

An Assignment on “Extract various artifacts” on the Galaxy open source software system



Submitted To

Dr. Amit Kumar Mondal
Associate professor
Computer Science and Engineering Discipline,
Khulna University.

Submitted By

Md. Mehedi Hasan Jubair
Student ID: 200231
Course No: CSE-3106

GitHub: <https://github.com/jubair200231>

Galaxy:

The Galaxy Project is an open-source platform for bioinformatics research, offering a user-friendly web interface for analyzing biological data. It promotes reproducibility, accessibility, and community collaboration by providing tools, workflows, and support for researchers worldwide.

Artifact Name	What is it?	Why it is used?	How is it created?
Doc	A "doc artifact" in a project typically refers to any documentation produced as part of the project's deliverables or process.	Doc is used for communication, guidance, documentation, knowledge transfer, risk mitigation.	Document artifacts are created in a project through a structured process involving gathering necessary information, writing content, undergoing review and revision, formatting, and finalizing. This ensures that the document accurately reflects project details and meets the needs of stakeholders.
Pull request	In the Galaxy Project, a pull request artifact is the package of code changes, documentation updates, or other modifications submitted by a contributor for review and potential inclusion into the project's codebase. It's a crucial element for facilitating collaboration and maintaining code quality.	Pull request artifacts are used in the Galaxy Project to propose and review changes to the project's codebase. They facilitate collaboration among contributors, ensuring that modifications adhere to project standards and requirements before being merged into the main code	A pull request artifact in the Galaxy Project is created when a contributor proposes changes to the codebase. They make modifications in their fork of the repository, then submit a request to merge those changes into the main project. This generates the pull request artifact, containing the proposed modifications and related information.

Discussion	A discussion artifact in the Galaxy Project is a record of conversations, comments, and exchanges among contributors or users, typically stored in forums, mailing lists, or issue trackers. These artifacts capture valuable insights, decisions, and feedback within the project's community for reference and collaboration purposes.	Discussion artifacts in the Galaxy Project are used to document conversations, decisions, and feedback among contributors and users. They provide a record of interactions, enabling transparency, collaboration, and knowledge sharing within the project's community.	Discussion artifacts in the Galaxy Project are created through written exchanges, comments, and interactions among contributors and users in forums, mailing lists, or issue trackers.
Action	In the Galaxy Project, an action artifact refers to any tangible outcome or record of actions taken by contributors or users within the project's community. These actions could include submitting bug reports, requesting features, providing feedback, or making contributions such as code changes or documentation updates. Action artifacts serve to document and track the various activities and contributions within the project, helping to facilitate collaboration, communication, and progress monitoring.	Action artifacts in the Galaxy Project are used to track and document activities and contributions by contributors and users. They promote transparency, collaboration, and accountability within the project's community.	Action artifacts in the Galaxy Project are created when contributors or users perform actions such as submitting bug reports, requesting features, providing feedback, or making contributions like code changes or documentation updates. These actions are typically recorded and tracked through the project's issue trackers, forums, or collaboration platforms, forming a tangible record of community engagement and project progress.

Wiki	<p>In the Galaxy Project, a wiki artifact refers to the documentation and informational content stored in the project's wiki pages. These wiki pages contain guides, tutorials, FAQs, and other resources to help users and contributors navigate and understand various aspects of the project. The wiki artifact serves as a central repository of knowledge and information, providing valuable resources for learning, troubleshooting, and contributing to the Galaxy Project.</p>	<p>The wiki artifact in the Galaxy Project is used to provide users and contributors with centralized documentation, guides, tutorials, and other resources. It serves as a valuable repository of knowledge, facilitating learning, troubleshooting, and collaboration within the project's community.</p>	<p>The wiki artifact in the Galaxy Project is created and maintained by project contributors and administrators. They add content, create pages, edit existing pages, and organize information to ensure it is comprehensive, accurate, and up-to-date. Contributions to the wiki can come from various sources within the project's community, including users, developers, and administrators, who collectively curate the content to provide valuable resources for the project.</p>
Readme	<p>In the Galaxy Project, a README artifact is a document typically named "README.md" (Markdown format) that provides essential information about the project. It often includes an overview of the project, installation instructions, usage guidelines, and links to additional resources. The README artifact serves as a starting point for users and contributors to understand and engage with the project.</p>	<p>The README artifact in the Galaxy Project is used to provide essential information about the project, including its purpose, installation instructions, usage guidelines, and additional resources. It serves as a quick reference for users and contributors, helping them understand and engage with the project effectively.</p>	<p>The README artifact in the Galaxy Project is typically created by project maintainers or contributors as a plain text or Markdown file named "README.md" within the project repository. It is written to provide concise and informative content about the project, including its purpose, how to install it, how to use it, and any other relevant details. The content is formatted using Markdown syntax to ensure readability and clarity.</p>

