

Github – More than a version control on cloud

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- 
- + What is Git and Github
 - + Overview of git
 - + Version control system
 - + How it works
 - + Why should we use (g)it
 - + Beyond Version control

What is Git and GitHub

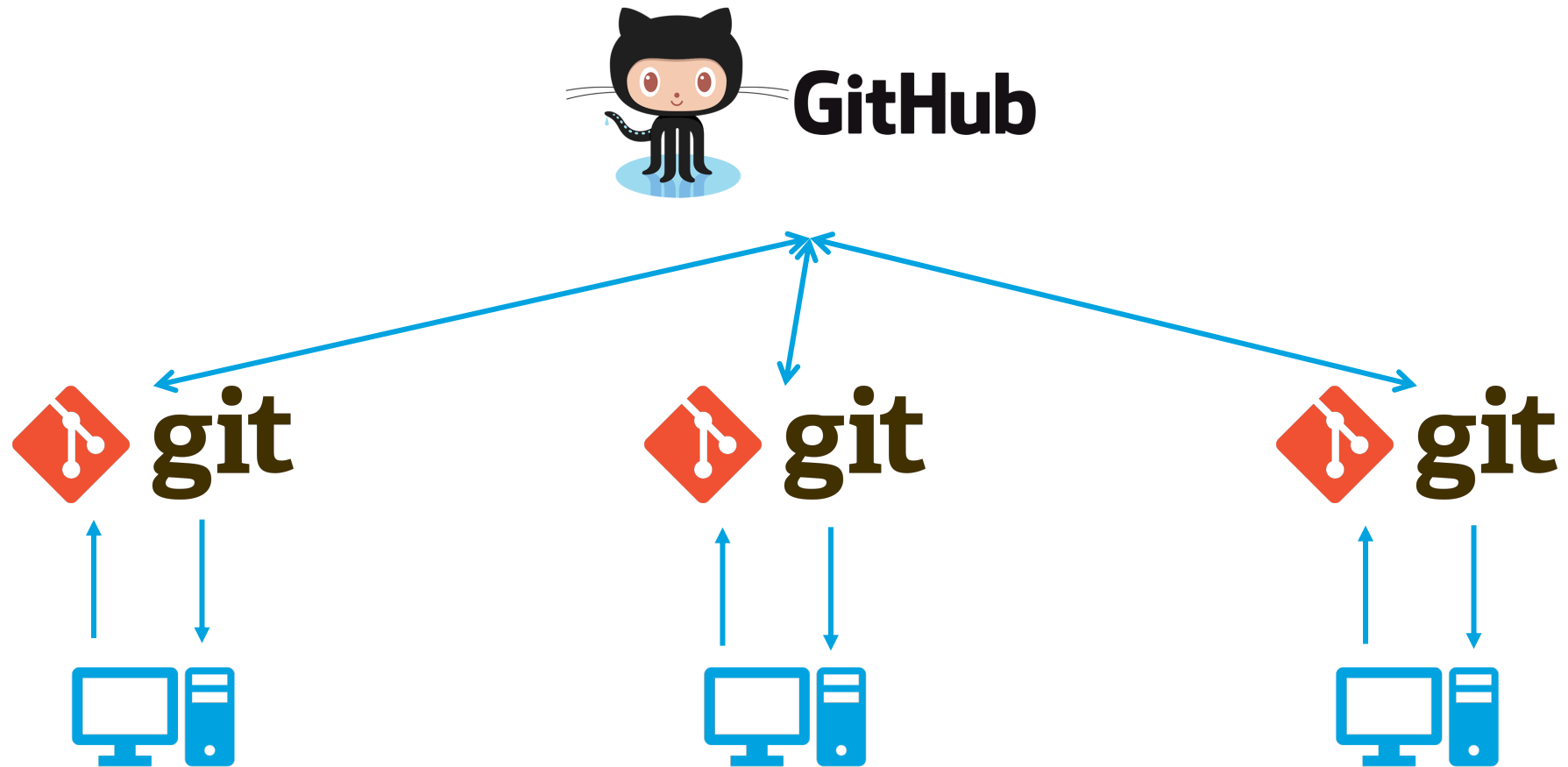


Git is a distributed version-control system for tracking changes in source code during software development.

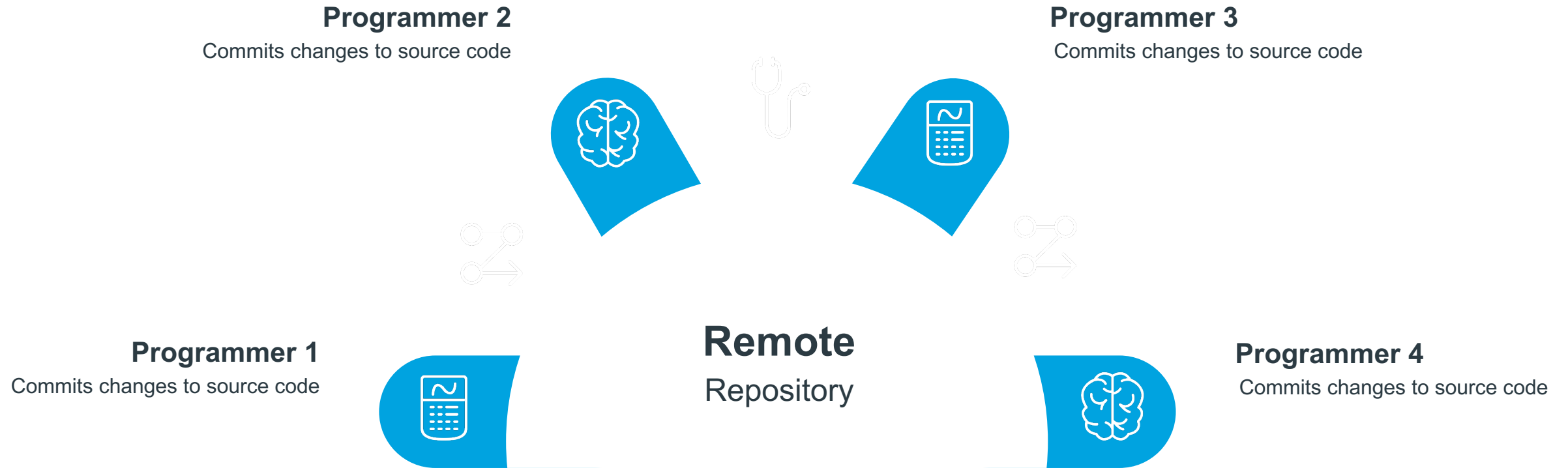
- Coordinates work between multiple programmers/developers
 - Who made what changes and when – Audit trail
 - Move within the versions anytime
 - Local and remote repositories
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- GitHub is how people build software
 - GitHub is a platform which provides the provision for storing remote repositories

Git and GitHub

Graphical representation

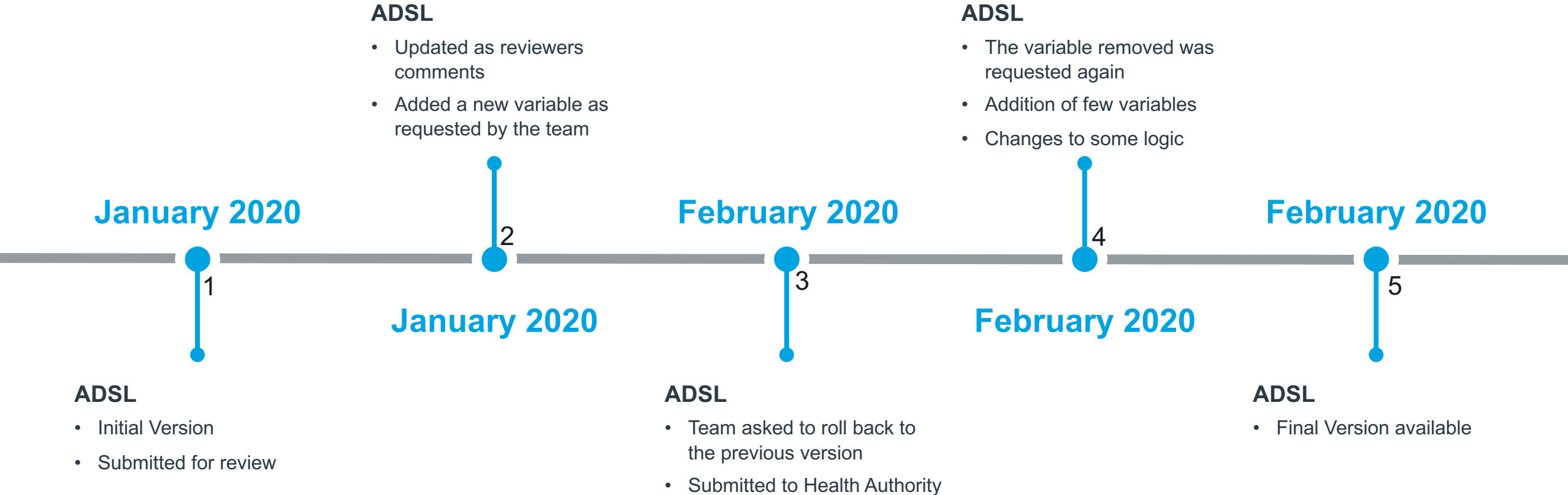


A general scenario

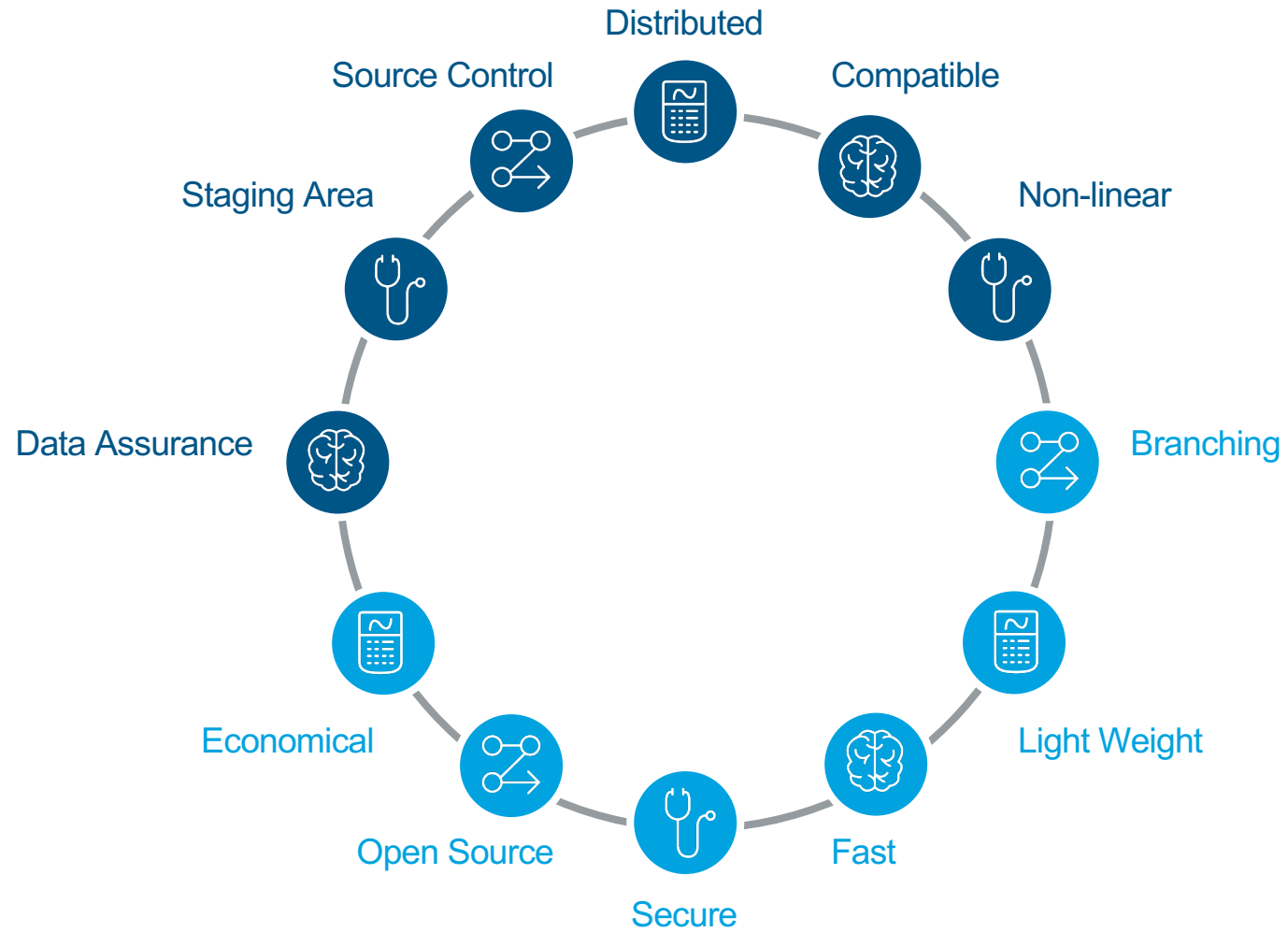


