

rest framework

rest architecture

api = application programming interface -> we can run multiple app using one database. Example facebook whatsapp insta server down if the organisation use one database but they are interconnected each other through api. if server down then 3 application will not work properly

convert database in api

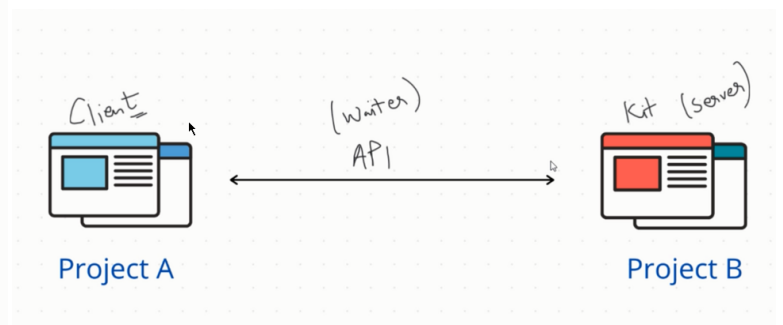
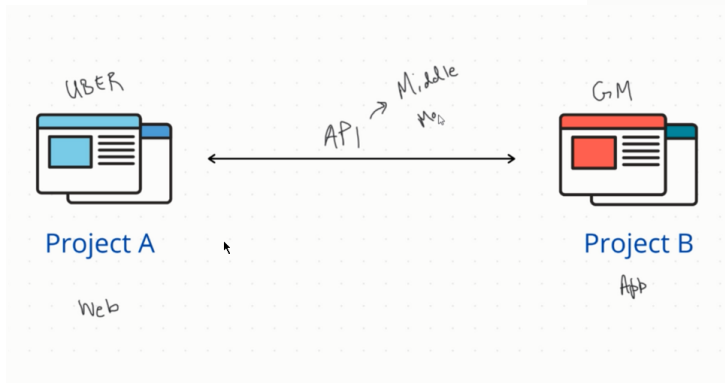
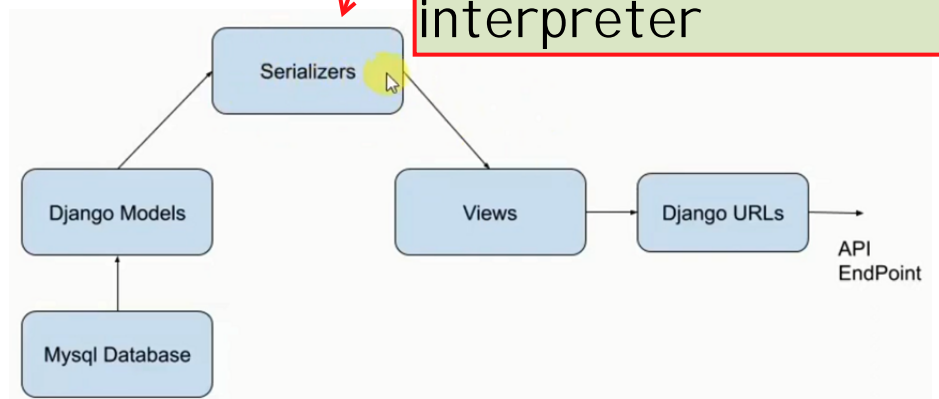
Rest = Representational state transfer

is a type of architecture (make of such kinds of algo) thats makes the data in one kind of standard data form JSON

