Version Control System Overview

Version Control System Used: GitHub

GitHub, a distributed version control system built on top of Git, has been utilized for managing version control in the project.

Advantages of GitHub

1. Distributed Nature: GitHub allows collaboration among multiple team members, where everyone has a full version of the repository, including its history.
2. Branching and Merging: It supports efficient branching and merging, allowing developers to work on features independently before integrating changes.
3. Transparency: Detailed commit history ensures clear traceability of changes, improving accountability.
4. Integration: GitHub integrates with CI/CD pipelines, project management tools, and IDEs for seamless workflows.
5. Backup and Hosting: The remote repository on GitHub provides reliable backup and accessibility from anywhere.

Disadvantages of GitHub

1. Learning Curve: For beginners, Git commands and GitHub workflows can be complex to understand.
2. Internet Dependency: Remote repository access requires an internet connection, which can be a limitation in offline scenarios.
3. Cost for Private Repositories: While GitHub offers free repositories, advanced features and larger storage may require a paid subscription for teams.
4. Conflict Management: Merge conflicts can arise in collaborative projects, requiring careful resolution.

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Proof of Commits

The screenshot below demonstrates the commit history of the project, showcasing the versioning process and contributions: