Practical : 1

Aim: Explore github/gitlab for open-source projects with different licenses

➢ **GitHub Licenses**

SR. No	License Name	Type	What It Allows	What It Restricts / Requires	Best Use Case
1	**No License**	Default (All rights reserved)	Nobody can legally use, copy, modify, or distribute your code	Others cannot use your code without permission	Private or personal projects
2	**MIT License**	Permissive	Use, copy, modify, distribute, commercial use	Must include original copyright & license	Student projects, open-source, startups
3	**Apache License 2.0**	Permissive	Everything MIT allows + patent protection	Must state changes and include license	Corporate & enterprise projects
4	**BSD 2-Clause ("Simplified")**	Permissive	Use, modify, distribute	Must keep copyright notice	Lightweight open-source projects
5	**BSD 3-Clause ("Revised")**	Permissive	Same as BSD 2-Clause	Cannot use author's name for promotion	Academic & research software
6	**Boost Software License 1.0**	Permissive	Free use, modification, distribution	License text must be included	Libraries & frameworks

7	**Creative Commons Zero (CC0 1.0)**	Public Domain	Anyone can do anything	No restrictions at all	Data, templates, examples
8	**Eclipse Public License 2.0**	Weak Copyleft	Modify & distribute	Modifications must be shared	Enterprise Java / Eclipse projects
9	**GNU GPL v3.0**	Strong Copyleft	Use, modify, distribute	Source code must be open	Fully open-source software
10	**GNU GPL v2.0**	Strong Copyleft	Same as GPL v3	No patent protection	Legacy open-source projects
11	**GNU LGPL v2.1**	Weak Copyleft	Link with proprietary code	Modifications must be open	Libraries
12	**GNU AGPL v3.0**	Strongest Copyleft	Use, modify, distribute	Must share source even for web apps	SaaS & network services
13	**Mozilla Public License 2.0**	Weak Copyleft	Mix open & closed source	Modified files must stay open	Balanced open-source projects
14	**The Unlicense**	Public Domain	Full freedom	No warranty	Experimental or learning projects

➢ **Comparative Table of Popular Software Licenses**

SR. No	License	Open Source	Commercial Use	Modify & Distribute	Must Open Source Changes	Patent Protection	Attribution Required	Best For
1	No License	✘ No	✘ No	✘ No	—	✘ No	—	Private or unfinished projects
2	MIT	✓ Yes	✓ Yes	✓ Yes	✘ No	✘ No	✓ Yes	Students, startups, portfolios
3	Apache 2.0	✓ Yes	✓ Yes	✓ Yes	✘ No	✓ Yes	✓ Yes	Enterprise & patent-safe projects
4	BSD 2-Clause	✓ Yes	✓ Yes	✓ Yes	✘ No	✘ No	✓ Yes	Simple open-source tools
5	BSD 3-Clause	✓ Yes	✓ Yes	✓ Yes	✘ No	✘ No	✓ Yes	Academic & research projects
6	Boost 1.0	✓ Yes	✓ Yes	✓ Yes	✘ No	✘ No	✘ No	Libraries & frameworks
7	MPL 2.0	✓ Yes	✓ Yes	✓ Yes	Partial (file-level)	✘ No	✓ Yes	Mixed open/closed projects

8	**GPL v3**	✅ Yes	❌ Limited	✅ Yes	✅ Yes (strong copyleft)	✅ Yes	✅ Yes	Fully open-source software
9	**GPL v2**	✅ Yes	❌ Limited	✅ Yes	✅ Yes	❌ No	✅ Yes	Legacy open-source projects
10	**LGPL v2.1**	✅ Yes	Yes	✅ Yes	Partial	❌ No	✅ Yes	Libraries used by closed apps
11	**AGPL v3**	✅ Yes	❌ No	✅ Yes	✅ Yes (network use)	✅ Yes	✅ Yes	Web / SaaS open-source apps
12	**CC0 1.0**	Public Domain	✅ Yes	✅ Yes	❌ No	❌ No	❌ No	Data, templates, samples
13	**Unlicense**	Public Domain	✅ Yes	✅ Yes	❌ No	❌ No	❌ No	Learning & experiments

➢ **GitHub Alternatives**

SR. No	Platform	Type	Public Repos	Private Repos	Best For	Key Strengths	Limitations
1	GitLab	Cloud / Self-hosted	✅ Yes	✅ Yes (Free)	Full DevOps	CI/CD built-in, powerful	UI feels heavy
2	Bitbucket	Cloud	✅ Yes	✅ Yes	Teams using Jira	Strong Atlassian integration	Weaker open-source presence
3	SourceForge	Cloud	✅ Yes	✖ Limited	Legacy open-source	File hosting, mirrors	Outdated UI
4	Gitea	Self-hosted	Depends	Depends	Lightweight self-hosting	Very fast, simple	No cloud by default
5	Codeberg	Cloud	✅ Yes	✖ No	Open-source purists	Privacy-friendly, EU hosted	No private repos
6	Azure DevOps	Cloud	✖ No	✅ Yes	Enterprises	Boards, pipelines	Poor community exposure
7	Launchpad	Cloud	✅ Yes	✖ No	Ubuntu projects	Debian/Ubuntu integration	Niche use
8	AWS CodeCommit	Cloud	✖ No	✅ Yes	AWS users	Secure & scalable	No public repos

9	**Gogs**	Self-hosted	Depends	Depends	Simple git server	Very lightweight	Limited features
10	**Savannah GNU**	Cloud	✅ Yes	❌ No	GNU projects	Free software focus	Strict rules