**Django REST Framework Notes**

REST framework is used so that front and back end can interact via REST protocol. Code and logic of frontend and backend are fully separated, the just communicate via REST. You should have in depth knowledge of Django before studying REST framework.

* First you need to create a normal Django app with a database model.
* pip install djangorestframework.
* Create a serializer within that app, new file serializers.py.
* Serializers are a way for data to be converted from/in Django models to another outside format such as JSON.
* You can model serializers that go hand in hand with your models like this.

Text

Description automatically generated

* Then you can convert a django models object to JSON back and forth like this:

>>> from todo.serializers import TodoSerializer

>>> from todo.models import Todo

>>> from rest\_framework.renderers import JSONRenderer

>>> from rest\_framework.parsers import JSONParser

>>> t = Todo(title="My Todo Title", description="My todo content.")

>>> t.save()

>>> s = TodoSerializer(t)

>>> s.data

>>> content = JSONRenderer().render(s.data)

>>> content

>>> import io

>>>

>>> stream = io.BytesIO(content)

>>> data = JSONParser().parse(stream)

>>> serializer = TodoSerializer(data=data)

>>> serializer.is\_valid()

>>> serializer.validated\_data

OrderedDict([('title', 'My Todo Title'), ('description', 'My todo content.')])

>>> serializer.save()

<Todo: My Todo Title>

* Now we will use views.py to communicate with the serializers.
* Note in normal Django MVT, the views are used for rendering the html, but for using Django REST, it is used for responding to REST protocols.

Text

Description automatically generated

Text

Description automatically generated

Text

Description automatically generated