**Overview**

This documentation describes the DNS server REST service developed as a part of the project. The REST service is developed using the Django Rest Framework and consists of the following API:

* API to update the DNS record, which takes domain and IP address as a request body and saves it in a database.
* API which gives IP address based on the given domain name. If the domain name is not stored in our local database, then the service does an IP lookup to derive the IP address.

**Technical Details**

The DNS server REST service is built using the following technologies:

* Django Rest Framework
* Python

**API Endpoints**

The REST service has the following API endpoints:

* **‘POST api/dnsrecord/’ -** This endpoint is used to update the DNS record with the given domain name and IP address. The request body should be in JSON format and should contain the following fields:
  + **domain\_name:** The domain name of the DNS record.
  + **ip\_address:** The IP address of the DNS record.
* **‘GET api/dnsrecord/’** - This endpoint is used to retrieve the IP address based on the given domain name. The endpoint takes a query parameter domain which contains the domain name for which we need the IP address. If the domain name is not stored in our local database, then the service does an IP lookup to derive the IP and saves it in our own database while returning domain name and IP.