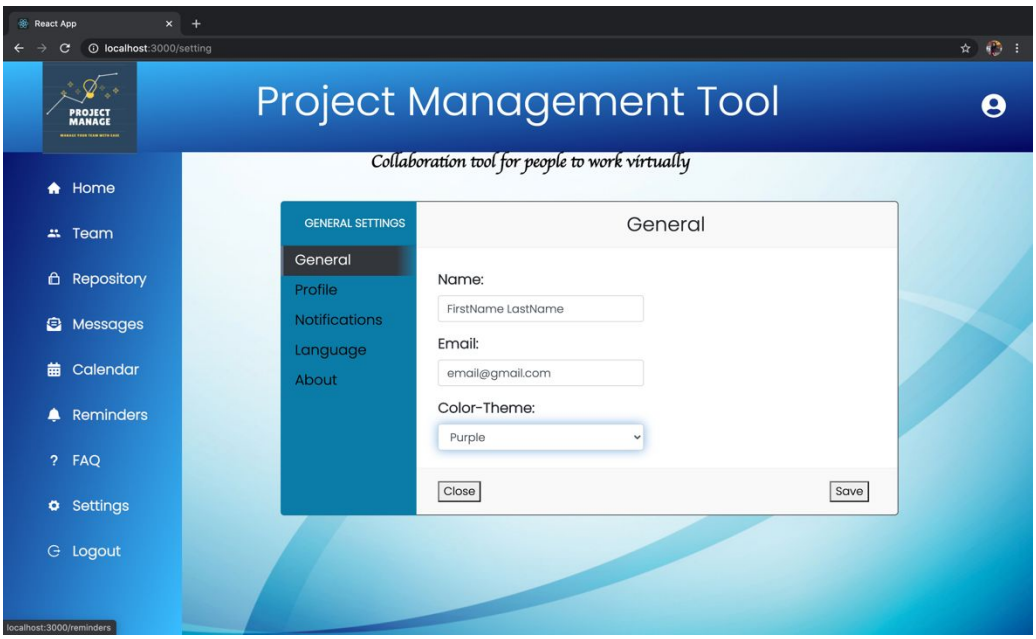
7. Click on Calendar to view the calendar and add notes.



8. Click on FAQ to know more information.



9. Click on Settings to open the settings page.



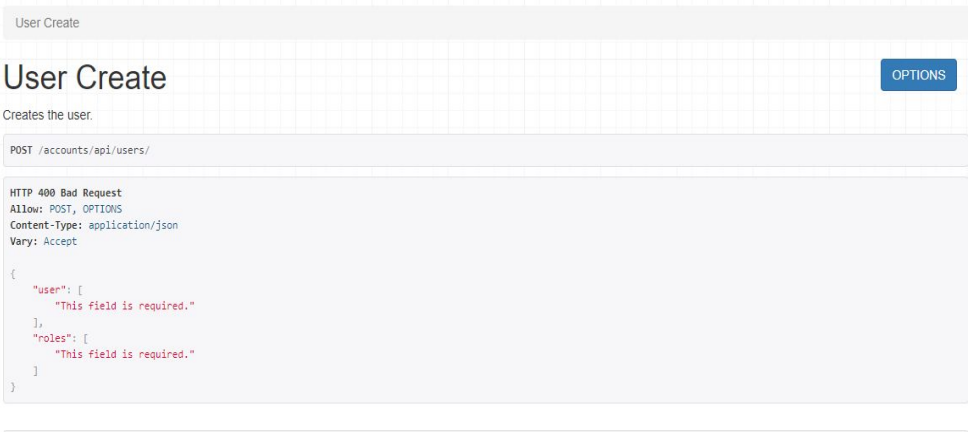
Running API

1. Download API code from https://github.com/saijeevan54/django and save in a folder. OR you can also clone the project if you have git bash using the following command: *git clone* https://github.com/saijeevan54/django

