

Overview and Installation of Git

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



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In this tutorial, we will learn about



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- ▶ **Version Control System**



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- ▶ **Git**



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In this tutorial, we will learn about

- ▶ **Version Control System**
- ▶ **Git**
- ▶ **Installation of Git on Ubuntu Linux and Windows operating systems**



System Requirements



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- ▶ **A working Internet connection**



System Requirements

- ▶ **A working Internet connection**
- ▶ **Ubuntu or Windows operating system**



Prerequisites



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You should be familiar with either of the mentioned operating systems



Version Control System (VCS)



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Version Control System (VCS)

- ▶ Backup system that manages changes to documents, computer programs, etc.
- ▶ Provides a historical record
- ▶ VCS is also known as revision control, source control and SCM
- ▶ Examples: RCS (Revision Control System), Subversion, Bazaar



Introduction to Git



Introduction to Git

- ▶ **A distributed version control software**



Introduction to Git

- ▶ **A distributed version control software**
- ▶ **Free and open source software**



Introduction to Git

- ▶ **A distributed version control software**
- ▶ **Free and open source software**
- ▶ **Keeps track of changes made to a file or set of files**



Introduction to Git

- ▶ **A distributed version control software**
- ▶ **Free and open source software**
- ▶ **Keeps track of changes made to a file or set of files**
- ▶ **Allows developers to work collaboratively**



Introduction to Git (continued)

- ▶ **Manages and stores versions of projects**



Introduction to Git (continued)

- ▶ **Manages and stores versions of projects**
- ▶ **Helps in tracking the project progress history**



Salient features of Git



Salient features of Git

- ▶ **Can go back and recover previous versions of our work**



Salient features of Git

- ▶ Can go back and recover previous versions of our work
- ▶ See the complete history of changes



Salient features of Git

- ▶ Can go back and recover previous versions of our work
- ▶ See the complete history of changes
- ▶ Conflicts can be easily resolved using suggestions



Salient features of Git

- ▶ Can go back and recover previous versions of our work
- ▶ See the complete history of changes
- ▶ Conflicts can be easily resolved using suggestions
- ▶ Any loss of data can be restored from any of the client repositories



Who can use Git?



Who can use Git?

- ▶ **Programmers, Web developers, Project managers, Writers and many others**



Who can use Git?

- ▶ **Programmers, Web developers, Project managers, Writers and many others**
- ▶ **Anyone working with text files, sheets, design files, drawings, etc., to track versions**



Who can use Git?

- ▶ **Programmers, Web developers, Project managers, Writers and many others**
- ▶ **Anyone working with text files, sheets, design files, drawings, etc., to track versions**
- ▶ **People who work collaboratively on an activity or project**



How Git works?

- ▶ **Git stores a snapshot of the entire project**



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- ▶ **If some files have no changes, Git does not store them again**



How Git works?

- ▶ Git stores a snapshot of the entire project
- ▶ If some files have no changes, Git does not store them again
- ▶ In the event of failure, the data is restored from the snapshot



Installation of Git

- ▶ Git can be installed on Ubuntu Linux using **Ubuntu Software Center**



Installation of Git

- ▶ Git can be installed on Ubuntu Linux using **Ubuntu Software Center**
- ▶ For more details on Ubuntu Software Center, refer to the Linux tutorials on <http://spoken-tutorial.org>



Summary

- ▶ **Version Control System**
- ▶ **Git**
- ▶ **Installation of Git on Ubuntu Linux and Windows operating systems**



Acknowledgement

- ▶ 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



Acknowledgements

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- ▶ **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- ▶ **More information on this Mission is available at:**

<http://spoken-tutorial.org/NMEICT-Intro>