Version Control System

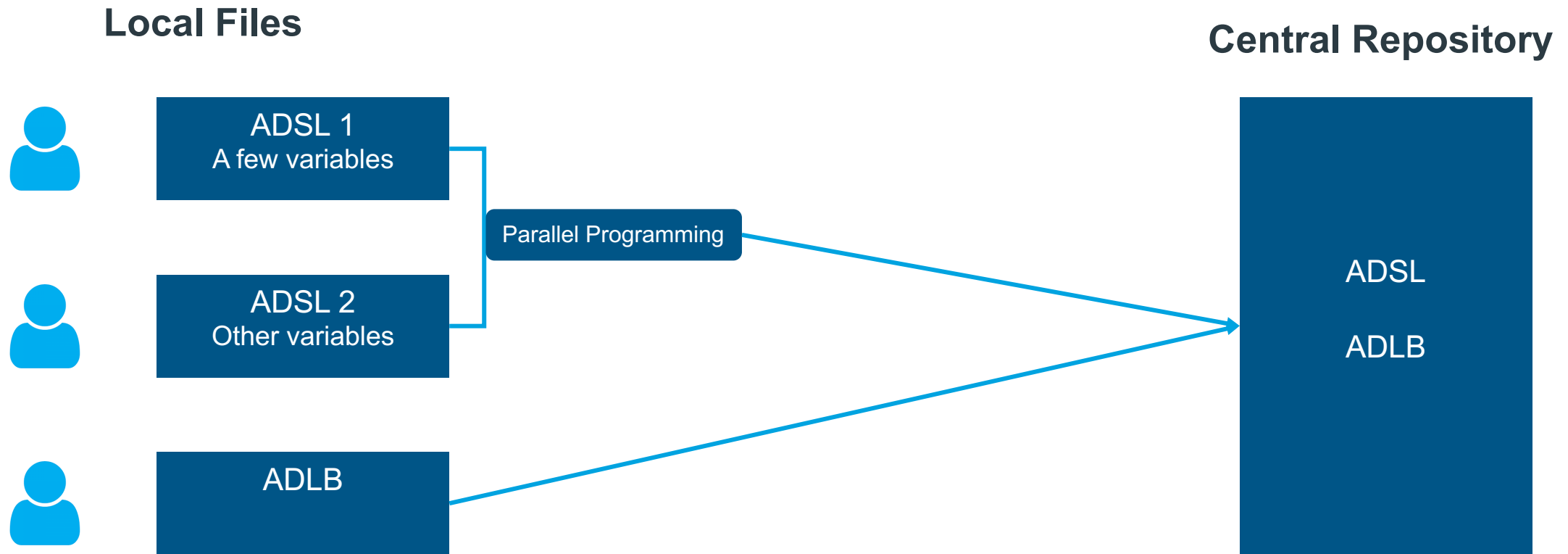
Representation of ADSL program to showcase version control system



