

# INVESTIGATION BETWEEN GitHub AND GitLab

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## **SUBTASK 1:**

### **Key Features of GitHub:**

1. GitHub Actions: Enables automation of software workflows directly in your repository.
2. Pull Requests: Facilitates code review and collaboration before merging changes.
3. GitHub Pages: Allows users to create websites hosted directly from a GitHub repository.

### **Key Features of GitLab:**

1. Built-in CI/CD: Continuous Integration and Continuous Deployment are integrated into GitLab.
2. Auto DevOps: Automates the software delivery pipeline using best practices.
3. Issue Tracking and Kanban Boards: Advanced project management tools built into the platform.

### **Licensing Distinction:**

GitHub is primarily a proprietary platform owned by Microsoft, with limited open-source components. GitLab offers both an open-source Community Edition and a proprietary Enterprise Edition, giving users more flexibility.

### **Feature Comparison:**

Common Features of GitHub and GitLab:

1. 1. Git-based version control system.
2. 2. Web-based interface for repositories.
3. 3. Collaboration tools (issues, merge requests/pull requests).
4. 4. Integrated CI/CD (GitHub Actions for GitHub; GitLab CI for GitLab).
5. 5. Wiki and documentation support.

Unique Features of GitHub:

6. 1. GitHub Copilot – AI-powered code completion tool.
7. 2. GitHub Marketplace – Third-party apps and actions for workflow enhancement.

Unique Features of GitLab:

8. 1. Auto DevOps – Automated deployment pipeline.

9. 2. Self-hosted option with open-source Community Edition.