

## **EXPERIMENT-1**

### List of Licences in Git

#### **Common Git / Open Source Licenses**

License Name	Description
MIT License	Permissive license allowing use, modification, and distribution with attribution.
Apache License 2.0	Permissive license with explicit patent protection and attribution requirements.
BSD 2-Clause License	Permissive license with minimal restrictions and no endorsement clause.
BSD 3-Clause License	Permissive license preventing use of author's name for endorsement.
ISC License	Simple and permissive license similar to MIT.
Zlib License	Permissive license used for libraries, requires acknowledgment.
GPL v2.0	Strong copyleft license requiring derivatives to remain open source.
GPL v3.0	GPL v2 with added protections against patents and hardware restrictions.
AGPL v3.0	Extends GPL to require source sharing for network-based software.
LGPL	Weak copyleft license allowing linking with proprietary software.
MPL 2.0	File-level copyleft license allowing mixing with proprietary code.
EPL	Copyleft license with patent protection, common in Java projects.
Unlicense	Public domain dedication with no restrictions.
CC0	Public domain dedication, commonly used for data and content.
Proprietary License	All rights reserved; no redistribution or modification allowed.
Custom License	User-defined license with specific terms.

License	Commercial Use	Modify	Distribute	Disclose Source	Keep License	Patent Protection	Copyleft
MIT	Yes	Yes	Yes	No	Yes	No	No
Apache 2.0	Yes	Yes	Yes	No	Yes	Yes	No
BSD 2-Clause	Yes	Yes	Yes	No	Yes	No	No
BSD 3-Clause	Yes	Yes	Yes	No	Yes	No	No
GPL v2	Yes	Yes	Yes	Yes	Yes	No	Strong
GPL v3	Yes	Yes	Yes	Yes	Yes	Yes	Strong
AGPL v3	Yes	Yes	Yes	Yes (Network )	Yes	Yes	Very Strong
LGPL v2.1	Yes	Yes	Yes	Library only	Yes	No	Weak
LGPL v3	Yes	Yes	Yes	Library only	Yes	Yes	Weak
MPL 2.0	Yes	Yes	Yes	Modified files	Yes	Yes	Weak

License	Commercial Use	Modify	Distribute	Disclose Source	Keep License	Patent Protection	Copyleft
EPL 2.0	Yes	Yes	Yes	Modified files	Yes	Yes	Weak
Boost 1.0	Yes	Yes	Yes	No	Yes	No	No
Unlicense	Yes	Yes	Yes	No	No	No	No
CC0 1.0	Yes	Yes	Yes	No	No	No	No

## Alternatives to GitHub

GitHub is a widely used platform for version control and collaborative software development; however, several alternative platforms provide similar or specialized functionalities. These alternatives differ in terms of hosting options, licensing models, integration capabilities, and target audiences.

### GitLab

GitLab is a comprehensive DevOps platform that supports the entire software development lifecycle. It offers source code management, continuous integration and continuous deployment (CI/CD), issue tracking, and project management tools. GitLab is available as both a cloud-hosted service and a self-hosted solution, making it suitable for organizations that require greater control over their infrastructure.

### Bitbucket

Bitbucket is a version control platform developed by Atlassian. It supports Git repositories and integrates seamlessly with other Atlassian products such as Jira and Confluence. Bitbucket is commonly used by enterprise teams that rely on structured project management and offers strong access control and collaboration features.

### SourceForge

SourceForge is one of the oldest platforms for hosting open-source software projects. It provides tools for code hosting, version control, bug tracking, and project distribution. SourceForge is particularly known for supporting open-source communities and offering long-term project hosting.

### Azure DevOps

Azure DevOps, provided by Microsoft, is a suite of development tools that includes Git

repositories, CI/CD pipelines, project management features, and testing tools. It is designed to integrate closely with Microsoft Azure services and is often used by organizations already invested in the Microsoft ecosystem.

## Gitea

Gitea is a lightweight, open-source Git hosting solution that can be self-hosted. It provides essential features such as repository management, issue tracking, and code review while requiring minimal system resources. Gitea is suitable for small teams or organizations seeking a simple and efficient alternative.

## SourceHut

SourceHut is a minimalist, developer-focused platform that emphasizes simplicity, transparency, and open-source principles. It provides Git and Mercurial repositories, mailing lists, and continuous integration without relying on heavy graphical interfaces. SourceHut is often preferred by experienced developers who value lightweight tools.

## GitBucket

**GitBucket** is an **open-source Git platform** written in **Scala**. It provides a **self-hosted Git repository management solution** with features similar to GitHub, including:

- **Repository hosting:** Create, manage, and clone Git repositories.
- **Issue tracking:** Track bugs, features, and tasks within projects.
- **Pull requests:** Support for code review and collaboration through pull requests.
- **Wiki:** Documentation support for each repository.
- **Social features:** Users can follow repositories, star projects, and receive notifications.
- **Plugin support:** Extend GitBucket's functionality using plugins.

Platform	Free Public Repos	Private Repos	CI/CD	Self-Hostable
<b>GitHub</b>		(Unlimited)	(Actions)	(Enterprise Only)
<b>GitLab</b>		(Unlimited)	(GitLab CI)	
<b>Bitbucket</b>		(Up to 5 users)	(Pipelines)	(Data Center)

Platform	Free Public Repos	Private Repos	CI/CD	Self-Hostable
<b>SourceForge</b>		(Open source only)	(External)	
<b>AWS CodeCommit</b>		(5 active users)	(CodeBuild)	
<b>Azure Repos</b>		(5 active users)	(Pipelines)	
<b>Gitea / Forgejo</b>			(Needs Runner)	
<b>Gogs</b>				
<b>Codeberg</b>			(Woodpecker)	
<b>Phabricator / Phorge</b>			(Drydock)	