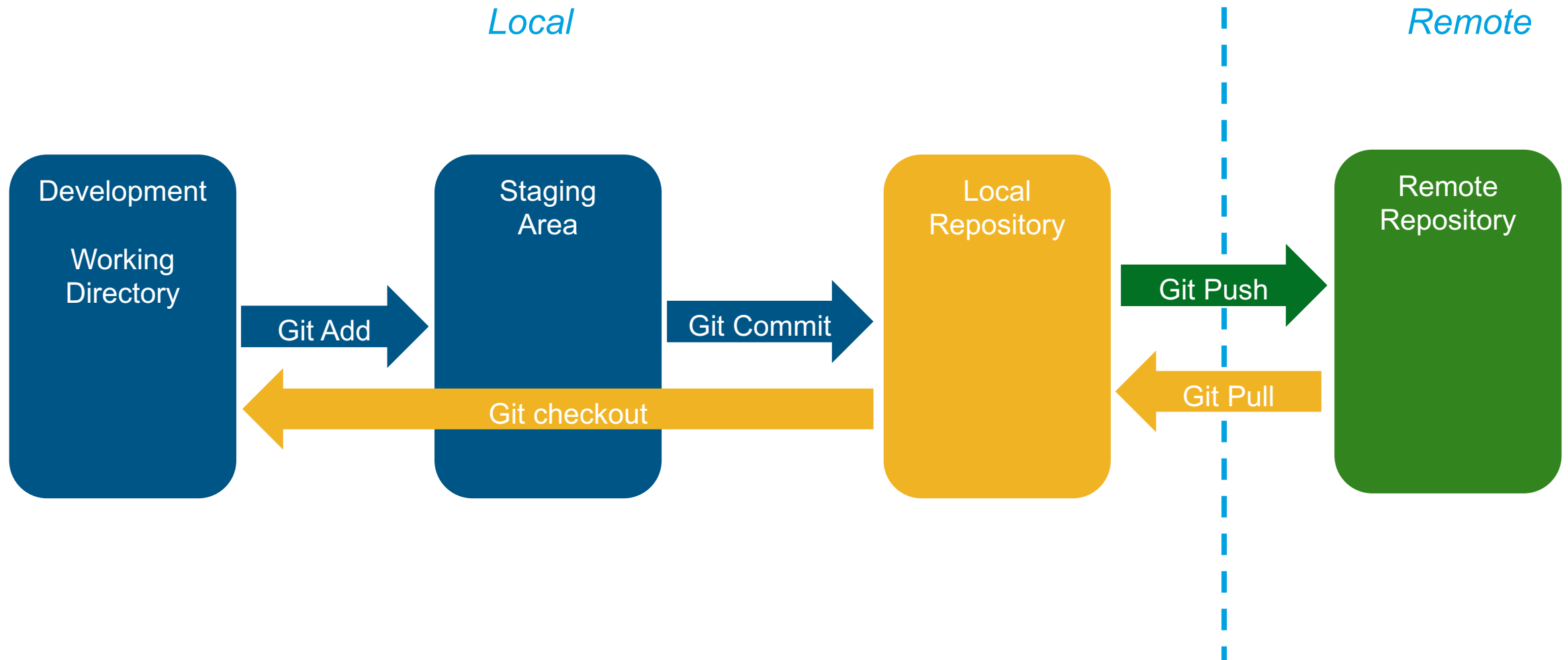
Features of Git



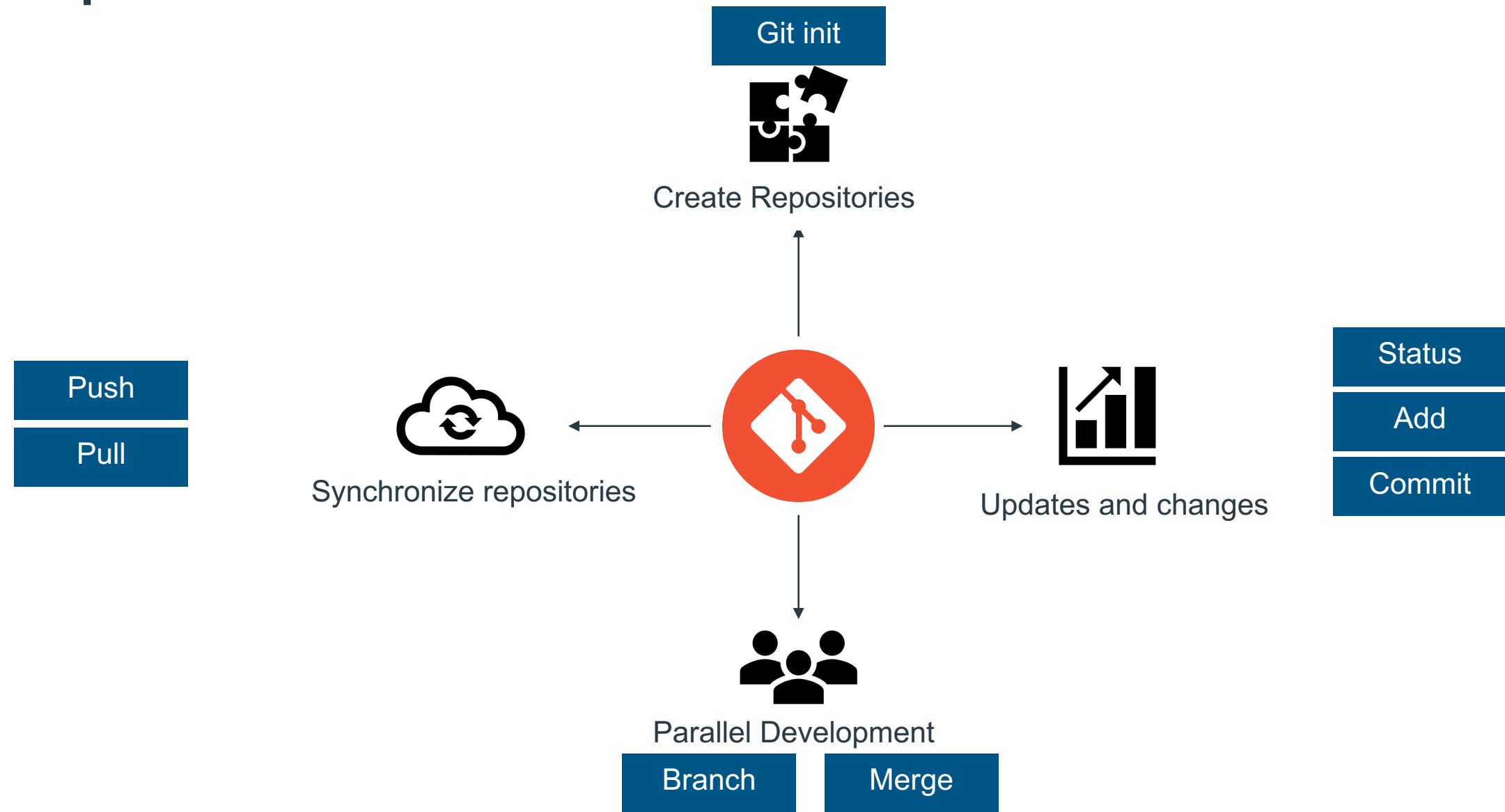
Collaboration



How it works



Git operations and commands

