

Model Relationships

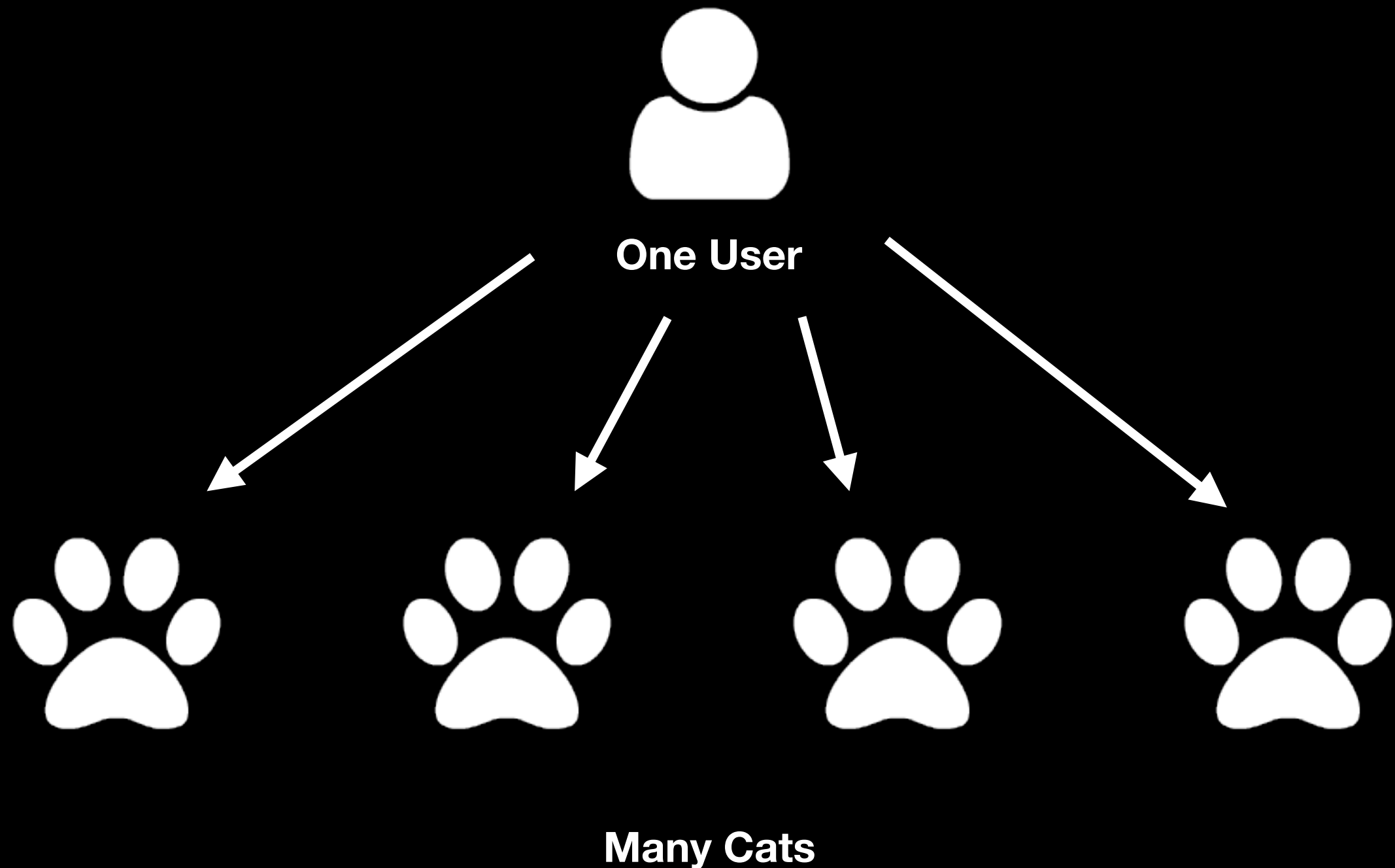
Creating the Owner Model

```
from django.db import models

class Owner(models.Model):
    name = models.CharField(max_length=100)
    last_name = models.CharField(max_length=100)
    age = models.IntegerField()
```

