TU856/3
INTRODUCTION TO DEVOPS

LAB 4 – CONTINUOUS INTEGRATION WITH JENKINS

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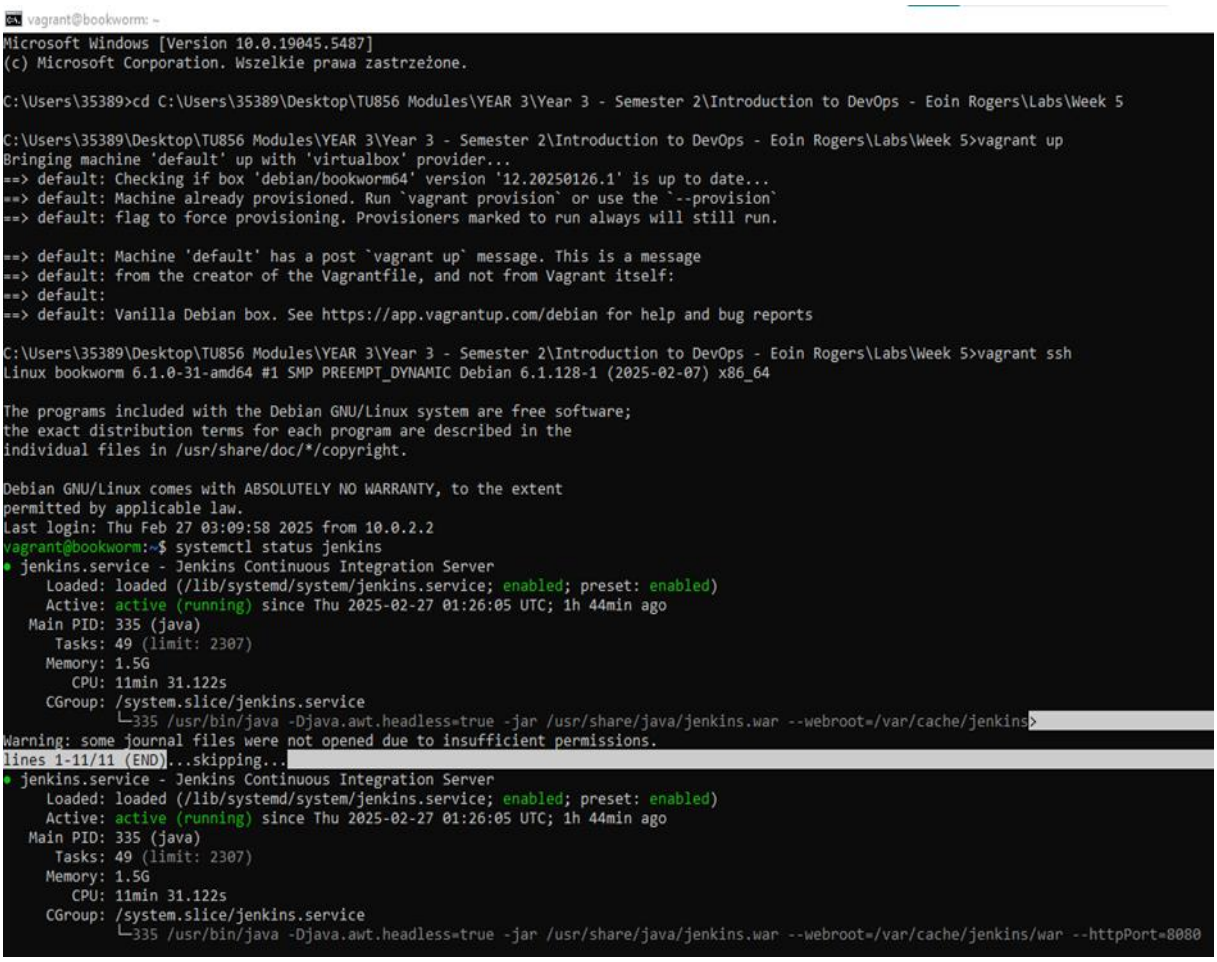
PAULINA CZARNOTA C21365726

1. SETTING UP AND STARTING JENKINS SERVICE ON VM

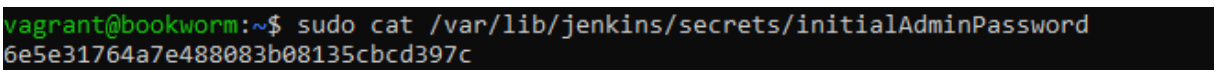
This section includes starting the virtual machine, accessing it via SSH, and running the command: `systemctl status jenkins`

This verifies that the Jenkins service is active and running.

