



3PILLAR

GLOBAL

Python in Web Development

Recap

- Model
- QuerySet & Manager

LAB 9

Django Admin & Commands

AGENDA

- Django Admin
- Django Management Commands
- Django Forms

Admin

- **Django Admin**
 - Quick and dirty way to edit content
 - Works based on Model definitions
 - Super-fast-easy to config behaviour
 - Inlines - handy for related data

Example

```
class QuestionAdmin(admin.ModelAdmin):  
    list_fields = ('question_text', )  
    class Meta:  
        model = Question  
  
# admin.site.register(Question)  
admin.site.register(Question, QuestionAdmin)
```

Management Commands

- Similar to
 - `python manage.py dumpdata`
 - `python manage.py loaddata`
 - `python manage.py appcommand`
- Used to do special actions: generate reports...

Example command

```
class Command(BaseCommand):  
    def add_arguments(self, parser):  
        parser.add_argument('arg_id', nargs='+', type=int)  
  
    def handle(self, *args, **options):  
        generate_reports()
```


Django Forms

- Essential for input data validation
- Displays errors related to fields and form
- Able to render itself based on field widget types
- Can be auto-generated using ModelForms
- Used by Admin for content editing
- Essentially has some accessors:
 - `is_valid`
 - `clean_<fieldname>`
 - `clean`
 - `errors`
 - `validated_data`

Django ModelForm

```
class QuestionModelForm(ModelForm):  
    class Meta:  
        model = Question  
        fields = '__all__' # or ('question_text', 'votes')  
  
# usecase  
  
f = QuestionModelForm({'question_text': 'What is the  
meaning of life?', 'votes': 42})  
f.is_valid() # True or False; then we have .errors  
f.save()     # ORM magic!  
f.instance   # we now have an instance yay!
```

Quiz time :)

<https://goo.gl/forms/fnAY6hcfDZjPnG9j2>

Thank you!