# **DJANGO READING PLAN**

Timeline: 20 days+:

* Django : 13 days
* Tastypie API framework : 5 days
* Unittest: 2 days
* Big Practice

**I. Django Document:** [**https://docs.djangoproject.com/en/1.11/**](https://docs.djangoproject.com/en/1.11/) **(13 days)**

Environment:

* Django 1.11
* Python 3.6
* Flake8 🡪 báo lỗi runtime(giống eclipse, 1 tiến trình chạy code đang viết,,, sau 1 time xác định do mình set)
  + Sublime text: <https://github.com/dreadatour/Flake8Lint>
  + VSCode: <https://github.com/DonJayamanne/pythonVSCode/wiki/Linting#flake8>
* Pylint☹báo lỗi chi tiết hơn, phải cài
  + Sublime text: <https://packagecontrol.io/packages/Pylinter>
  + VSCode: <https://github.com/DonJayamanne/pythonVSCode/wiki/Linting#pylint>

### **Chapter 1: First steps(Overview | Installation)**

Practice:

Follow step to create first Django project

**Chapter 2: The model layer**

Focus on: Models, QuerySet, Models Instance, Migrations

Practice:

* Create some models have relations together  
  E.g : Product and Category, Product and Order
* Make migrations and data migration for models
* Use Python shell to make queries and lookup expressions

**Advanced, Other**

Practice:

* Create a custom Manager that only get products have quantity > 5
* Create a custom QuerySet that only get products with Category = “Car”
* Try to use Raw SQL to get products with Category = “Car”
* Try to use Aggregation to calculator with quantity and price of product

**Chapter 3: The view layer**

The basics, Reference, Class-based views, Models Instance

Working with View functions, Display Views, Edit Views

**File uploads, Middleware**

**Chapter 4: The template layer**

* The basics of creating dynamic Web pages with Django
* Working with template system of Django

**Chapter 5: Form**

#### Practice:

* Use django form and validation for input data
  + Allow user input Product
  + Allow user see list of Product
  + Validate empty product name

**Chapter 7: The admin**

* Explains functionality: Django’s database layer
* Django’s automatic admin interface

**Chapter 8: Security**

**II. Tastypie API: Webservice API framework for Django(5 days):** <http://django-tastypie.readthedocs.org/en/latest/index.html>

**III. Django Unittest: (2 day)**

* Django-nose and Coverage: <http://django-nose.readthedocs.io/en/latest/usage.html>