Activity	<p>In the Galaxy Project, an activity artifact refers to any tangible record or documentation of activities or actions taken within the project's development or user community. These artifacts can include logs of code commits, issue tracker updates, forum discussions, documentation edits, or any other interactions or contributions made by users and contributors. Activity artifacts serve to document and track the progress, changes, and engagement within the Galaxy Project's ecosystem.</p>	<p>Activity artifacts in the Galaxy Project are used to track and document the various actions, contributions, and interactions within the project's community. They help maintain transparency, monitor progress, and facilitate collaboration among users and contributors. Additionally, they provide a historical record of project activities, which can be valuable for understanding trends, identifying issues, and assessing the project's overall health and development.</p>	<p>Activity artifacts in the Galaxy Project are created automatically or manually through various actions and interactions within the project's ecosystem. These actions include code commits, issue updates, forum discussions, documentation edits, and other contributions made by users and contributors. These activities are recorded and tracked by the project's version control system, issue tracker, forums, and other collaboration tools, generating a tangible record of project engagement and progress.</p>
Custom properties	<p>In the Galaxy Project, a custom properties artifact refers to additional metadata or attributes that can be attached to certain entities within the project, such as tools, workflows, datasets, or histories. These custom properties allow users and administrators to add specific information or categorizations beyond the standard attributes, enhancing organization, searchability, and usability of project resources.</p>	<p>Custom properties artifacts in the Galaxy Project are used to provide additional metadata or attributes to certain project entities. This allows for enhanced organization, searchability, and usability of project resources by enabling users to add specific information or categorizations beyond standard attributes.</p>	<p>Custom properties artifacts in the Galaxy Project are created by configuring the Galaxy instance to support additional metadata or attributes for specific entities. Users can then add or edit these properties through the Galaxy interface, enhancing organization and usability of project resources.</p>

Forks	<p>In the Galaxy Project, a forks artifact refers to copies of the project's code repository made by users or contributors to propose changes or experiment without affecting the original codebase. Forks allow individuals to work independently on their own versions of the project and later merge their changes back into the main repository through pull requests.</p>	<p>Forks in the Galaxy Project are used to enable users and contributors to experiment with changes to the project's codebase without directly impacting the original repository. They provide a way for individuals to work independently on their own versions of the project, allowing for experimentation, development, and testing of new features or fixes. Forks also facilitate collaboration by allowing contributors to propose changes back to the main repository via pull requests, where they can be reviewed and potentially integrated into the project.</p>	<p>Forks in the Galaxy Project are created when a user or contributor makes a copy of the project's code repository on the hosting platform, such as GitHub. This copy becomes an independent version of the project that the individual can modify, experiment with, and work on without affecting the original codebase. Users can create forks directly from the project's repository interface on the hosting platform with the click of a button.</p>
Releases	<p>In the Galaxy Project, a releases artifact refers to specific versions or releases of the project's software that are made available to users. These releases typically include stable and tested versions of the software, packaged for easy installation and use by the community. Each release may include new features, bug fixes, and improvements, providing users with updated and reliable versions of the Galaxy software.</p>	<p>Releases artifacts in the Galaxy Project are used to provide users with stable, tested, and packaged versions of the software. They allow users to easily install and use the Galaxy software, providing access to new features, bug fixes, and improvements in a reliable and organized manner.</p>	<p>In the Galaxy Project, releases artifacts are created by the project maintainers when they finalize a version of the software for distribution to users. This involves packaging the software, documenting changes, and ensuring it meets quality standards. Once prepared, the release is officially published and made available for download or installation by the community.</p>