

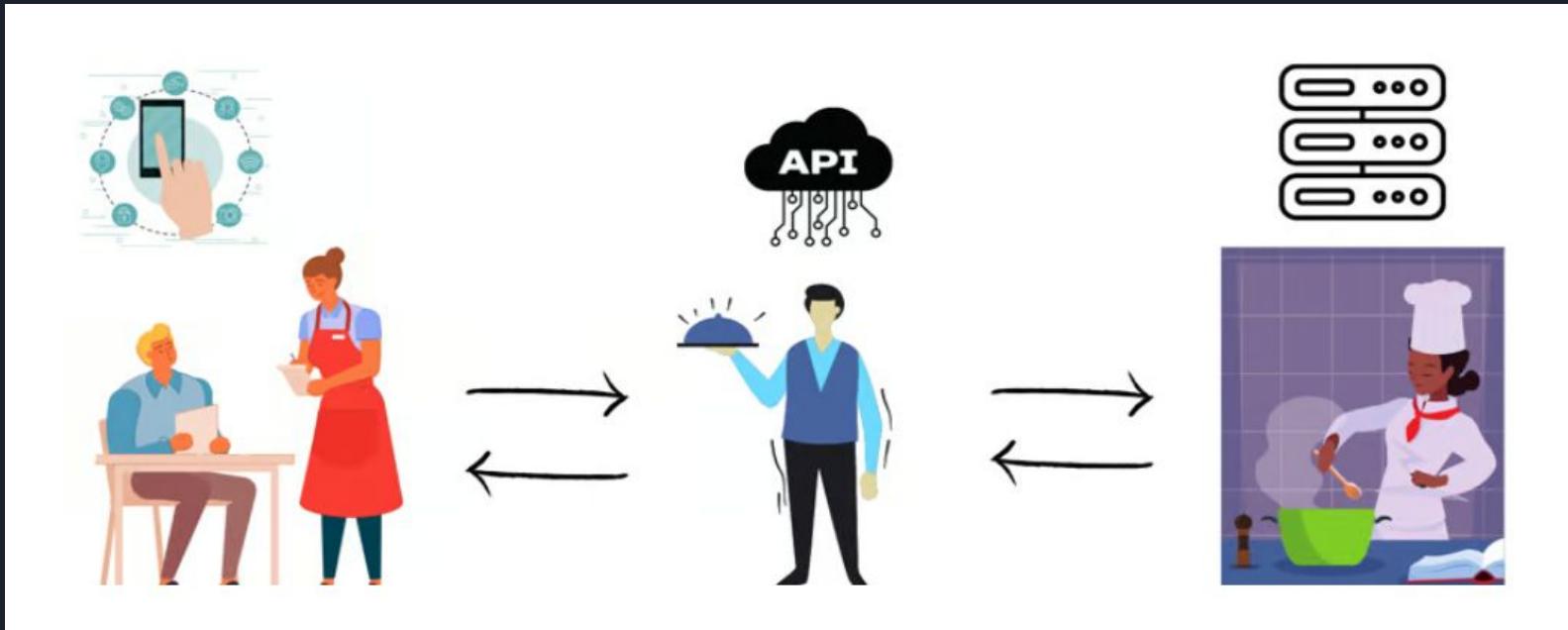


# API

Django Rest Framework

# API (Application Programming Interface)

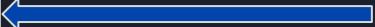
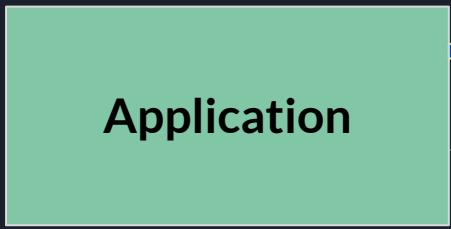
An API is a software intermediary that allows two or more applications to talk to each other





## API types in terms of release Policies

- **Private:** It can be used within the organization
- **Partner:** It can be used within Business Partners.
- **Public:** It can be used by any third party Developers.



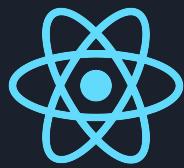
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# **REST & RESTful APIs**

- REST is an architectural Design to develop a Web API.
- It stands for Representational State Transfer.
- API's which are developed using this architecture are called as REST or RESTful APIs.



## **How REST API works:**

- Client makes an HTTP request to API
- API will communicate to your Web Application or database if needed.
- From which data will be provided to the API.
- API returns this response data to the client.



# CRUD operations in REST:

Operation	HTTP Methods	Description
Create	POST	Creating/Posting/Inserting Data
Read	GET	Reading/Getting/Retrieving Data
Update	PUT, PATCH	Updating Data Complete Update - PUT Partial Update - PATCH
Delete	DELETE	Deleting Data

# Student API Resource (End Point):

`https://qspiders.com/api/students`



1. Base URL
2. Naming Convention
3. Resource of API (End Point)



## Example of Student API Resource (End Point):

- GET - /api/students
- GET - /api/students/1
- POST - /api/students
- PUT - /api/students/1
- PATCH - /api/students/1
- DELETE - /api/students/1

# Data Conversion:

- In API's we always pass JSON string.
- So first we should learn the conversion of Data.