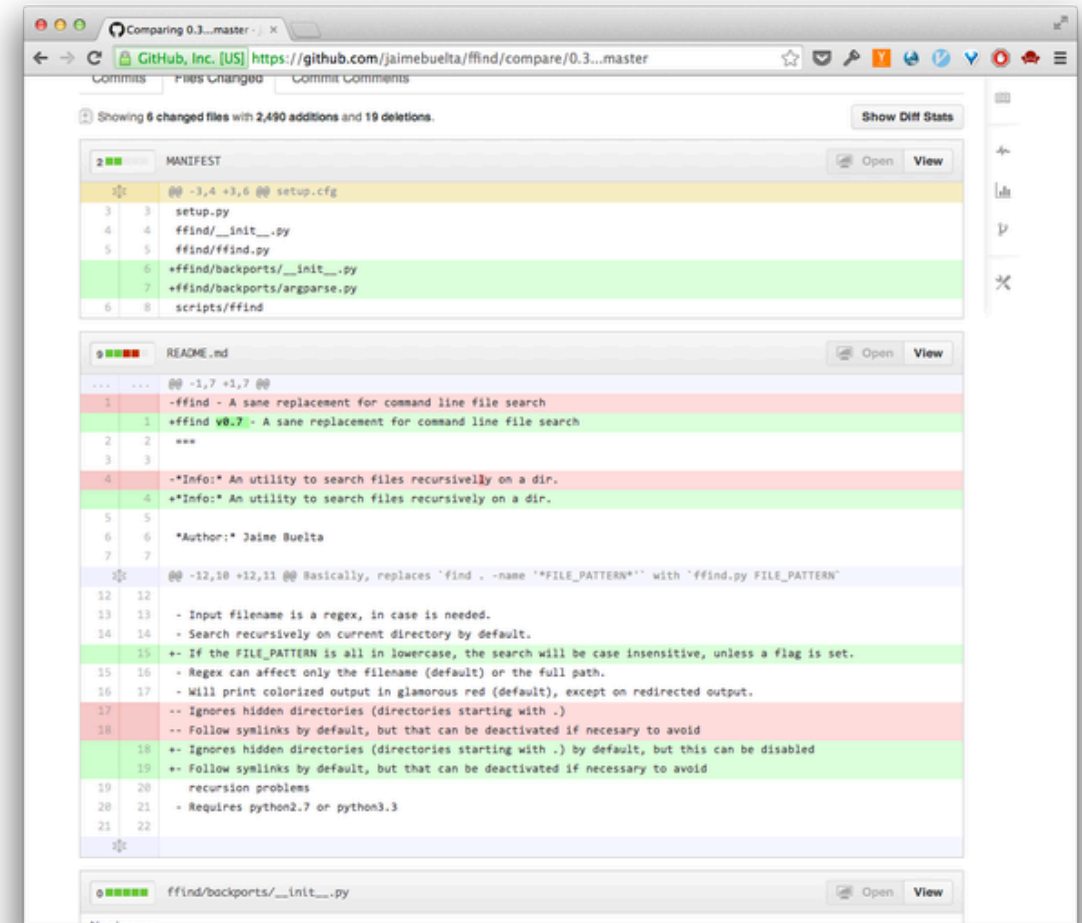


Beyond Version Control

- There is a GUI tool available for those who like move away from the command prompt which does exactly the same operations. However, command based approach is more preferred by programmers
- Code Review
- Project Management
- Team Management

