Git, GitHub & Open Source Contribution Crash Course

1. What is a Version Control System?

Version control, also known as source control, is tracking and managing software code changes.

2. Introduction to Git VCS

What is Git?

- Installation of Git CLI
- Basic Git Commands
- Setting up Git Global Configuration(via email)

3. Version Controlling with Git (Basic Commands)

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- Start a new project and complete setup with Git & GitHub
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4. Introduction to OpenSource

- What is Open Source
- Issues Intro
- Issue Labels
- Submitting a new issue
- Workflow of resolving an issue
- Analyzing a pull request
- Concept of fork and upstream
- Further discussions on pull requests
- Recap of workflow

5. Branching in Git

- Introduction to Branching Concept.

- Creating Branches.

    - `git branch <BRANCH NAME>`

    - `git checkout <BR_NAME>`

    - `git checkout -b "BR_NAME"`

- Branch Tags

    - feat/feat-name

- Practical demonstration of branching

- Creating a new pull request

- Common branching mistake

- "git pull" concept

5. Introduction to vercel

- Basic idea of vercel
- Pipelining with vercel
- Reviewing pull requests
- Automation of Deployment

6. Introduction to Advance Git & GitHub

- Connecting and syncing with upstream
- Code sync problem when multiple contributors working on different issues simultaneously
- Concept of multiple remorts and Upstreaming
- Summery of advance git

7. Git Merge Conflicts

- What is Conflicts
- Practical demonstration of conflicts
- Resolve Conflicts (carefully) Using Upstream

Other topics will be added in the future.