Steps to setup Django and PostgreSQL with Redis in windows.

1. Download and install python : <https://www.python.org/downloads/>
2. Download and install postgresql bundle: <https://www.postgresql.org/download/windows/>
3. Post man download and for API testing: <https://www.postman.com/downloads/>
4. Create one folder and >> **pip install django**
5. To create rest APIs we need to install Django rest framework.

**>> pip install djangorestframework**

1. Open the command prompt in the desired folder and type the command.

**>> django-admin start project <name of the project>**

1. Lets simply run the project and see how it looks in the browser using below command.

**>> python manage.py runserver**

The app is now running in the port 8000.

1. Now lets create an app in our Django project.

**>> python manage.py startapp <the name of the app>**

1. Next let us register the app and the required modules in settings.py file.

In the installed apps section, lets add Rest framework, cors header, and the newly created app.

**INSTALLED\_APPS = [**

'django.contrib.admin',

'django.contrib.auth',

'django.contrib.contenttypes',

'django.contrib.sessions',

'django.contrib.messages',

'django.contrib.staticfiles',

**'rest\_framework',**

**'UserApp.apps.UserappConfig**'

]

1. To connect to PostgreSQL from our Django app, we need to install the database adapter.

**>> pip install psycopg2**

1. Open pgadmin and give initial password admin
2. Create mytestdb database.
3. Add the database details in settings.py file.

DATABASES = {

    'default': {

        'ENGINE': 'django.db.backends.postgresql',

        'NAME': 'mytestdb',

        'USER': 'postgres',

        'PASSWORD': '123456',

        'HOST' : '127.0.0.1',

        'PORT' : '5432'

    }

}

1. Lets write the command to make migrations file for our models.

**>> python manage.py makemigrations <app name>**

1. we can execute the command to push these changes to the database.

**>> python manage.py migrate <app name>**

1. Write code in views.py, urls.py, serializers.py
2. Download redis github msi for windows server
3. Configure the redis in setting.py file

CACHE\_TTL = 60 \* 1500

CACHES = {

    'default': {

        'BACKEND': 'django\_redis.cache.RedisCache',

        'LOCATION': 'redis://127.0.0.1:6379/1',  # Redis server address

        'OPTIONS': {

            'CLIENT\_CLASS': 'django\_redis.client.DefaultClient',

        }

    }

}

1. Write redis code in views.py file
2. Test with post man with API ends which we mentioned in file.