Comparison of Git, GitHub, and GitLab

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| **Feature** | **Git** | **GitHub** | **GitLab** |
| **Type** | Version Control System | Git Repository Hosting Service | Integrated DevOps Platform |
| **Primary Use** | Local version control | Remote repository hosting, collaboration, and code sharing | Comprehensive software development, CI/CD, and collaboration |
| **Hosting** | Local and self-hosted | Primarily cloud-hosted (GitHub servers), some self-hosting options | Cloud-hosted (GitLab.com) and self-hosted options; supports hybrid models |
| **CI/CD Integration** | Not built-in; requires third-party tools | GitHub Actions (robust CI/CD tool) | Comprehensive CI/CD pipelines and automation |
| **Access Control** | Basic through Git hooks and server configuration | Detailed access control with teams, role-based permissions, and collaboration features | Detailed access control, including group and subgroup management, fine-grained permissions, and protected branches |
| **License** | Open Source (GPLv2) | Proprietary with some open-source projects | Open-source (Core) and proprietary (Premium) editions |
| **Community Features** | None | Issue tracking, discussions, wikis, collaboration features (forks, pull requests) | Similar to GitHub with additional DevOps project management tools (boards, milestones) |
| **Integration** | Requires external tools for additional functionality | Wide range of integrations through GitHub Marketplace | Comprehensive integrations within its DevOps ecosystem, including third-party tools and services |
| **Pricing/Cost Model** | Free | Free for public repositories, paid plans for private repositories, and additional features | Free (Core), paid plans for Premium features, self-hosted pricing available |

Cucumber is a testing tool that supports Behavior Driven Development (BDD) framework. It defines application behavior using simple English text, defined by a language called Gherkin.