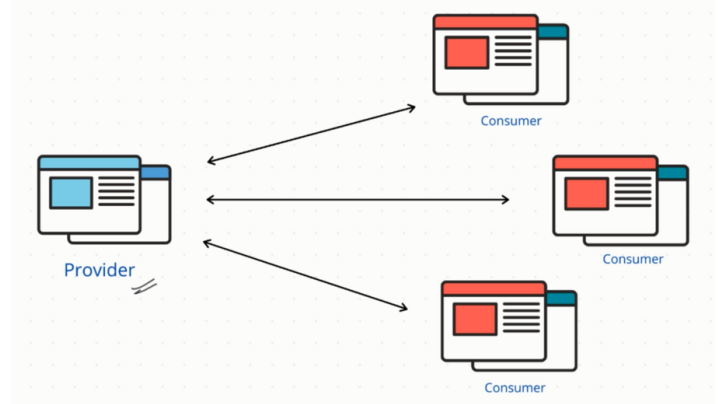
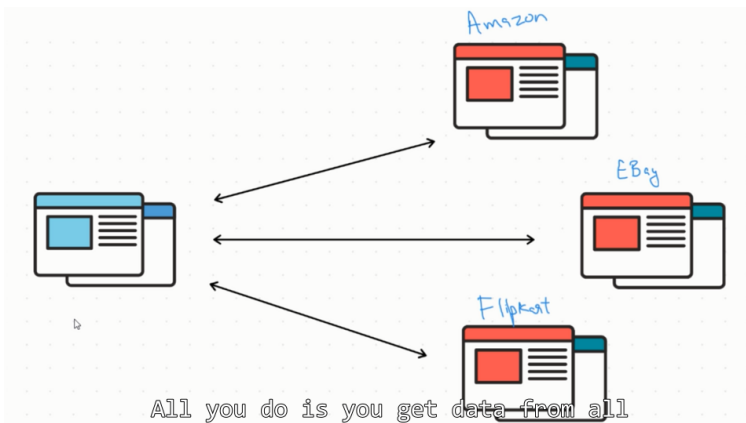
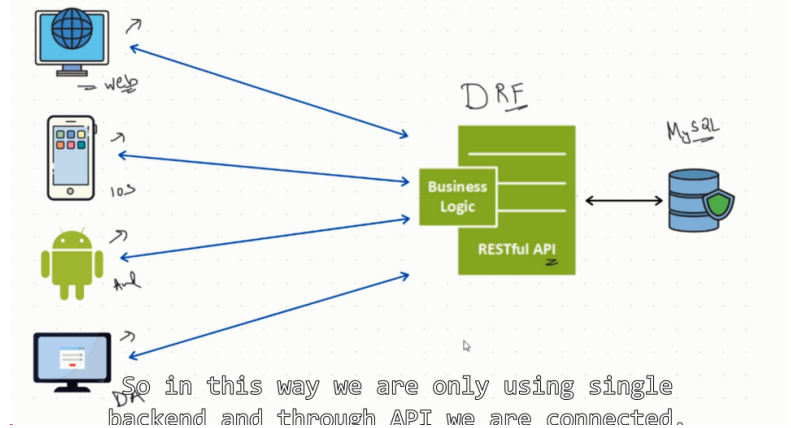
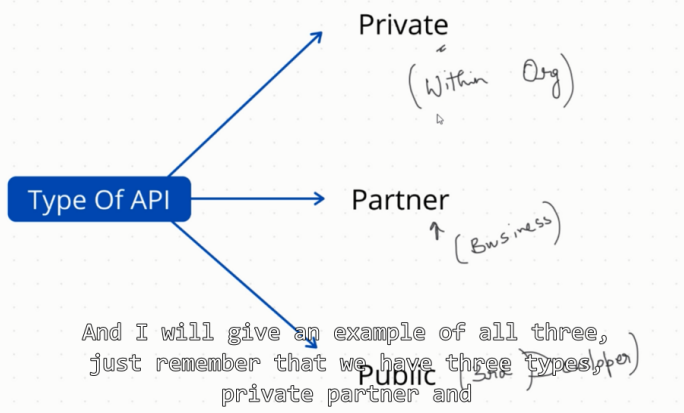
json=Java Script Object Notation

take data from model and convert in json.example chinese interpreter

user request-> view
->model->database
->view



api act as a middle man between client and server



Understanding URL

<https://www.api.movielist.com/movies/>
<https://www.api.movielist.com/movies/list/>

<https://www.api.movielist.com/movies/127/>
<https://www.api.movielist.com/movies/127/reviews/>
<https://www.api.movielist.com/movies/127/reviews/?limit=20>

<https://www.api.movielist.com/account/login/>
<https://www.api.movielist.com/account/register/>

It can be Spider-Man, Superman or any other movie.

Understanding URL

<https://www.api.movielist.com/movies/> *List*
<https://www.api.movielist.com/movies/list/>

<https://www.api.movielist.com/movies/127/> *Ind*
<https://www.api.movielist.com/movies/127/reviews/>
<https://www.api.movielist.com/movies/127/reviews/?limit=20>
Base URL
<https://www.api.movielist.com/account/login/>
<https://www.api.movielist.com/account/register/> *End Point*
 And then this remaining part, this part is known as End Point.

API REST → Rest API (status code)

① endpoint
 ② method
 ③ headers
 ④ the data
 json data

CRUD → Create → **POST**
 → Read → **GET**
 → Update → **PUT**
 → Delete → **DELETE**

HTTP Methods

So if I talk about them individually, we call them Create, retrieve, update and delete.

