Git Introduction for DevOps

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About Me

- TechApps Team Members.
- Degree Chemical, Master and Phd AI
- Coding Since 1995 (Form 4)
- Using version control since 2001 (RCS, CVS, SVN, Mercurial, Git)
- Using git workflow since 2018

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Session Schedule (60 minutes)

- Introduction: 10 minutes
- Github Hands-on: 25 minutes
- VSCode Hands-on: 15 minutes
- Q&A: 10 minutes

What is Version Control

- Tracking and managing changes to Software code over times
- Centralize (TFS, CVS, SVN)
- Decentralize (BitKeeper, Git, Bazar, Mercurial)

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Benefits

- Reduce development time and increase successful deployment
- Improve Collaboration
- Enhanced Workflow

Version Control Features

- A Complete long-term change history of every files.
- Branching and Merging. Working with multiple version concurrently.
- Traceability. Connect with Project Management, Bug Tracking, Code Review and CI.

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What is Git

- Mature, actively maintained open source project.
- Originally Develop in 2005 by Linus Torvalds.
- Use by Linux Kernel Project and Most of open source project.
- Now adopted by lots of commercials.

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Why Git

- Design with performance, security and flexibility in mind.
- Most Widely used modern version control system.
- Very Popular, Many Online Service Github, Gitlab, Bitbucket, Azure DevOps
- Integrated with popular Editor (VSCode) and IDE (Visual Studio, JetBrains, NetBeans, Eclipse)
- Adapt to Multiple Workflow.

Git for multiple workflow

Developer

- Feature Branch workflow
- Distributed Development
- Pull Request
- Community
- Faster Release Cycle

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Others

- Manage market specific release.
- Prototype with potential customer.
- Frequent release
- Maintain Old Version, Production, New Development, Specific Customer Version.