Owner			
id	name	las_name	age

One to Many / Many to One



Who is your owner?

```
from django.db import models
from . import Owner
```

```
class Cat(models.Model):
    name = models.CharField(max_length=30)
    breed = models.CharField(max_length=20)
    grumpy = models.BooleanField(default=False)
    owner = models.ForeignKey(Owner, null=True)
```

Cat				
id	name	breed	grumpy	owner
2	Mr. Bunns	British	FALSE	null
3	Conrad	Siamese	FALSE	null
4	Shishi	British	FALSE	null
5	Conrad	Persian	FALSE	null

```
nicolas = Owner.objects.create(  
    name="Nicolas",  
    last_name="Serrano",  
    age=78  
)
```

Owner			
id	name	las_name	age
1	Nicolas	Serrano	78

```
bunns = Cat.objects.get(id=2)
```

Cat

id	name	breed	grumpy	owner
2	Mr. Bunns	British	FALSE	null
3	Conrad	Siamese	FALSE	null
4	Shishi	British	FALSE	null
5	Conrad	Persian	FALSE	null

```
nicolas = Owner.objects.create(  
    name="Nicolas",  
    last_name="Serrano",  
    age=78  
)
```

```
bunns = Cat.objects.get(id=2)
```

```
bunns.owner = nicolas
```

```
bunns.save()
```


Cat

id	name	breed	grumpy	owner
2	Mr. Bunn	British	FALSE	1
3	Conrad	Siamese	FALSE	null
4	Shishi	British	FALSE	null
5	Conrad	Persian	FALSE	null

Owner

id	name	las_name	age
1	Nicolas	Serrano	78

```
bunns = Cat.objects.get(id=2)

print(bunns.breed)
```

Cat				
id	name	breed	grumpy	owner
2	Mr. Bunns	British	FALSE	1
3	Conrad	Siamese	FALSE	null
4	Shishi	British	FALSE	null
5	Conrad	Persian	FALSE	null

```
bunns = Cat.objects.get(id=2)
print(bunns.owner.age)
```

Owner			
id	name	las_name	age
1	Nicolas	Serrano	78

Getting related objects

Get nicolas' cats!

Django _set

- Automagically groups all the related objects into a property.
- To call all the objects related to the owner all we have to do is call 'modelName_set'
- For the cat model it would be cat_set