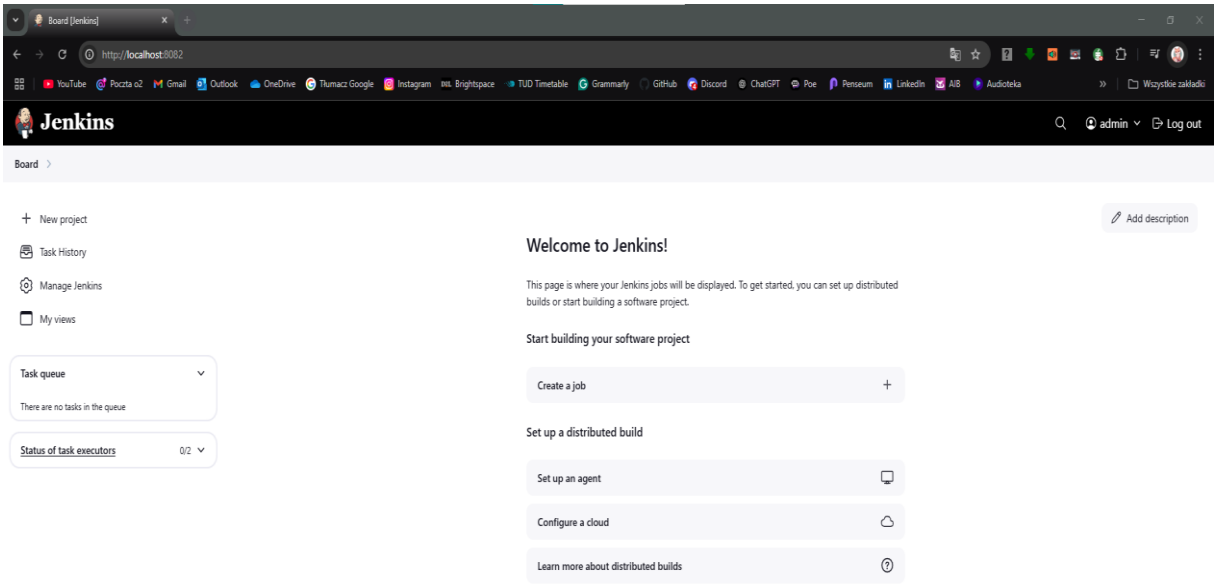


2. JENKINS DASHBOARD

This screenshot demonstrates the retrieval of the admin password required to access Jenkins.

