

Getting started with Django

Spoken Tutorial Project

<http://spoken-tutorial.org>

FOSSEE project

<http://fossee.in>

National Mission on Education through ICT

<http://sakshat.ac.in>

**Script: Thiagarajar College of Engineering
& FOSSEE project**

Video : Praveen S, IIT Bombay



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Learning Objectives

In this tutorial, we will learn



Learning Objectives

In this tutorial, we will learn

- **About** Python Virtual Environment



Learning Objectives

In this tutorial, we will learn

- ▶ **About** Python Virtual Environment
- ▶ **How to use the** Virtual Environment



Learning Objectives

In this tutorial, we will learn

- **How to install Django**



Learning Objectives

In this tutorial, we will learn

- ▶ **How to install** Django
- ▶ **How to start a** Django project



Learning Objectives

In this tutorial, we will learn

- ▶ **How to install Django**
- ▶ **How to start a Django project**
- ▶ **The Django project file structure**



System Requirements



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- ## ► Ubuntu Linux 16.04 OS



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- ▶ **Python 3.5**



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- ▶ **Python 3.5**
- ▶ **Python 3.4-venv or higher**



Python Virtual Environment

- Python virtual environment is an isolated working copy of Python



Python Virtual Environment

- ▶ Python virtual environment **is an isolated working copy of Python**
- ▶ `virtualenv` **is a tool to create an isolated** Python environment



Python Virtual Environment

- It allows us to work on a specific Django project **without affecting other** projects



Python Virtual Environment

- ▶ **It allows us to work on a specific Django project without affecting other projects**
- ▶ **It does not require root access**



- One can install, upgrade and remove Python packages using a program called **pip**



- ▶ One can install, upgrade and remove Python packages using a program called **pip**
- ▶ By default, **pip** will install packages from the Python Package Index

<https://pypi.python.org/pypi>



What is a Django project?



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- **Settings for an instance of Django**



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 - ▶ Database **configuration**



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 - ▶ **Database configuration**
 - ▶ Django **specific options**



What is a Django project?

- A Django project is a collection of**
- ▶ **Settings for an instance of Django**
 - ▶ **Database configuration**
 - ▶ **Django specific options**
 - ▶ **Application specific settings**



File structure

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

```
mysite/  
  manage.py  
  mysite/  
    __init__.py  
    settings.py  
    urls.py  
    wsgi.py
```



Delete the virtual environment

- ▶ **If the virtual environment is no longer needed, we can delete it**
- ▶ **This is done by deleting its directory**



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```
rm -rf myapp_env
```



Summary

In this tutorial, we have learnt

- ▶ **About** Python Virtual Environment
- ▶ **How to use the** Virtual Environment



Summary

In this tutorial, we have learnt

- ▶ **How to install Django**
- ▶ **How to start a Django project**
- ▶ **The Django project file structure**



Assignment

- ▶ **Create a new** virtual environment
- ▶ **Activate it**
- ▶ **Install the latest version of** Django
- ▶ **Create a new** project **named** demo_project **under the same** virtual environment



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 for specific questions:

- ▶ **The Spoken Tutorial forum is for specific questions on this tutorial**
- ▶ **Please do not post unrelated and general questions on them**
- ▶ **This will help reduce the clutter**
- ▶ **With less clutter, we can use these discussion as instructional material**



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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- ▶ Thiagarajar College of Engineering
- ▶ FOSSEE Project, IIT Bombay
<https://fossee.in/>

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Tutorial Project, IIT Bombay

