**Lab 3 Django**

Andrea Murphy

Project Log for: django/week3

**Subject**: Python and Django

**Purpose**: Become familiar with Django apps, models, the admin panel, and query sets

**Description**: In this lab we will add dynamic data to our resume page. Using Django models, create a new app, called “resume”, link the **ROOT\_URLCONF** to the **apps.urls**, create two models, add data to our database, and display the data to the user using a template.

**Starting point:**

The project is the codebase you have in

**~/workspace/django/week2**

Make a copy of

**~/workspace/django/week2** to **~/workspace/django/week3**

with

**$ cp -r week2 week3**   #You must be in ~/workspace/Django

Use

**$ git** **status** #to confirm that all the new directories

**~/workspace/django/week3** #are untracked

Use

**git add --all** and **git commit -m 'start week3 Django project'**

#to document your new Django project setup

**Details**

1. App: “resume”
   * Create a new app that is named “resume”
   * add “resume” to your installed\_apps in **settings.py**

INSTALLED\_APPS = [

'django.contrib.admin',

'django.contrib.auth',

'django.contrib.contenttypes',

'django.contrib.sessions',

'django.contrib.messages',

'django.contrib.staticfiles',

'resume',

]

1. Create Models.py
   * Experience Model

class Experience(models.Model):

"""

Model (DB layer) for Andrea Murphy professional work experience

"""

company = models.CharField(max\_length=40)

title = models.CharField(max\_length=40)

location = models.CharField(max\_length=40)

start\_date = models.DateField()

end\_date = models.DateField()

description = models.TextField()

def \_\_str\_\_(self):

return self.company

* + Education Model

class Education(models.Model):

"""

Model (DB layer) for Andrea Murphy's education records

"""

institution\_name = models.CharField(max\_length=40)

location = models.CharField(max\_length=40)

degree = models.CharField(max\_length=40)

major = models.CharField(max\_length=40)

gpa = models.FloatField(max\_length=40)

def \_\_str\_\_(self):

return self.title

1. Django Shell
   * Launch the shell using-

(805-env) Andreas-MacBook-Pro:week3 $ python3 manage.py shell

* + Import your models from command line-

>>>from resume.models import Education

new\_education = Education(institution\_name=”UNH”, location=”Manchester, NH”, degree="Masters of Science ", major=”IT”, gpa=3.8, name=”Education”)

>>>new\_education.save() #must save at each new entry

new\_education = Education(institution\_name=”VCU”, location= “Richmond,VA”, degree= “Bachelor of Science”,major=”Business Marketing”, gpa=3.5, name=”Education”)

>>>new\_education.save()

>>>from resume.models import Experience

new\_experience = Experience(company= "Three Owl Design", title= "Founder and Principal Operator", location="New Boston, NH", start\_date= '2015-05-01', end\_date= '2018-02-01', description=" Communications and Cross-functional Virtual Marketing Manager, Web and Graphic Designer", name = “Experience”)

>>>new\_experience.save()

new\_experience = Experience(company= “Canvas on the Road”, title= “Owner and Principal Art Teacher”, location=”New Hampshire”, start\_date= ‘2016-11-01’, end\_date= ‘2018-02-01’, description=”Operations management and, marketing graphic and web design, teach varies types of art classes”, name = “Experience”)

>>>new\_experience.save()

new\_experience = Experience(company= “Dawkins Productions”, title= “Marketing Director”, location=”Richmond, VA”, start\_date= ‘2014-04-01’, end\_date= ‘2015-05-01’, description=”Operations management, social marketing planning and execution, graphic and web design, intern program manager”, name = “Experience”)

>>>new\_experience.save()

new\_experience = Experience(company= “Perfect Harmony”, title= “Owner and Principal Operator”, location=”Richmond, VA”, start\_date= ‘2008-05-01’, end\_date= ‘2015-09-01’, description=”Operations management and, marketing graphic and web design, therapeutic massages with ROM, and chiropractic care”, name = “Experience”)

>>>new\_experience.save()

* + Confirm the objects were saved by using query sets

>>>education\_queryset = Education.objects.all()

1. Admin Panel
   * Register these models with the admin panel in (**resume/admin.py** module)

from django.contrib import admin

from django.contrib import admin

from .models import Education, Experience

class EducationAdmin(admin.ModelAdmin):

pass

class ExperienceAdmin(admin.ModelAdmin):

pass

admin.site.register(Education, EducationAdmin)

admin.site.register(Experience, ExperienceAdmin)

* + Confirm all your entries were saved by viewing them in the admin panel

1. Urls-Views-Templates:

**URLS**

**resume/urls.py**

urlpatterns = [

path('', views.index, name='index'),

]

**portfolioplus/urls.py**

#Use include( ) function from django.conf.urls in your call to path( )

path(r'resume/', include('resume.urls' , namespace = 'resume')),

* + - Create a new path that will correspond to a new view

**resume/views.py**

def index(request):

"""

Renders the Resume app home template

Context: Education in query set

Returns: 'resume/home.html'

"""

qs1 = Education.objects.all()

qs2 = Experience.objects.all()

context = {'new\_education':qs1, 'new\_experience': qs2 }

return render(request, 'resume/home.html', context)

**Template:**

**resume/home.html**

{% extends 'base.html' %}

{% block content %}

<div class='resume-banner'>

<h1>Andrea Murphy</h1>

<hr>

<div class='resume-content'>

{% if new\_education %}

<ul>

{% for Education in new\_education %}

<li>{{ Education.institution\_name }}</a>

<li>{{ Education.location }}</li>

<li>{{ Education.degree }}</li>

<li>{{ Education.major }}</li>

<li>{{ Education.gpa }}</li>

{% endfor %}

</ul>

{% else %}

<h1>Contact an Admin!</h1>

{% endif %}

{% if new\_experience %}

<ul>

{% for Experience in new\_experience %}

<li>{{Experience.company}}</li>

<li>{{Experience.title}}</li>

<li>{{Experience.location}}</li>

<li>{{Experience.start\_date}}</li>

<li>{{Experience.end\_date}}</li>

<li>{{Experience.description}}</li>

{% endfor %}

</ul>

{% else %}

<h1>Contact an Admin!</h1>

{% endif %}

{% endblock %}

</div>

</div>