MIT AITI Python Software Development



Lab 02: Models

In this lab, we will set up the models and data for a blog. In Lab 1, we did the models, views, and templates at once, but in the next several labs, we will be focusing on each part individually. In larger projects, this is how things will often work – one person will do models, one will do views, and another will do the templates. A designer doesn't need to worry about the database, and the database designer doesn't need to worry about the display style.

If you get confused, look at the resources available to you:

- 1. Lecture slides
- 2. Lab 01
- 3. Other group members
- 4. Django documentation
 - a. Models: https://docs.djangoproject.com/en/1.3/topics/db/models/
 - b. Field reference: https://docs.djangoproject.com/en/1.3/ref/models/fields/
- 5. Google
- 6. Instructors

```
1. Create a new project called "myblog"
  $ cd ~/Desktop
  $ django-admin.py startproject myblog
  $ cd myblog
```

2. Edit your settings.py file and fill in these variables:

```
DATABASES = {
     ...
     'ENGINE': 'django.db.backends.sqlite3',
     'NAME': 'blog.db',
     ...
}
...
TIME_ZONE = 'Asia/Colombo'
```

3. Create a new application:

```
$ django-admin.py startapp blog
$ cd blog
```

- 4. Edit the models file and create two models
 - a. Blog:
 - i. title (60 characters)
 - ii. body (large text)

```
iii. created (date created)
           iv. updated (date updated)
      b. Comment:
            i. body (large text)
            ii. author (60 characters)
           iii. created (date created)
           iv. updated (date updated)
           v. post (foreign key linking Comment to Blog)
5. Configure your django project to allow the built-in admin
      a. Open settings.py and change the installed app setting:
         INSTALLED APPS= (
              'blog',
              'django.contrib.admin',
         )
      b. Open urls.py and uncomment the admin lines:
         from django.contrib import admin
         admin.autodiscover()
         urlpatterns = patterns('',
              url(r'^admin/', include(admin.site.urls)),
```

- 6. Create a file admin.py in the blog directory. Add admin information to this file
 - a. At the top of your admin.py, add:

```
from django.contrib import admin
from blog.models import Blog
```

- b. At the end of your admin.py, add:
 admin.site.register(Blog)
- 7. Update the database and start the server
 - \$ python manage.py syncdb
 - \$ python manage.py runserver
- 8. Go to admin and add posts http://localhost:8000/admin