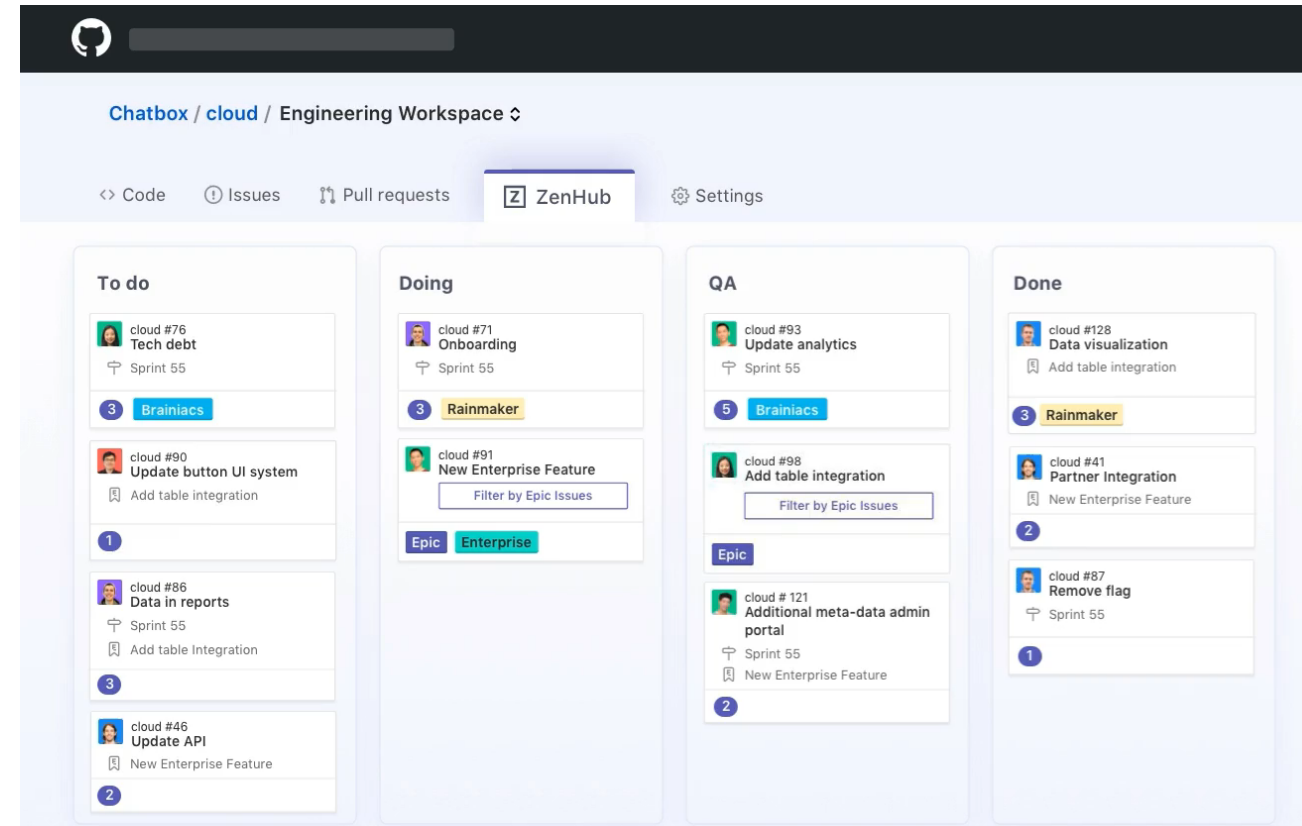
Code Review

- See what has changed in the code over the course of time and by whom
- Compare the code with color coding
- Expand and shrink the differences for easy review



Project Management

- GitHub easily integrates with the project management solutions available for example: ZenHub
- Create a new issue or raise an already raised issue for production programmer
- Keep track of requested changes, issues raised and maintain an automated audit history
- Create new tasks and assign it to team members
- Provide a deadline for the assigned task
- Create a milestone for the project
- Holistic view of the project status, assigned tasks and pending items all in one place



References

- <https://git-scm.com/>
- <https://github.com/>
- <https://www.edureka.co/>