Django

The Web framework for perfectionists with deadlines

What is Django?

Django is a web framework written in Python that enables rapid development of web applications.

Django Reinhardt, a famous French jazz musician, was the inspiration for the name. Jazz musician, stood godfather for the name.

The further development of Django is ensured by the Django Software Foundation.

History

Founded in 2003 as management software for the online newspaper Lawrence Journal World.

In 2005 Django was released under the BSD license.In 2008, the Django brand was transferred to the Django Software Foundation.

The Django Software Foundation takes care of the further development of Django, the promotion of its use, the protection of intellectual property and generally the advancement in web development.

Django Features

support for Postgres, Mysql, Oracle, SQLite databases

automatically generated administration interface

flexible URL design

template language supporting inheritance

internationalization

security, Cross Site Request Forgery, SQL Injections, Header Poisoning

caching

authentication, permissions, User Management

and much more

Model View Template

Django implements the model-view-controller pattern as a model-view-template pattern.

the logic of the individual areas is separated in the persistence level (model), the presentation layer (the template) and the application level (the View).
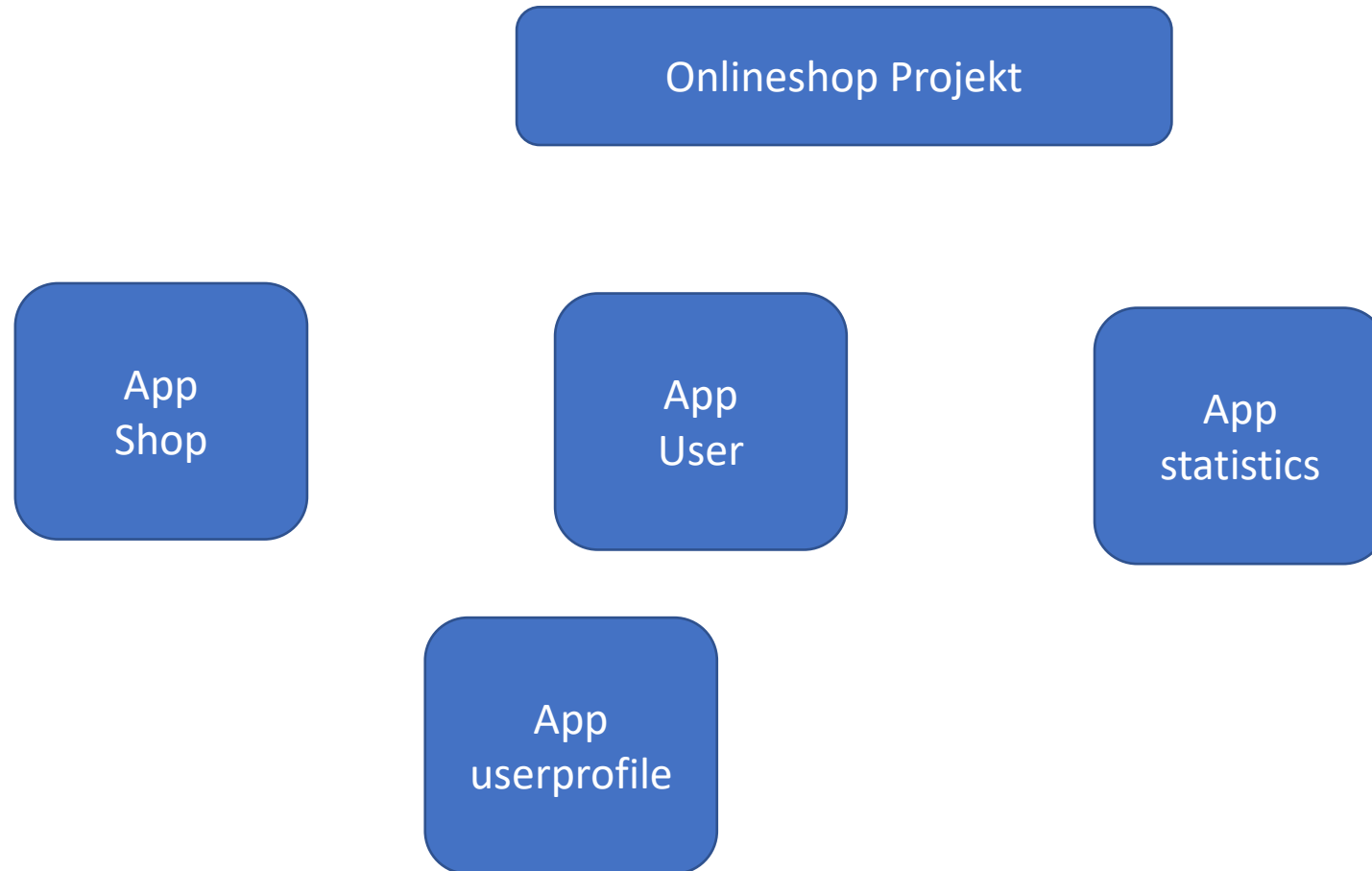
a django project

The most fundamental unit of a Django web application (aka website) is the Django Project. A Django project hosts at least one, but usually several Django apps.

To create a new django project, just startproject with django-admin:

django-admin startproject my_first_project

Django structure

Django is based on so-called (reusable) apps. A project, for example an online store that can be reached at www.myshop.de, consists of many apps.

Onlineshop Projekt

App
Shop

App
User

App
statistics

App
userprofile

What is a Django App?

A Django app is a Python package that should have only one task. For example a blog-system could be a Django app or a user profile.

Apps can be reusable. They don't have to be.

Each app has different functions, so called Views. Those views can be addressed via URLs.

Django URLconf

To connect client-side requests with functions of the framework, Django processes the URLs. The technology behind this is called URLconf.

the URL-Path of this Url.

http://127.0.0.1/my_first_app/first

has to be resolved by Django

Overview