**Summary Report for Project Tasks**

**Task 1: Project Selection**

In Task 1, the team successfully selected the "Meta Web Application" as the open-source project based on their shared interest. This decision laid the foundation for the subsequent project tasks.

**Task 2: Write GUI and API Test Cases**

In Task 2, the team initiated the test case development process for the selected application. They accomplished the following:

Identified three different modules/features of the application.

Applied various testing techniques such as ECP, BVA, and Risk Analysis to comprehensively plan their testing.

Committed detailed test case notes to the Git repository.

Created 10-15 GUI and 10-15 Web API test cases per team member using a Test Management Tool.

Tracked and recorded essential matrices such as requirement coverage, risk coverage, ECP coverage, BVA coverage, and test case statistics. Screenshots were taken and committed to the Git repository when utilizing a Test Management Tool.

**Task 3: Migrate Tests to Gherkin Language**

Task 3 involved migrating some of the previously written test cases to Gherkin Language. The team achieved the following:

Converted at least 50% of the test cases to Gherkin Language, enhancing test case readability and maintainability.

Measured and recorded the same matrices for the Gherkin test cases, ensuring consistency in coverage and quality.

Committed all work to the Git repository, maintaining a comprehensive record of their test assets.

**Task 4: Automate GUI Test Cases**

Task 4 marked the beginning of test automation for GUI test scenarios. The team successfully automated 5 GUI Gherkin test scenarios per team member using their chosen test automation frameworks. The process followed these key steps:

Each team member created independent branches in the Git repository.

Work on automation was individually committed, ensuring traceability and version control.

Upon completion, the branches were merged into the main repository.

**Task 5: Automate API Test Cases**

Task 5 mirrored the previous task but focused on automating 5 Web API Gherkin test scenarios. The team demonstrated their proficiency in API test automation using their preferred frameworks. The process included:

Creating independent branches for individual work.

Committing the automation code to the Git repository.

Merging branches to the main repository after successful automation.

Overall Progress

The team has made significant progress in the project, covering a range of testing activities from manual test case creation to automation. The project's Git repository serves as a centralized and version-controlled platform for documentation and code management. The team's commitment to tracking and recording various testing matrices reflects their commitment to thorough testing and quality assurance.

The project is well-structured, and the team is on track to meet their testing goals for the "Meta Web Application." The use of Gherkin for test case descriptions enhances clarity and communication within the team, making the test assets more accessible and understandable.

The next steps involve continuing with test automation, updating test cases, and maintaining a consistent and organized repository for effective project management.