

An Assignment on Extracting various artifacts of open source software systems



Course Name: Software Development Project

Course No: CSE 3106

Submitted to:

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1.

Github Account: <https://github.com/redwanahomedpranto>

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Open source project repository: <https://github.com/galaxyproject/galaxy>,

Open source project name: **Galaxy**

Artifact	What is it	Why it is used	How is it created
Codebase	The collection of source code files that form the software system.	It is the foundation of the software, containing all the instructions and logic for the system.	Programmers and development tools write and contribute to the codebase.
Core Executable	The main executable file or files that constitute the functional software application.	It is the executable form of the software that users interact with.	Created through compilation of the source code using a build process.
Commit	A commit represents a specific version of the codebase, including changes made by developers.	Keeps track of changes made by contributors, allowing collaboration and version control.	Developers make commits using version control tools (e.g., Git), describing changes made.
Workflow	A series of automated steps that define the process of building, testing, and deploying the software.	Ensures consistency and efficiency in the software development lifecycle.	Defined in workflow configuration files (e.g., GitHub Actions YAML files).
Unit of Work	A set of related tasks or activities that need to be completed to achieve a specific goal.	Manages and tracks progress on a particular feature or bug fix.	Typically tracked in project management tools or issue trackers, associated with specific issues or tasks.
Readme	A document providing information about the software, its usage, and other important details.	Serves as documentation for users and developers, helping them understand the project.	Created and maintained by developers, often written in Markdown format.
Activity	Records of user interactions and system events within the software project	Provides insights into how users engage with the system.	Generated automatically by tracking user actions or events in the application.

Custom Properties	Additional properties or configuration settings specific to the software project.	Allows customization and configuration based on project-specific requirements.	Defined and managed by developers, often in configuration files or settings.
Actions	Automated tasks or processes triggered by specific events in the software development lifecycle.	Streamlines repetitive tasks, such as building, testing, and deploying code.	Defined in configuration files (e.g., GitHub Actions YAML files) and associated with specific events.
Wiki	A collaborative documentation space where project-related information is stored and shared.	Provides a central location for detailed project documentation.	Edited and updated by project contributors, often using wiki markup or Markdown format.
Tags	Identifiers assigned to specific points in the commit history to mark important releases or milestones.	Helps easily reference and navigate to specific points in the project history.	Created by developers using version control tools, typically associated with releases or significant changes.
Branches	Independent lines of development within the codebase, allowing for parallel work on different features.	Facilitates concurrent development and experimentation with new features.	Created and managed by developers using version control tools.
Pull Request	A proposed set of changes submitted by a contributor for review and integration into the codebase.	Facilitates code review, discussion, and collaboration among team members.	Created by contributors when they want to merge their changes into the main codebase.
Releases	Specific versions of the software that are considered stable and ready for deployment.	Indicates significant milestones or improvements in the software.	Tagged in the version control system and associated with specific commit states.