"Kyiv Vocational College of Communication"

Cyclic Commission of Computer Engineering

EXECUTION REPORT

**Work - Case #1**

**from the discipline: "Operating systems"**

**Topic:** WORK-CASES IN LINUX

a list of additional practical tasks

from the discipline "Operating Systems"

It was performed by students of the RPZ group - 03B

Myronov Myhail

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**Work-case 1**

**#1 Describe what git is used for, what basic actions and commands it performs.**

Git is a distributed version control system that is widely used in software development to track changes made to source code and collaborate with other developers. It allows developers to work on the same codebase simultaneously without interfering with each other's work. Git stores all changes made to the codebase in a database called a repository, which can be accessed by multiple users.

* Git performs a variety of basic actions and commands, including:
* Initializing a repository: This creates a new Git repository in a directory.
* Adding files to the repository: This adds files to the Git repository and prepares them to be tracked.
* Committing changes: This records the changes made to the files and saves them as a new version in the repository.
* Checking the status of the repository: This shows which files have been changed, added, or deleted.
* Branching: This creates a new branch of the repository, allowing developers to work on different versions of the codebase.
* Merging: This combines changes made to different branches of the repository, allowing developers to integrate their work.
* Pulling: This fetches changes made by other developers and merges them with the current branch.
* Pushing: This sends changes made by a developer to the repository, allowing other developers to access and review them.
* Cloning: This creates a copy of a repository on a developer's local machine, allowing them to work on the codebase without affecting the original version.
* Tagging: This creates a named reference to a specific version of the codebase, allowing developers to easily access it later.

Git is a powerful tool for managing and tracking changes in software development projects. It is widely used in the industry and has a large community of developers who contribute to its ongoing development and improvement.

**#2 Register your own git account (gitlab, github or another platform).**

**#3 Create a new public repository, which you will use to add all completed works from the "Operating Systems" discipline (if you work in a team, add other team members to its editors).**

**№4 Place your first report on completed Work-case 1 (presentation, text file, html page) in this repository.**

**Conclusion:** During the implementation of WorkCase 1, I gained initial knowledge of using the Git application, the issue of initial git commands was theoretically investigated in more detail. Acquired practical skills of working with git commands.