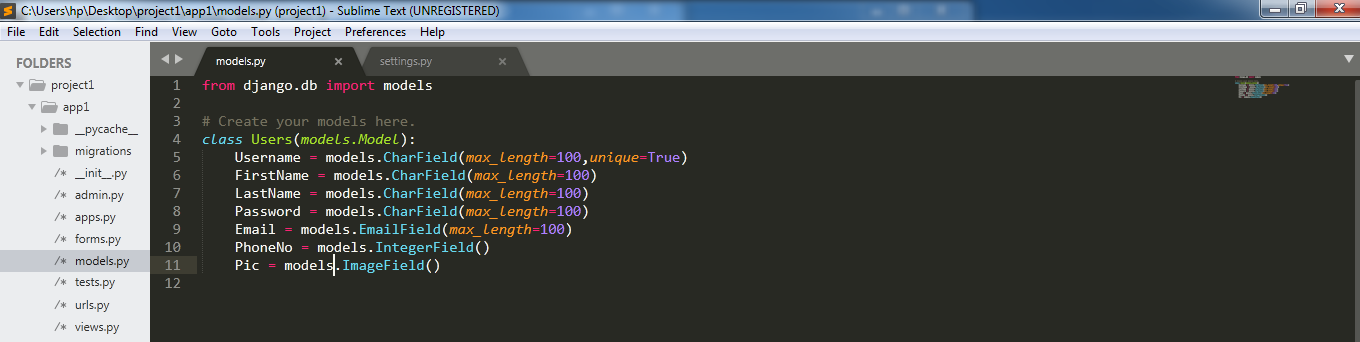
Models

A model is the single, definitive source of information about your data. It contains the essential fields and behaviors of the data you’re storing. Generally, each model maps to a single database table.

The basics:

* Each model is a Python class that subclasses **[django.db.models.Model](https://docs.djangoproject.com/en/2.1/ref/models/instances/" \l "django.db.models.Model" \o "django.db.models.Model)**.
* Each attribute of the model represents a database field.



‘Unique = True’ is used to make that field as a primary key

**Username,FirstName** ,**LastName,Password,Email,PhoneNo and Pic** are [fields](https://docs.djangoproject.com/en/2.1/topics/db/models/#fields) of the model. Each field is specified as a class attribute, and each attribute maps to a database column.

2. To connect to mysql server ‘mysqlclient’ package should be installed. Use following command to insall mysqlclient.

Python -m pip install mysqlclient.

To use mysql database the database is to created in mysql server using the following command:

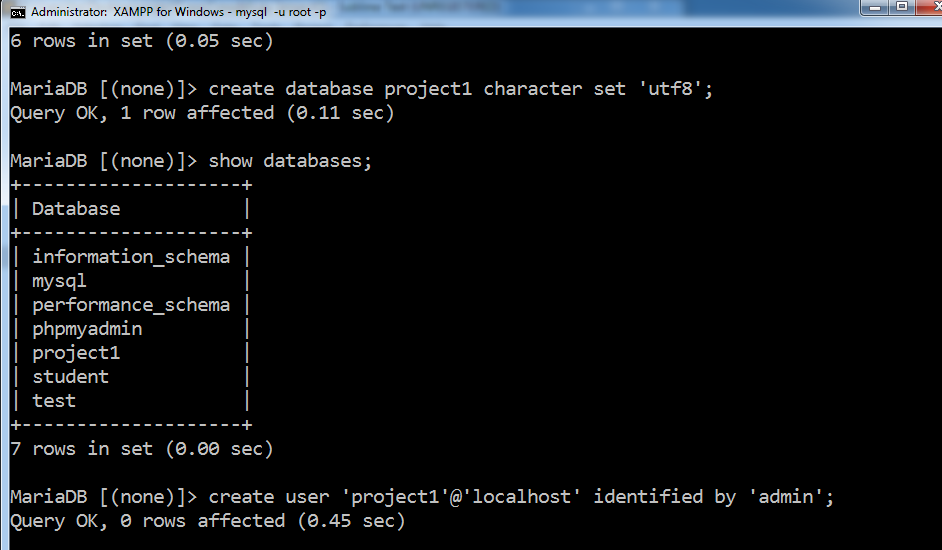
Create database ‘databasename’ character set ‘utf8’;

e.g create database ‘project1’ character set ‘utf8’;

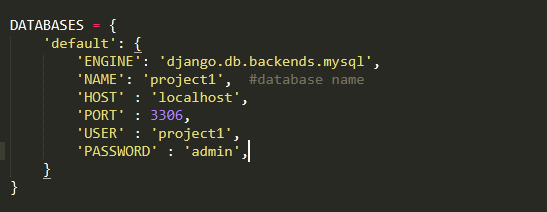
Then create user using command:

Create user ‘username’@’hostname’ identified by ‘password’;

Create user ‘project1’@’localhost’ identified by ‘project1’;



3. Then to use mysql server the following configurations has to be done in project1.settings



Key ‘NAME’ consists of database name.

4. The migrations have to be done to create table in our database. Without migrations the model which we have created in models.py will not be converted into database table. The following migrations are made:

a. python manage.py makemigrations

(this will create a file in ‘migrations’ folder)

b. python manage.py sqlmigrate ‘app\_name’ ‘file\_name’

(app\_name is the name of app for which you are doing migrations and under which the file was created when first migration was done and file\_name is the name of that file.)

Suppose the app\_name is ‘app1’ and file\_name is ‘0001’

Then the command will be :

Python manage.py sqlmigrate app1 0001

c. The third and final migration is as follows:

python manage.py migrate

5. After these migrations the table will be created in our database with name ‘app1\_users’ if the model is in our app1 and ‘users’ if the class name is ‘users’.

6. After the table creation all queries can be done using mysql commands.

7. To have admin panel the following url is requested:

‘localhost/admin’

In admin panel it will ask for username and password for further login. So to create superuser following command is executed:

Python manage.py createsuperuser

Username : admin

Email : admin@gmail.com

Password : admin123

Using this username and password admin can login.

8. User can be added or deleted graphically using admin login or using database commands or automatically using script.