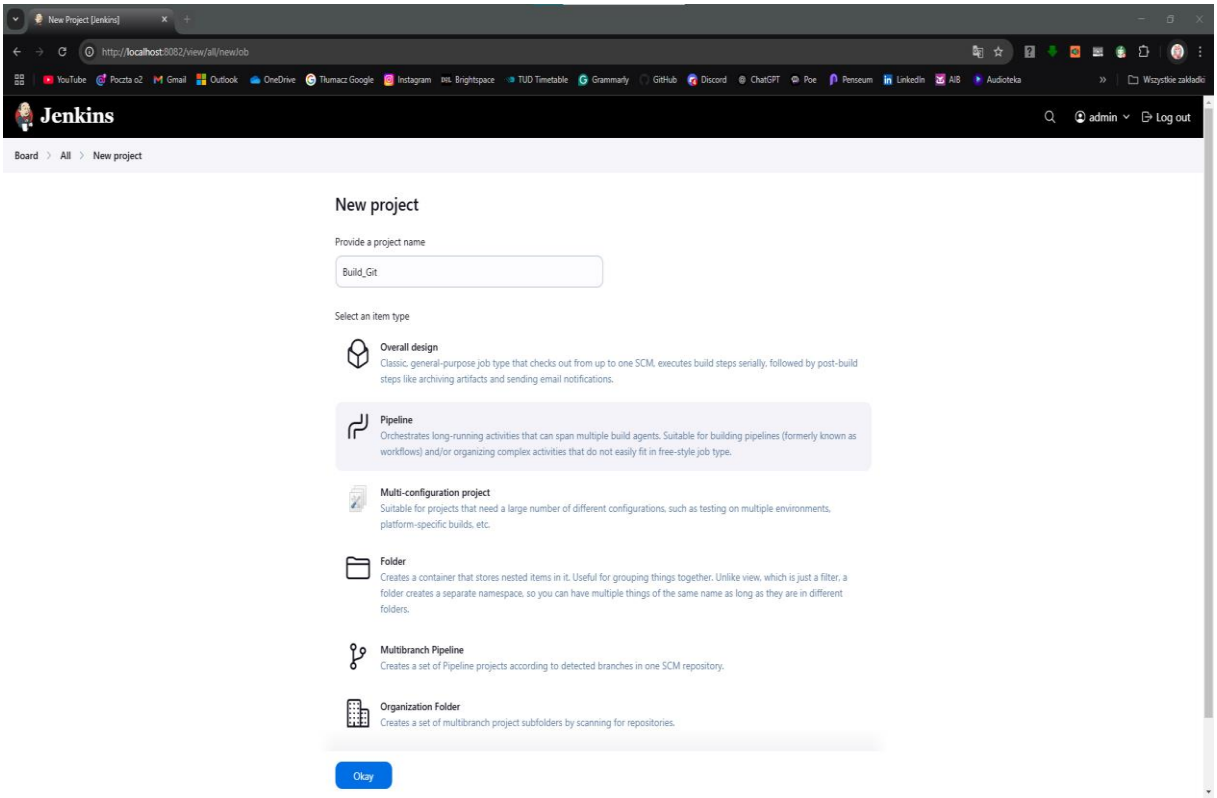


The image confirms that Jenkins is installed and running correctly, accessed via: `http://localhost:8082`



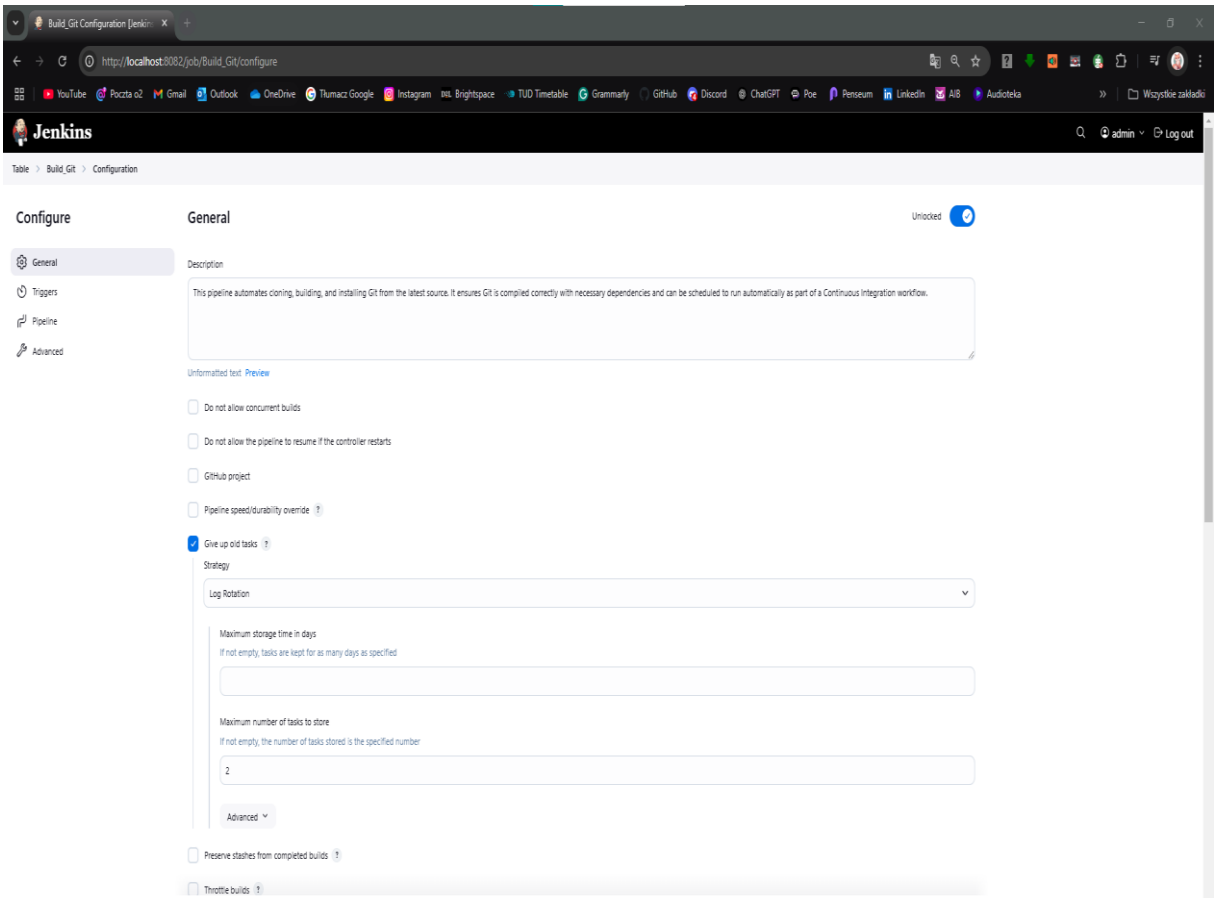
3. CREATING A NEW JENKINS PROJECT

This screenshot demonstrates the creation of a new Jenkins pipeline project named `Build_Git`, selecting the "Pipeline" option.



