GitHub Workflow Documentation for the Data-Analytics Repository

This document outlines the structured workflow for managing code contributions and collaboration in the Data-Analytics GitHub repository.

1. Main Repository Structure

- ➤ The Data-Analytics repository serves as the central repository for our project.
- ➤ It was created by team member Sedhuragavan and acts as the base repository containing the main branch.

2. Branch Structure

To organize our work effectively, the repository is structured with the following branches:

Main Branch

The main branch contains the stable, production-ready version of the project.

All finalized and reviewed code from sub-branches is merged here.

Sub-Branches

Three sub-branches were created from the main branch to categorize work:

- AI/ML: Dedicated to Artificial Intelligence and Machine Learning code and models.
- **DM:** Focused on Data Mining operations and related algorithms.
- **RPA:** Contains work related to Robotic Process Automation.

3. Individual Repositories

- From the sub-branches, individual team members create personal repositories (branches) named after themselves.
- Each team member works on their respective code in their individual repository.

4. Workflow Process

Step 1: Code Development

Team members develop and test their code in their respective branches.

Step 2: Code Upload

Completed code is uploaded to the respective individual branch.

Step 3: Pull Request Creation

- ◆ A pull request (PR) is created to merge the code from the individual branch into the respective sub-branch (AI/ML, DM, or RPA).
- ◆ The PR includes a detailed description of the code changes for better understanding during the review.

Step 4: Code Review

- The team conducts a code review to ensure quality, functionality, and adherence to standards.
- Feedback, if any, is addressed by the contributor.

Step 5: Merge to Sub-Branch

Once approved, the PR is merged into the corresponding sub-branch.

Step 6: Merge to Main Branch

After ensuring stability and integration of all sub-branches, they are merged into the main branch.

I hereby attached my screenshot the flow of the organization and workflow







