

ADMIN:

```
python manage.py createsuperuser
```

```
admin.site.register(Skill)
```

MODEL AND DB:

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

- make a class by inheritance from `model.Model` (use Model blocks in vscode) in `model.py` in our app and put fields we want and its type:

```
IntegerField, CharField, BooleanField, TextField
```

and some parameters:

```
IntegerField(validators=[MinValueValidator(18), MaxValueValidator(50)])
```

```
-> from django.core.validators import MinValueValidator, MaxValueValidator
```

```
CharField(max_length=50, db_index=True)
```

```
EmailField(max_length=254, null=True, blank=True, default="blabla")
```

خالی بودن رشته خالی بودن فیلد در دیتابیس

- `python manage.py makemigrations`: initialize migrates -> changing

- `python manage.py migrate`: execute and set my table in `db.sqlite3` -> changing

-> class Meta:

```
verbose_name = "Skill"
```

->+override `__str__`

-now I can make an object from my model : `person1= Person(name="ali", age=10)` |

for save it to db: `person1.save()` | or `Person.objects.create(name="ali")`

some important methodes:

```
Person.objects.all()
```

```
Person.objects.get(name="ali")
```

****use it in try becaus if there are no one(except) return 404**

```
Person.objects.filter(name="ali") Person.objects.filer(age__gt=10)
```

```
.filter(age__lt=10, weight__gt=60)
```

-> or filter:

->more abilitis:

```
from django.db.models import Sum, Avg, Min, Max
```

```
Developer.objects.aggregate(.....)
```

-most imprtant one: relations:

one to one: define a field in one of them(rather in one that has another):

```
x= models.OneToOneField(Projects,on_delete=models.CASCADE)
```

other model all on_delete:

to access to related model fields just use it's name: Skill.x.all() and x.skill.all()

****related_name:**

one to many: define a field in **کوچولوئه، منظورم از کوچولوئه اینه که تنها یک نفر داره اما اون یک نفر داره یه سرپرست داره اما اون سرپرست میتونه چند تا داشته باشه**

developer= models.ForeignKey(Developer, on_delete=models.CASCADE)

to access: Skill.developer.name and Developer.skill-set.all

to add: skill1=Skill(name="english")

skill1.developer=developr1 automatic it adds to developer1 to

many to many: define a field in one of them(rather in one that has another):

projects=models.ManyToManyField(Projects)

to access: developer1.projects.all() and projects1.developer_set.all()

to add: developer1.projects.add(folan) and projects1.developer_set.add(bahman)

*dont forget first save all in db then relate together in this one.

FORM:

we have 3 ways to create form:

1- manual form:

based on front, in html in form with POST methode we get attribute we want.

but not recommended.

2- django form:

first we create form.py in our app. then like the picture we make a class and inheritance from "forms.Form"

then we put our attribute we want.

in views.py we import form.py. like picture, we have to modes:

get: just make an object of this form and send it to template.

post: make an object of form with "request.POST" constructor.

then if it was valid: we extract data and access it like dictionary

and we can use it like put in database.

at last I can send it to template like any variable I had.

in template:

in form tag, with POST methode(and don't forget csrf_token token)

then I put the _form like any variable I had.

at last put a button with "submit" type.

it's too good because error handling and order.

3-form model: (put form data directly in model)

in next section.

+manage.py shell

+plug methods: