git - the content tracker

Tom Wiesing

CS Club

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Overview

- Introduction: What is version control and why use git?
- Getting started: The git model
- Using git: clone, init, add, commit, push, pull
- Going further: Branching, Merging, Stashing and more
- **GitHub** : Collaboration with Issues, Forking, Pull Requests
- Behind the Scenes: Internals of Git
- Demo / Hacking / Questions

Introduction (1): What is version control?

- tracks any kind of content
  - e.g. websites, software, presentations
- knows about different versions
  - knows what was changed when
  - can revert changes if something goes wrong
- has a collaboration component
  - several people can work together on the same project
  - changes can be synced
  - easy to see who changed what

Introduction (2): What is git and why use it?

- git – “the stupid content tracker”
  - open-source version control system
  - fast, scalable, distributable
- originally developed in 2005 for maintaining the linux kernel source code

Introduction (3): What is git and why use it?

- git is both for beginners and advanced users
  - provides high-level-commands
  - additonally gives full access to internals
- git is distributed - and it is easy to sync changes
  - no central server to share content required
  - changes can be synced in many ways

http(s), ssh, git protocol, diffs via email, ...