Understanding URL

→ <https://www.api.movielist.com/movies/>] LIST

GET

POST

→ <https://www.api.movielist.com/movies/127/>] IND

GET

PUT

DELETE

API + REST Architecture → REST API

1. End Points

2. Methods (CRUD)

3. Headers (Status Code)

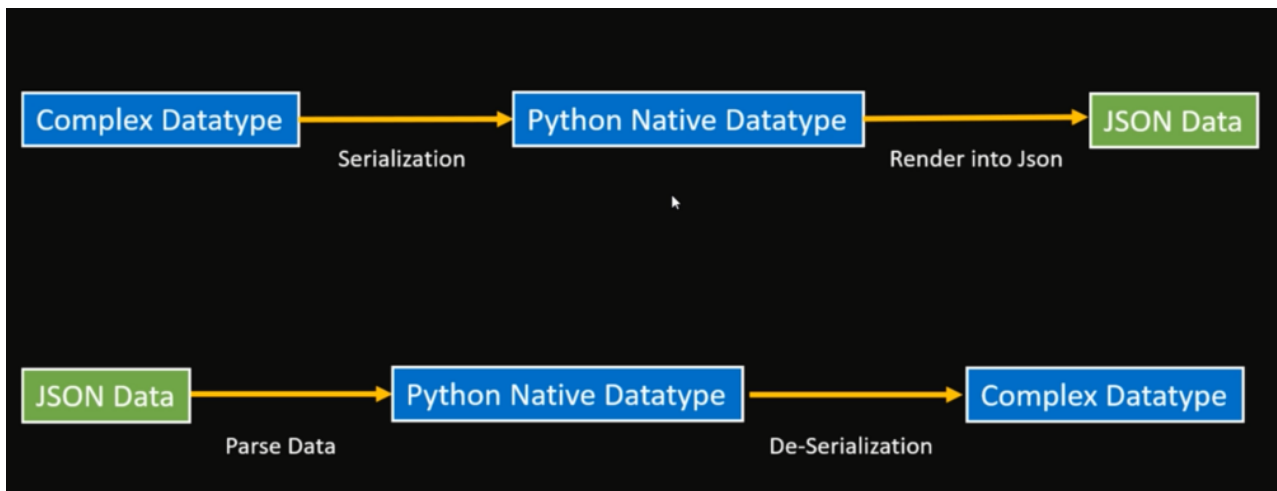
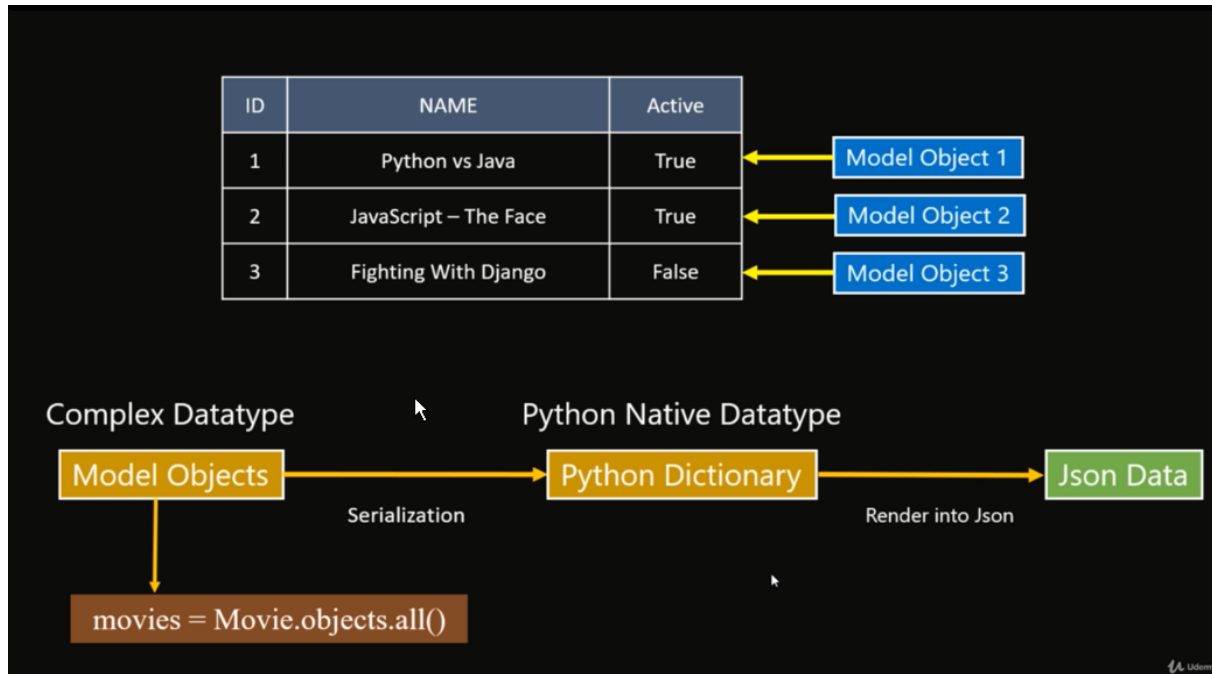
4. The Data (JSON)

```
def movie(request):
    movies = Movie.objects.all()
    data = {
        'movies': list(movies.values())
    }
    return JsonResponse(data)
```

queryset -> python
dictionary
python dictionary -> json
response

```
def movie_details(request, pk):
    movie = Movie.objects.get(id=pk)
    data = {
        'name' = movie.name,
        'description' = movie.description
    }
    return JsonResponse(data)
```

serializations in DRF



Type Of Serializers

Type Of Views

Working With API

serializers.Serializer
serializers.ModelSerializer

Serializers

serializers.Serializer

serializers.ModelSerializer

Views

Function Based Views

@api_view()

Class Based Views

APIView

- Generic views
- Mixins
- Concrete View Classes
- ViewSets

Working With API

→ DRF Browsable API

→ Postman

HTTPIe

