



#Database Engines

`django.db.backends.postgresql`

`django.db.backends.mysql`

`django.db.backends.sqlite3`

`django.db.backends.oracle`

#Example configuration in settings.py

```
DATABASES = {  
    'default': {  
        'ENGINE': 'django.db.backends.mysql',  
        'NAME': 'databasename',  
        'USER': 'username',  
        'PASSWORD': 'password',  
        'HOST': '127.0.0.1',  
        'PORT': '5432',  
    }  
}
```

#Model Fields

`BooleanField`
`CharField`
`DateField`
`DateTimeField`
`DecimalField`
`EmailField`
`FileField`
`FloatField`
`ImageField`
`IntegerField`
`TextField`

#Relationship Fields

`ForeignKey`
`ManyToManyField`

#Example Model

```
from django.db import models  
from django.utils import timezone  
  
class Make(models.Model):  
    name = models.CharField(max_length=15)  
    factory_address = models.TextField()  
    email = models.EmailField()  
  
    def __str__(self):  
        return self.name  
  
class Car(models.Model):  
    name = models.CharField(max_length=20)  
    active = BooleanField()  
    date_added = DateTimeField(default=timezone.now)  
    price = FloatField()  
    make = models.ForeignKey(Make)  
  
    def __str__(self):  
        return self.name
```

#Create Objects

```
from .models import Make, Car  
  
toyota = Make(name='Toyota', factory_address='Somewhere in Japan...',  
              email='toyota@toyota.com')  
toyota.save()  
  
camry = Car(name='Camry', active=True, price=29999.99, make=toyota)  
camry.save()
```

#Example Queries

```
Car.objects.get(pk=1) #get car with primary key = 1  
Make.objects.all()  
Car.objects.filter(name='Camry')  
Make.objects.all()[5:10] #offset 5, limit 10  
Car.objects.order_by('name')  
Make.objects.filter(name__startswith='Toy')  
Car.objects.filter(make__name='Toyota') #relationship query
```

#Useful Links

Django Website - <https://www.djangoproject.com>

Pretty Printed Website - <http://prettyprinted.com>

Pretty Pretty YouTube Channel -
<https://www.youtube.com/c/prettyprintedtutorials>