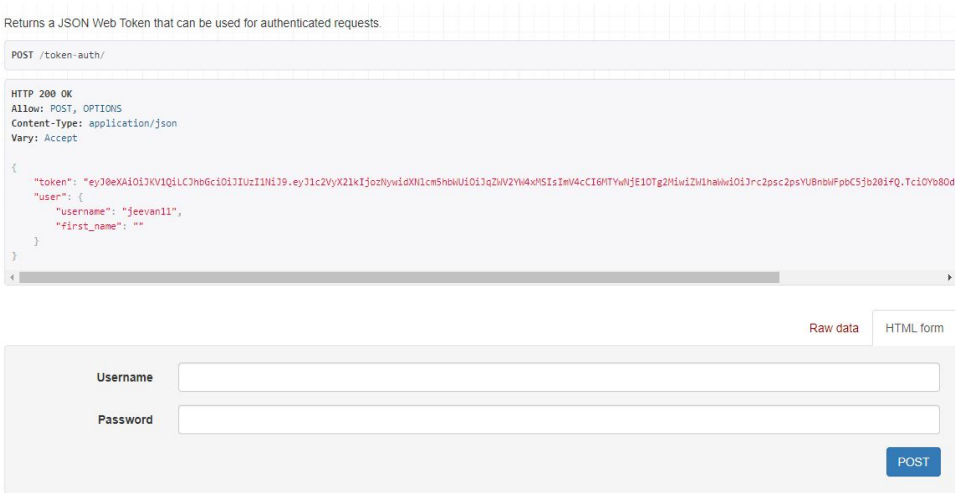
2. Open the project folder where you just downloaded or cloned the API in VS code. Open the terminal where the environment is present and activate the environment. This can be done by running the command Scripts/activate.
3. After the environment is activated. Go to the project folder through terminal where manage.py is present and run the server using
    a. `$ python manage.py runserver`

Backend API:

- For the backend you can check how the responses are being sent and received as we have created an API view for all the necessary fields.
- Whenever a User needs to be registered you can check the JSON data being sent through the API view.
- After you run the server. Go to http://localhost:8000
- In this you will be able to see all the links that take you to their respective pages.
- This page is to create user and to see how the data is being sent along with responses



The generation of token after logged in with username and password.



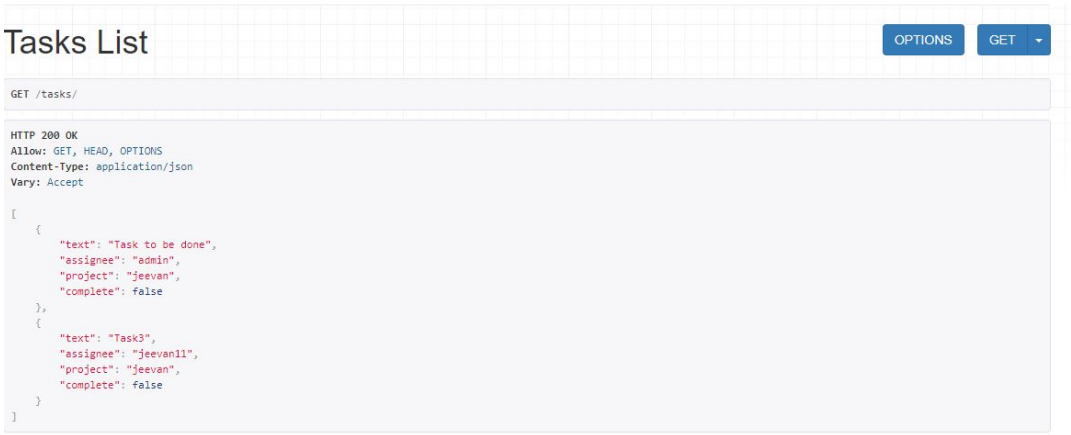
We show a user case for the pulling of data required. Here we can show the all the tasks that are added to the projects. In similar way we can also show the projects that are available and users that are registered.

API for tasks: http://localhost:8000/tasks/

API for users: http://localhost:8000/tasks/role

API for projects: http://localhost:8000/tasks/project

API for user creation : http://localhost:8000/accounts/api/user


Tasks List
OPTIONS
GET
GET /tasks/
HTTP 200 OK
Allow: GET, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept
[
{
"text": "Task to be done",
"assignee": "admin",
"project": "jeevan",
"complete": false
},
{
"text": "Task3",
"assignee": "jeevan11",
"project": "jeevan",
"complete": false
}
]