

Deliverable 3

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- Introduction

This document explains the structure and purpose of the MenuSystem class used in the Git Management application. The menu provides a user-friendly interface to manage repositories, branches, and commits using a command-line interface (CLI).

- Why Use a Menu System?

The menu system helps users interact with the Git functionalities without needing to remember complex commands. By using a structured, color-coded, and centered console interface, the application improves usability, especially for users who prefer GUI-like behavior in terminal environments.

- Menu Functions and Their Purpose

1. displayMainMenu: Presents the user with main options such as repository management, branch operations, and commit management.
2. displayRepositoryMenu: Allows users to initialize new repositories.
3. displayBranchMenu: Facilitates creating, switching, and viewing branches.
4. displayCommitMenu: Enables users to make commits and view commit history.
5. handleRepositoryManagement: Processes repository-related choices and actions.
6. handleBranchOperations: Manages branch tasks based on user input.

7. `handleCommitManagement`: Coordinates commit-related functions.

8. Utility Functions (`centerText`, `drawLine`, `setConsoleColor`, etc.): Provide formatting and aesthetic enhancements to improve the user experience.

- Conclusion

The `MenuSystem` class improves the overall user experience by abstracting Git operations into an intuitive, interactive interface. It is essential for streamlining workflow, reducing command-line errors, and making the system accessible.