

Django Rest Framework and Amazon Web Services Course

A course by Rahul Sharma, Faisal Manzer and Team

What will you get for ₹ 250 /-

- 7 30 45 Days
- The Demo Class
- 🤝 Google Meet

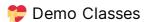
- (4 PM to 5:30 PM
- No prerequisite
- Discord Server

- 📆 4 Days a week
- Regular notes
- Hands-on

This course is for both beginners and advanced students, with no prerequisite. At the end of this course, you will have sufficient knowledge to build a scalable server with Django. You will get notes for each topic before every lecture. Mentors and students will remain connected on Discord, providing you a better class interaction. The course depicts real-life challenges and their solution, with hands-on sessions along with the speaker.

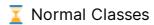
This course is only for learning with **no certificates at the end**.





There will be 2 demo classes

on @Aug 7, 2020 and @Aug 8, 2020



Classes will be 4 days a week

Mon | Tue | Wed | Thu



NOTE We will only support two operating systems, macOS and Linux.

🂆 What we will learn





Django Rest Framework

Amazon Web Services

***** Celery



Python Basic

- ▼ Basic Python Intro
 - 1. About Python
 - 2. Installing python
 - 3. Running Hello World
 - 4. Understanding syntax
- ▼ Basic variables in Python
 - 1. String
 - 2. Integer
 - 3. Float
 - 4. Boolean

- 5. Scope of variables
- ▼ Basic iterables in Python
 - 1. List
 - 2. Tuple
 - 3. Set
- ▼ Functions in Python
 - 1. Uses of function
 - 2. Basic function
 - 3. Arguments in function
 - 4. Default Value argument
 - 5. Args and Kwargs in function
- ▼ Classes in Python
 - 1. Basic class object understanding
 - 2. Define own class
 - 3. Inheritance
 - 4. @property and @staticmethod decorators

TWhat we will build



We will create only one project but with different concepts.



Nogging Site

REST Api

器 Muti User Editing

Mathematical Location Enabled 🐣 AWS Cloud

Tag following

X Discussion thread

📏 Scaled for Traffic

User following

Code Support

Email Support

Discussion Thread

Basic blog site open for all

▼ v0.0.1 Introduction

- 1. Client Server Architecture.
- 2. HTTP request and response overview
- 3. Django getting started
- 4. Django CLI and default files
- 5. Django app and project understanding
- 6. Django default project structure
- 7. Django URL Routing and views overview
- ▼ Hello World Example

A basic Django app where will just say hello world.

- ▼ v1.0.0 Database and Django ORM
 - 1. What are databases
 - 2. SQL vs NoSQL database
 - 3. Django ORM concept overview
 - 4. A basic Django model
 - 5. Migrations and its importance
 - 6. Django shell
 - ▼ Basic Floq

We will create a basic app which will display all blogs in our database in our index page.

- ▼ v1.0.1 Database operations with Django ORM
 - 1. Editing model object (Shell)
 - 2. Deleting model object (Shell)
 - 3. Creating model object (Shell)
 - 4. GET and POST request
 - 5. Handling Request and Performing CRUD action (View)
 - 6. CSRF token and CSRF issue
 - ▼ Decentralized Flog

We will do CRUD operations with our models on a request.

- ▼ v1.0.2 Django template system
 - 1. What are templates
 - 2. Rendering a template
 - 3. Loops and variables in template
 - 4. Extending a template
 - ▼ Handsome Flog

We will use Django templates to show all information rather than sending a httpResponse.

- ▼ v1.0.3 Django forms
 - 1. Use Django form for rendering
 - 2. Validation in form
 - 3. Use Model form
 - ▼ Cleaner Flog

We will rewrite some of our blog forms with Django form.

🂁 User session and blog for user

- ▼ v2.0.0 Browser's Session
 - 1. Request session
 - 2. Saving data in user's session
 - 3. Understanding issues with cookie
 - 4. Permission management
 - ▼ Browser's Flog

We will use Django session to store todos created by user in a session and will only allow operations on those log.

- ▼ v2.0.1 User Authentication overview
 - 1. Who are users in Django
 - 2. How Django authenticate them

- 3. User creation
- 4. User login
- ▼ SignIn to Flog

We will understand Django's authentication system and will implement Sign-Up and Sign-In feature.

- ▼ v2.0.2 Django Slug
 - 1. Adding slug to our blog
 - 2. Adding slug to our URL
 - ▼ SignIn to Flog

We will understand Django's authentication system and will implement Sign-Up and Sign-In feature.

- ▼ v2.0.3 User Association with blog
 - 1. Add user context to our blog
 - 2. Show all blog user created
 - 3. Permission management
 - ▼ User's Flog

We will save user created blog in database and show them after login.

- ▼ v2.0.3 Many to Many field
 - 1. Understanding Many to Many Field
 - 2. Understanding One to One Field
 - 3. Working with Many to Many field
 - 4. Adding tag support to Flog
 - ▼ Tagged Flog

We will add tag support to our app.

* AWS Introduction

- ▼ Intro to AWS Cloud
 - 1. Basics of how Cloud Works

- 2. How Pricing works
- 3. Free Tier system
- 4. EC2 Introduction
- 5. Elastic Beanstalk Introduction
- 6. Security Groups in AWS
- ▼ v3.0.0 Hosting to Elastic Beanstalk
 - 1. Making our app ready for Elastic Beanstalk
 - 2. Creating Elastic Beanstalk Environment from Dashboard
 - 3. Creating zip and hosting to Elastic Beanstalk
 - 4. Debugging our app
 - 5. Django's ALLOWED host and Debug Setting change
 - ▼ Hosted Flog

We will host our project with Elastic beanstalk on AWS Cloud.

