

WEEKLY PROJECT PROGRESS REPORT – 4

In the fourth week, key aspects of my contributions include:

1. Constants: Defined constants include the Maven Wrapper version, default download URL, paths for properties file and JAR, and the property name for a custom download URL.

2. Main Method:

- Accepts the base directory as a command-line argument.
- Checks for the existence of a maven-wrapper.properties file in the base directory.
- Reads a custom download URL from the properties file if available; otherwise, uses the default URL.
- Downloads the Maven Wrapper JAR from the determined URL.
- Saves the JAR to the project's .mvn/wrapper/ directory.
- Provides informative console output during the process.

3. Download Method:

Implements a method to download a file from a URL and save it locally.

Supports basic authentication if provided through environment variables.

4. Authentication:

Checks for MVNW_USERNAME and MVNW_PASSWORD environment variables for basic authentication during the download.

5. Output:

Prints messages to the console to inform users about the progress of the download.

Handles errors gracefully, providing error messages in case of exceptions.

I am proud of doing the work in the following ways,

- **Efficiency:** Automated a crucial aspect of project setup, saving time for team members.
- **User-Friendly:** Simplified project onboarding with a streamlined setup process.
- **Flexibility:** Allowed customization of the Maven Wrapper download URL, accommodating different project setups.
- **Robustness:** Included error handling for a reliable download process.
- **Security:** Supported basic authentication, prioritizing security.