Web Programming
with Python and JavaScript

Django

```
django-admin startproject projectname
```

Project Components

- `__init__.py`
- `manage.py`
- `settings.py`
- `urls.py`
- `wsgi.py`
- `project_name/`

manage.py

manage.py Commmands

- startapp

- makemigrations

- sqlmigrate

- migrate

- shell

- createsuperuser

- ...

```
python manage.py startapp appname
```

App Components

- `admin.py`

- `apps.py`

- `migrations/`

- `models.py`

- `tests.py`

- `views.py`

Model Fields

- `models.BooleanField`
- `models.CharField`
- `models.DateField`
- `models.DecimalField`
- `models.IntegerField`
- `models.TextField`
- `...`

on_delete

- CASCADE

- PROTECT

- SET_NULL

- ...

Model Fields for Relationships

- `models.ForeignKey`

- `models.ManyToManyField`

- `models.OneToOneField`

Migrations

Django Admin

Authentication

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