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SOFTWARE ENGINEERING LAB TASK-1

What is Github?

GitHub is a platform that helps developers store and manage their code online. It is based on Git, a system that tracks changes in code files over time. GitHub allows multiple people to work on the same project by keeping everything organized. Whether you're working alone or as a team, GitHub helps you save your work, track who made changes, and go back to previous versions if something breaks.

Introduction to Github

GitHub is one of the most popular platforms for managing and sharing code. It is used by millions of developers and organizations around the world. Its main purpose is to help you work with Git, a system that tracks changes in your project. GitHub adds extra tools for collaboration, making it easy to work with others on the same project, even if you're in different locations.

Key Features of GitHub

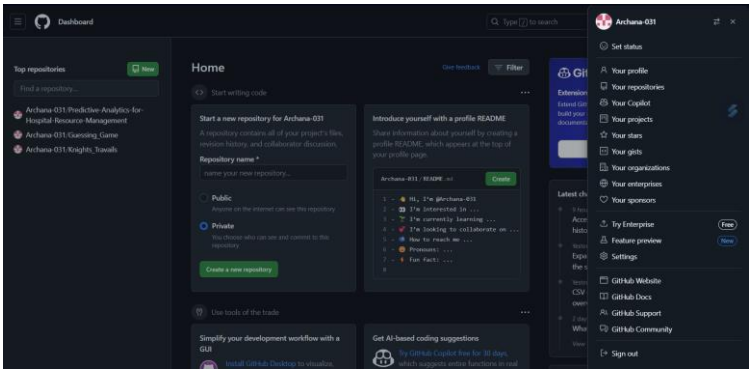
- Version Control: It is like a time machine for your code. It keeps track of every change you make so you can go back to an earlier version if something goes wrong. GitHub uses Git, which is a powerful tool for version control, to help you manage your project's history.
- Repositories: It is like a special folder for your project. It contains all your code files, project-related documents, and the entire change history. Repositories can be public or private
- Branches: It will let us create a separate version of your project where you can experiment or develop new features. You can work in a branch without affecting the main project. Once your work is ready, you can merge the branch back into the main project.
- Pull Requests: It is a way to ask others to review your work before it becomes part of the main project. It shows the changes you've made and lets others comment, suggest improvements, or approve your work.
- Issues and Project Management: GitHub lets us create "issues" to keep track of bugs, new features, or tasks. You can organize these issues using project boards, making it easier to plan and manage your work.
- Actions and Automation: GitHub Actions lets you automate tasks like testing code or deploying apps. You can set up workflows that run automatically when certain events happen, saving time and reducing errors.

Difference Between Git and GitHub

Git	Github
Git is a software.	GitHub is a service.
Git is a command-line tool	GitHub is a graphical user interface
Git is installed locally on the system	GitHub is hosted on the web
Git is focused on version control and code sharing.	GitHub is focused on centralized source code hosting.
Keeps a history of your work and tracks code changes on your computer.	Keeps a history of your work and tracks code changes on your computer.
Developers working on local machines.	Developers working on local machines.

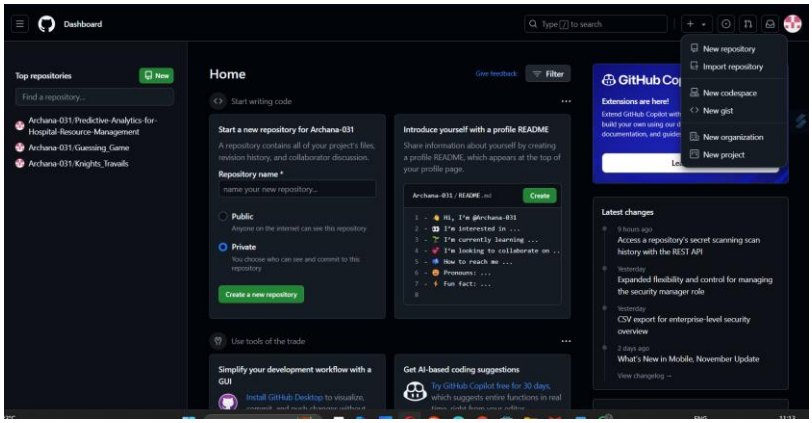
Getting Started with GitHub

1. Creating a GitHub Account

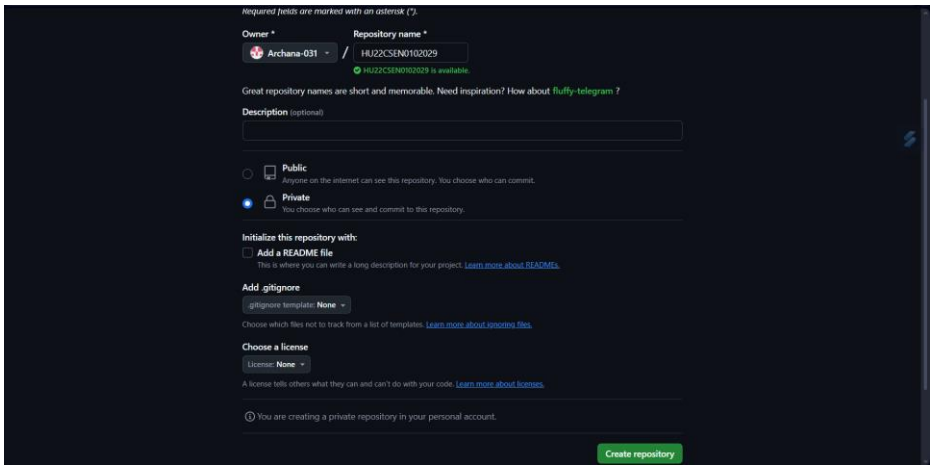


-> Already have an account

2. Creating a Repository



Create Repository



After repository created