

Activity API

An application programming interface (**API**) is a computing interface which defines interactions between multiple software intermediaries. It defines the kinds of calls or requests that can be made, how to make them, the data formats that should be used, the conventions to follow, etc

JSON Format :

JavaScript Object Notation (**JSON**) is a standard text-based **format** for representing structured data based on JavaScript object syntax. It is commonly **used for** transmitting data in web applications

Django Rest Framework:

Django REST framework is a powerful and flexible toolkit for building Web APIs. ... The Web browsable **API** is a huge usability win for your developers. Authentication policies including packages for OAuth1a and OAuth2. Serialization that supports both ORM and non-ORM data sources

RESTful API:

REST or **RESTful API** design (Representational State Transfer) is designed to take advantage of existing protocols. While **REST** can be used

over nearly any protocol, it usually takes advantage of HTTP when used for Web **APIs**

1. System Configuration

The hardware and software configuration of the system environment used during development in the organization is presented in detail

1.2 Hardware Configuration

- Processor : Intel® i5 8th Gen @4.2Ghz
- RAM : 8gb
- Storage : 1 Tb
- **1.2.1**

1.2.1 Software Profile

- Operating System : Microsoft® Windows 10 Enterprise
- Language : Python, Django
- Tools : Microsoft® Visual Studio 2019

2. View methods used:

2.1 Get Details:

Get details are used to provide specific data to the user and the facility to get the user data from the database and send them to the show all details

2.2 Get all details:

Get_all_details is used to provide the user the facility to get all the details from the database and show them

2.3 Add user:

Add user is a feature which is used to add a custom user data as input and it stores them in the database for retrieval

Tables :

NO 1	: Provides the user ID
Real Name	: Provides the user Name
Time Zone (TZ)	: provides the Time Zone
Start Time	: Provides the activity start time
End Time	: Provides the activity end time

3. Unit Testing:

Django comes with a test suite of its own, in the **tests** directory of the code base. It's our policy to make sure all tests pass at all times.

We appreciate any and all contributions to the test suite!

The Django tests all use the testing infrastructure that ships with Django for testing applications. See Writing and running tests for an explanation of how to write new tests.

4 Reference:

- <https://docs.djangoproject.com/en/dev/internals/contributing/writing-code/unit-tests/>
- <https://www.django-rest-framework.org/>