Experiment 1

AIM: Explore GitHub/GitLab for open-source projects with different licenses

1. List of GitHub Licenses

- MIT license
- Apache license 2.0
- GNU General Public license (GPL v2.0)
- GNU General Public license (GPL v3.0)
- GNU lesser General Public license (LGPL)
- BSD 2-Clause license
- BSD 3-Clause license
- Mozilla Public license 2.0 (MPL 2.0)
- Eclipse Public license (EPL)
- Creative Commons licenses
- The Unlicense
- Proprietary / No license

2. Licenses and Short Description Table

No.	License	Short Description
1	MIT license	Very permissive; allows use, modification, and distribution with attribution.
2	Apache license 2.0	Permissive license with explicit patent protection.
3	GNU GPL v2.0	Strong copyleft; modified code must remain open source.
4	GNU GPL v3.0	GPL v2.0 plus protection against patent abuse and tivoization.
5	GNU LGPL	Allows linking with proprietary software; mainly for libraries.

No.	License	Short Description
6	BSD 2-Clause	Simple permissive license with minimal restrictions.
7	BSD 3-Clause	BSD 2-Clause plus restriction on using author's name for promotion.
8	Mozilla Public license 2.0	File-level copyleft; allows mixing open and closed source.
9	Eclipse Public license (EPL)	Weak copyleft; commonly used for enterprise software.
10	Creative Commons licenses	Used for documentation/media, not recommended for software.
11	The Unlicense	Places code in the public domain with no restrictions.
12	Proprietary / No license	Code cannot be legally used, modified, or shared by others.

3. Licenses Comparison Table

License	Commercial Use	Open Source Required	Patent Protection
MIT	Yes	No	No
Apache 2.0	Yes	No	Yes
GPL v2.0	limited	Yes	No
GPL v3.0	limited	Yes	Yes
LGPL	Yes	Partial	No
BSD 2-Clause	Yes	No	No
BSD 3-Clause	Yes	No	No
MPL 2.0	Yes	File-level	No
EPL	Yes	Partial	No

License	Commercial Use	Open Source Required	Patent Protection
Creative Commons	limited	Depends	No
Unlicense	Yes	No	No
Proprietary	No	No	No

4. List of GitHub Alternatives

Platform	Short Description
Gitlab	Complete DevOps platform with Git repositories and CI/CD.
Bitbucket	Git repository hosting integrated with Atlassian tools.
SourceForge	Hosting platform mainly for open-source projects.
Azure DevOps	Microsoft's service for Git repos, pipelines, and project management.
Gitea	lightweight, self-hosted Git service.
Gogs	Simple and fast self-hosted Git repository solution.
AWS CodeCommit	Fully managed Git service by AWS.
Phabricator	Code review and collaboration tool for developers.
Beanstalk	Secure Git hosting with deployment features.
launchpad	Development platform mainly used for Ubuntu projects.

5. GitHub vs GitLab Table

Feature	GitHub	GitLab
Owner	Microsoft	Gitlab Inc.
Type	Code hosting platform	Complete DevOps platform
CI/CD	GitHub Actions (external setup)	Built-in CI/CD
Self-Hosting	limited	Fully supported
Open Source	Partially	Core features open source
Issue Tracking	Yes	Yes (more advanced)
DevOps Tools	limited	End-to-end DevOps
Popularity	Most popular platform	Popular in enterprises
Free Private Repos	Yes	Yes
Best For	Open-source fi collaboration	Full DevOps lifecycle

6. Open-Source vs Proprietary vs Freeware

Feature	Open-Source Software	Proprietary Software	Freeware
Source Code	Available to users	Not available	Not available
Cost	Free (mostly)	Paid (usually)	Free
Modification	Allowed	Not allowed	Not allowed
Redistribution	Allowed	Restricted	Restricted
Ownership	Community / Organization	Company / Vendor	Company / Developer
Transparency	High	low	low
Examples	linux, Firefox	Windows, MS Office	Adobe Reader, VLC
Best Used For	learning, development, customization	Commercial fi enterprise use	Personal use