Git Mastery Challenge - RML Juniors

Aybars Ağaya - Emir Bahadır Ünsal

June 28, 2024

Welcome to Version Control - Git

Version control is an indispensable tool in the world of software development, particularly in collaborative environments. Mastering Git not only enhances your ability to manage code effectively but also prepares you for real-world projects where precision and teamwork are paramount. Git is heavily used in the industry due to its ability to facilitate seamless collaboration, maintain a detailed history of changes, enable branching and merging, and ensure backup and recovery of codebases.

Task Overview

Your mission is to demonstrate your Git proficiency by working with a comprehensive Robotics Repository - Python Robotics This repository contains crucial codes and documents pivotal to Modern Robotics and a good initiation of Robotics world.

Objectives

1. **Setup the Git Environment - Create your Own Local Repository and Remote Repository** Check the video: Git Installation for Mac
2. **Create your GitLab account** Check the video: Gitlab Matching with SSH Keygen for Mac
3. **Pull the Repository**: Begin by cloning the Python Robotics Repository the link is given above.
4. **Enhance Documentation**: Add a PDF document detailing your selection of a Robotics algorithm (Control/fusion/planning/slam etc..) based on your preference on a random/imaginary Robotics project. You are heavily allowed to be creative. Just say the interesting/cool things about those algorithms. T
5. **Comment and Improve Code**: Review the Python scripts within the repository. Add meaningful comments to enhance readability and maintainability Run the codes and see the results whether they match with videos in Documentation.
6. **Push Your Changes**: Once your enhancements are complete, push the updated repository to your personal GitLab account.

Deliverables

- The updated repository pushed to your personal GitLab account including adjusted/commented codes and PDF document. Later on, we will use our Gitlab repos again :D

Troubleshooting

- For debugging, you can ask your questions to us, but we want you tackle with them first in detail since it heavily reinforces the learning procedure.

Have fun!