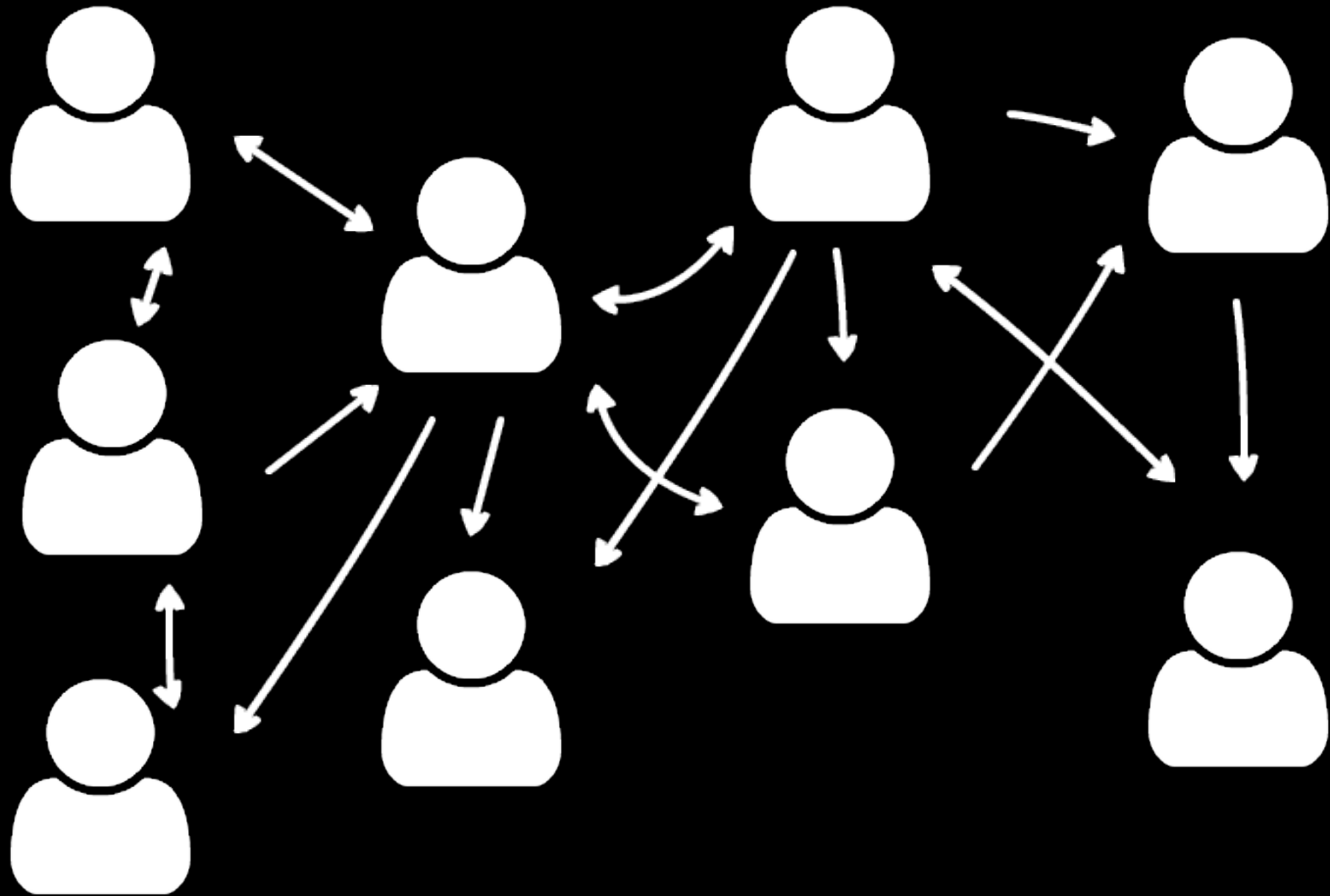
```
nicolas = Owner.objects.get(pk=1)
```

```
nico_cats = nicolas.cat_set.all()
```

Owner					
id	name	las_name	age	following	followers
1	Nicolas	Serrano	78		

Cat				
id	name	breed	grumpy	owner
2	Mr. Bunns	British	FALSE	1
3	Conrad	Siamese	FALSE	1
4	Shishi	British	FALSE	null
5	Conrad	Persian	FALSE	null

Many To Many



Many Users Follow Many Users

```

from django.db import models

class Owner(models.Model):
    name = models.CharField(max_length=100)
    last_name = models.CharField(max_length=100)
    age = models.IntegerField()
    following = models.ManyToManyField('self')
    followers = models.ManyToManyField('self')

```

Owner					
id	name	las_name	age	following	followers
1	Nicolas	Serrano	78		

Following Users

Owner

id	name	las_name	age	following	followers
1	Nicolas	Serrano	78		
2	Pedro	Gomez	44		
3	Jisu	Kimchi	12		
4	Niccolò	Machiavelli	44		

```
nicolas = Owner.objects.get(pk=1)
```

```
pedro = Owner.objects.get(pk=2)
```

```
jisu = Owner.objects.get(pk=3)
```

Owner					
id	name	las_name	age	following	followers
1	Nicolas	Serrano	78		
2	Pedro	Gomez	44		
3	Jisu	Kimchi	12		

```
nicolas.followers.add(jisu, pedro)
```

Owner					
id	name	las_name	age	following	followers
1	Nicolas	Serrano	78		2,3
2	Pedro	Gomez	44		
3	Jisu	Kimchi	12		
4	Niccolò	Machiavelli	44		