🎉 Postgres as Database

- ▼ v4.0.0 Postgres Introduction
 - 1. About PostgresSQL database
 - 2. Installing Postgres Database
 - 3. Connection With Django
 - 4. Recommendations for Saving Credentials
 - ▼ Postgres Flog

We will upgrade our database server from SQLite3 to Postgres. We will learn about scaling issues and distributed system.

- ▼ v4.0.1 AWS RDS Intro
 - 1. About AWS RDS
 - 2. Setting up a free-tier instance
 - 3. Connection With Django
 - 4. Moving Data

▼ RDS Flog

We will learn about AWS RDS, and connect our hosted instance to it.

- ▼ v4.0.2 Features of Postgres
 - 1. JSON Field
 - 2. Array Field
 - 3. Geo Fields
 - ▼ Work Flog

We will add location to our blog app for work reference.

- ▼ v4.1.0 Class based view
 - 1. About Class based view
 - 2. Rewriting our views
 - 3. Understanding Generic views
 - ▼ Classy Flog

We will rewrite all our views from functional based view to class based view.

Django Rest Framework

- ▼ Rest Framework Intro
 - 1. REST API
 - 2. GET, POST, PATCH, PUT and DELETE request
 - 3. Understanding serialization process
 - 4. Understanding APIViews
- ▼ v5.0.0 Flog's API
 - 1. Creating serialized
 - 2. Adding save and update method
 - 3. Creating List API (without DRF)
 - 4. Changing it to Model serialized
 - 5. Using DRF View

- 6. List, Create, Update and Delete operations
- **▼** DRF Flog

We will use DRF helper classes for creating API.

- ▼ v5.0.1 JWT Authentication
 - 1. Understanding Authentication Token
 - 2. Adding djangorestframework-simple-jwt
 - 3. Setting up
 - 4. Understanding Encryption
 - 5. RSA256 introduction
 - ▼ State Less Flog

We will add JWT authentication method to our app.

- ▼ v5.1.0 Generic Views
 - 1. Understanding Authentication Token
 - 2. Adding djangorestframework-simple-jwt
 - 3. Setting up
 - 4. Understanding Encryption
 - 5. RSA256 introduction
 - ▼ State Less Flog

We will add JWT authentication method to our app.

- ▼ v5.1.1 Many To Many field understanding
 - 1. Nested serialized example
 - 2. Using default user trick
 - 3. Tag creation view
 - 4. Remove tag view
 - ▼ Tags Flog

Adding tag support to our API.

6 EC2 the power

- ▼ Understanding EC2
 - 1. Introduction to EC2
 - 2. Creating an EC2 instance
 - 3. Starting the EC2 instance and the key file
 - 4. Connecting with ssh
- ▼ v6.0.0 Virtualenv
 - 1. Intro to virtualenv
 - 2. Creating virtualenv
 - 3. Activating and deactivating
 - 4. Installing dependency
 - 5. requirements.txt
 - ▼ Segregated Flog

We will segregate dependencies of our app to virtualenv.

- ▼ v6.1.0 Deploying to EC2
 - 1. Understanding gunicorn, ngix
 - 2. About DNS and subdomains
 - 3. Route53 and other DNS provider overview
 - 4. Postgres on Ubuntu
 - ▼ Powerful Flog

We will deploy our app to EC2 with a subdomain.

- ▼ v6.1.1 Scaling our database
 - 1. Connecting to our RDS
 - 2. Securing our database connection
 - ▼ SharedDB Flog

We will move our database out for scaling.

***** Celery power

- ▼ Celery as task manager
 - 1. Understanding Need of Celery
- ▼ Redis and Rabbit MQ
 - 1. Understanding Need of Celery
- ▼ v7.0.0 Installing Redis and setting Celery
 - 1. Installing Redis
 - 2. Configuring celery
 - ▼ Vegan Flog

We will set up a task with celery.

- ▼ v7.1.0 SMTP with celery
 - 1. Understanding SMTP
 - 2. Connecting with SMTP Gmail
 - 3. Notifying users on every login
 - ▼ Secure Flog

Notify users on every login.

- ▼ v7.1.1 Celery on cloud
 - 1. Setting-up Elastic Cache
 - 2. Adding celery support on EC2
 - ▼ Cloud cache Flog

We will host our celery support to cloud.

Carrying files better

- ▼ Intro to CDN and Storage Bucket
 - 1. Understanding S3 bucket
 - 2. Understanding CloudFront's DNS
- ▼ v8.0.0 Adding Django Storages

- 1. Setting-up Django Storages
- 2. Moving static files to S3
- ▼ Bucket Flog

All media files and static files will be saved on S3 bucket.

- ▼ v8.0.1 Using CDN for better delivery
 - 1. Setting-up CloudFront
 - 2. Understanding AWS IAM
 - 3. Adding CDN support
 - **▼** Bucket Flog

Now media will be served from CDN rather than bucket.

- ▼ v8.1.0 File upload with celery
 - 1. Support for file upload
 - 2. Moving files with celery
 - ▼ Drag-n-Drop Flog

Adding support for upload progress.

AWS Scaling

- ▼ v9.0.0 Understanding EC2 Images
 - 1. Understanding EC2 Images
 - 2. Backing up our instance
 - ▼ Backed-up Flog

We will backup of instance.

- ▼ v9.0.1 Adding Load-balancer
 - 1. Understanding Load-balancer
 - 2. Backing up our instance
 - ▼ Backed-up Flog

We will backup of instance.

W Taking about AWS Services

We will talk different about AWS Services here.

💉 Assignment

We will give you hints for implementing the following features:

- 1. News Feed
- 2. Signature Muti User Editing
- 3. Tag following
- 4. 👰 User following
- 5. Piscussion Thread

You can asks doubts and error on discord. And we will show this feature implemented in our way.