Creating Django Models

Spoken Tutorial Project
http://spoken-tutorial.org
FOSSEE project
http://fossee.in
National Mission on Education through ICT
http://sakshat.ac.in

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In this tutorial, we will learn to

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- **Create a** `blog app`

Learning Objectives

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In this tutorial, we will learn to

- **Create a** `blog app`
- **Initialize a** `Django app`
- **Create a** `Django model`
- **Perform** `Database` **migration**

System Requirements

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- **Python 3.4-venv or higher**

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- gedit Text Editor

To follow this tutorial, you need to know

Pre-requisites

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- **How to create a** `Django project`

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To follow this tutorial, you need to know

- **How to create a** `Django` `project`
- **If not, then please go through the pre-requisite tutorials in this series http://spoken-tutorial.org**

Django App

- **A** `Django project` **typically contains one or more** `apps`

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Django App

- **A** `Django project` **typically contains one or more** `apps`
- **A** `Django app` **performs a particular task**
- **A** `Django app` **will have one or more** `models`

What is a Django Model?

A `Django model` **is a simple** `Python class`

What is a Django Model?

- **A** `Model class` **represents a** `database table`

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- **A** `Model class` **represents a** `database table`
- **A** `Model attribute` **represents a** `table field` **(each column in the** `table`**)**

What is a Django Model?

- **A** `Model class` **represents a** `database table`

- **A** `Model attribute` **represents a** `table field` **(each column in the** `table`**)**

- **We write** `Django models` **in the** `models.py` **file**

Creating Django Models for blog app

- **We will create two models** `Blog` **and** `Article`

The `Blog model` **will have 2 fields**

Creating Django Models for blog app

The `Blog model` **will have 2 fields**

  ▶ `name`

Creating Django Models for blog app

The `Blog model` **will have 2 fields**

- `name`
- `created_on`

The `Article model` **will have 5 fields**

Creating Django Models for blog app

The `Article model` **will have 5 fields**

- `blog`

Creating Django Models for blog app

The `Article model` will have 5 fields

- `blog`
- `created_on`

The `Article model` **will have 5 fields**

- ▶ `blog`
- ▶ `created_on`
- ▶ `title`

Creating Django Models for blog app

The `Article model` **will have 5 fields**

- `blog`
- `created_on`
- `title`
- `body`

Creating Django Models for blog app

The `Article model` **will have 5 fields**

- `blog`
- `created_on`
- `title`
- `body`
- `draft`

File structure

`startapp` **command creates a project consisting of a file structure as shown here**

blog/
    init.py
    admin.py
    apps.py
    migrations/
        init.py
    models.py
    tests.py
    views.py

Summary

In this tutorial, we have learnt to

- **Create a** `blog app`
- **Initialize a** `Django app`
- **Create a** `Django Model`
- **Perform** `Database` **migration**

Assignment

- **Create** `models` **under** `blog app` **in** `demo_project`
- **Perform** `database` **migrations for the** `models` **created**

About Spoken Tutorial project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial

- It summarises the Spoken Tutorial project

- If you do not have good bandwidth, you can download and watch it

Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ **Conducts workshops using spoken tutorials**

- ▶ **Gives certificates to those who pass an online test**

- ▶ **For more details, please write to contact@spoken-tutorial.org**

Forum for specific questions:

- **Do you have questions in THIS Spoken Tutorial?**
- **Please visit http://forums.spoken-tutorial.org**
- **Choose the minute and second where you have the question**
- **Explain your question briefly**
- **Someone from our team will answer them**

Forum to answer questions

- **Questions not related to the Spoken Tutorial?**
- **Do you have general/technical questions on the Software?**
- **Please visit the FOSSEE Forum**
  http://forums.fossee.in/
- **Choose the Software and post your question.**

Acknowledgement

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- ▶ **National Mission on Education through ICT, MHRD, Government of India**

- ▶ **More information on this Mission is available at http://spoken-tutorial.org /NMEICT-Intro**

Thank you

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  https://fossee.in/

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