



Web programming with Django

Roadmap

Django, first steps

Creating a virtual environment with venv

Installing Django in the virtual environment

Creating a project with django-admin (event_manager)

Explore the file structure of a project

Django settings

manage.py - The Django management tool

Django Apps

Introduction

first App „events“

Model-View-Template Pattern VS. MVC-Pattern

URLs in Django (Url-Resolver)

a first View

the Django Development server (runserver)

A large, abstract blue ink splash or watercolor blotch on the left side of the slide, with various shades of blue and some white speckles.

Request und
Response

Django Request
Objekt

Django
Response Objekt



App Events

We are creating the events app within the event_manager project. This is an event management application.

Models, querysets, templates and the administration interface of Django are explained using this project.

Models

What is a model in the Django context?

Model and database tables

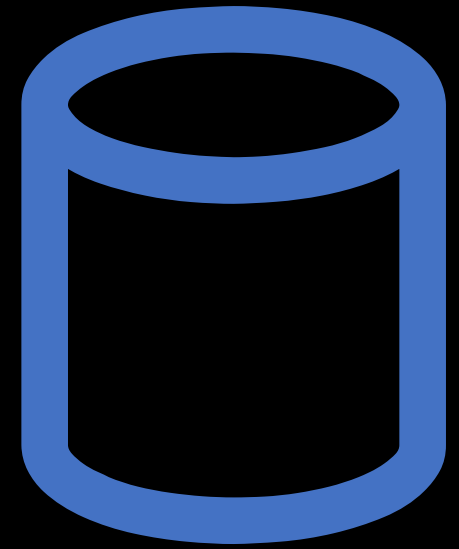
Model fields

Create a model

Create migrations

What exactly are migrations?

Migrate database



Model API

the model manager

objects

the object relation mapper

the Django shell

create objects

request objects with `all()`

store objects

develop your own manager

Querysets

Filter Objects

Inspect SQL

Queryset-Methods



Administrationsoberfläche

create superuser

the Django admin interface

show own models

user administration

Permission management based on
models



Django Template- System

What are Templates?

Save Templates

Django Template-Language

Templates Inheritance

Forms

Create forms in HTML

The Models.Forms class

The essence of an HTML form

The POST method

Processing form data

Validation of user input

Crispy forms





Web API with the Django Restframework entwickeln

Anhand des gelernten Wissens
entwickeln wir gemeinsam eine Api:

The Django Rest Framework

Serialization

Viewsets

Routing & Validators