4. PIPELINE CONFIGURATION (GENERAL SETTINGS)

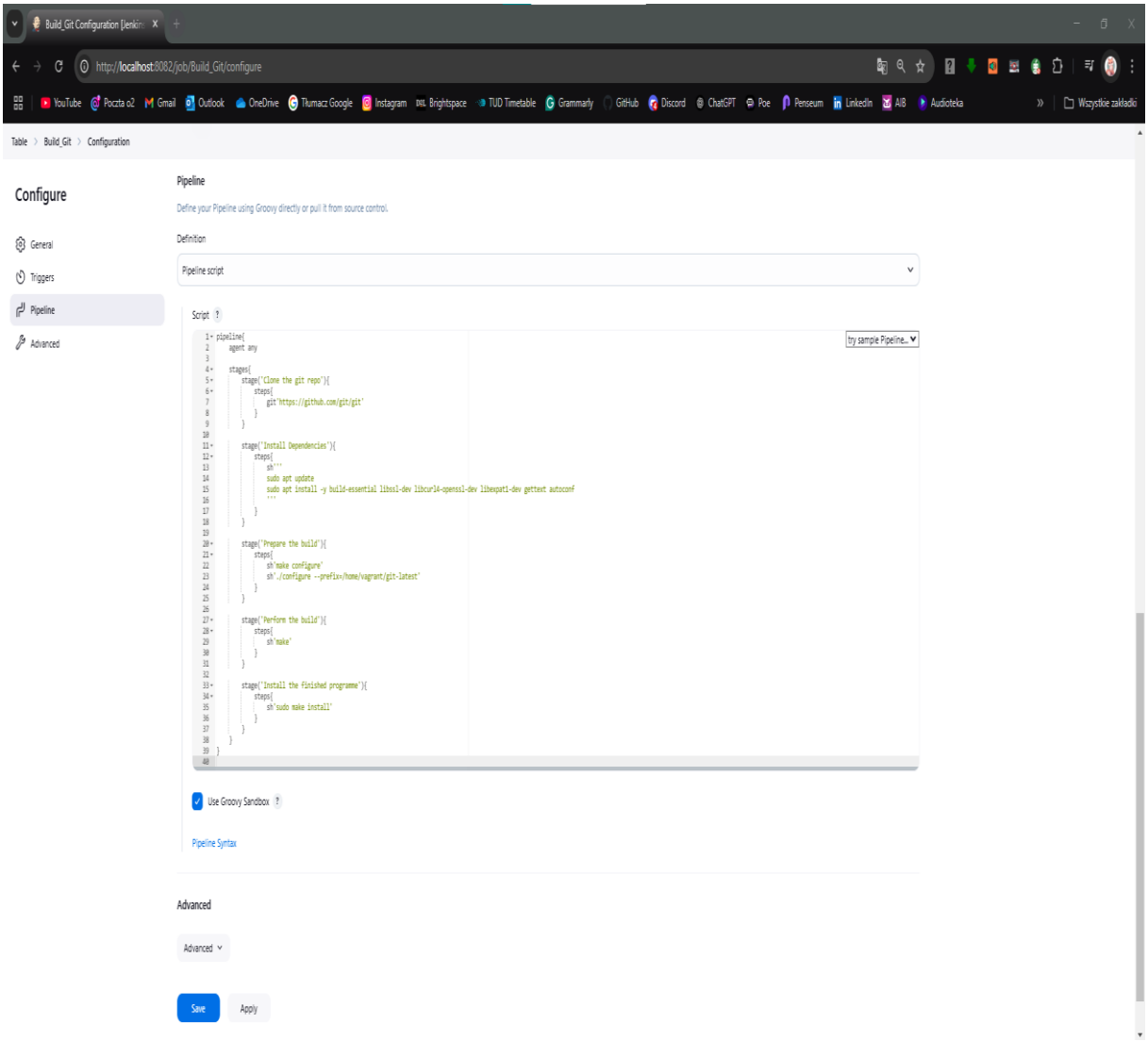
This image displays the pipeline configuration settings, including the description and log retention policies.



5. PIPELINE SCRIPT CONFIGURATION

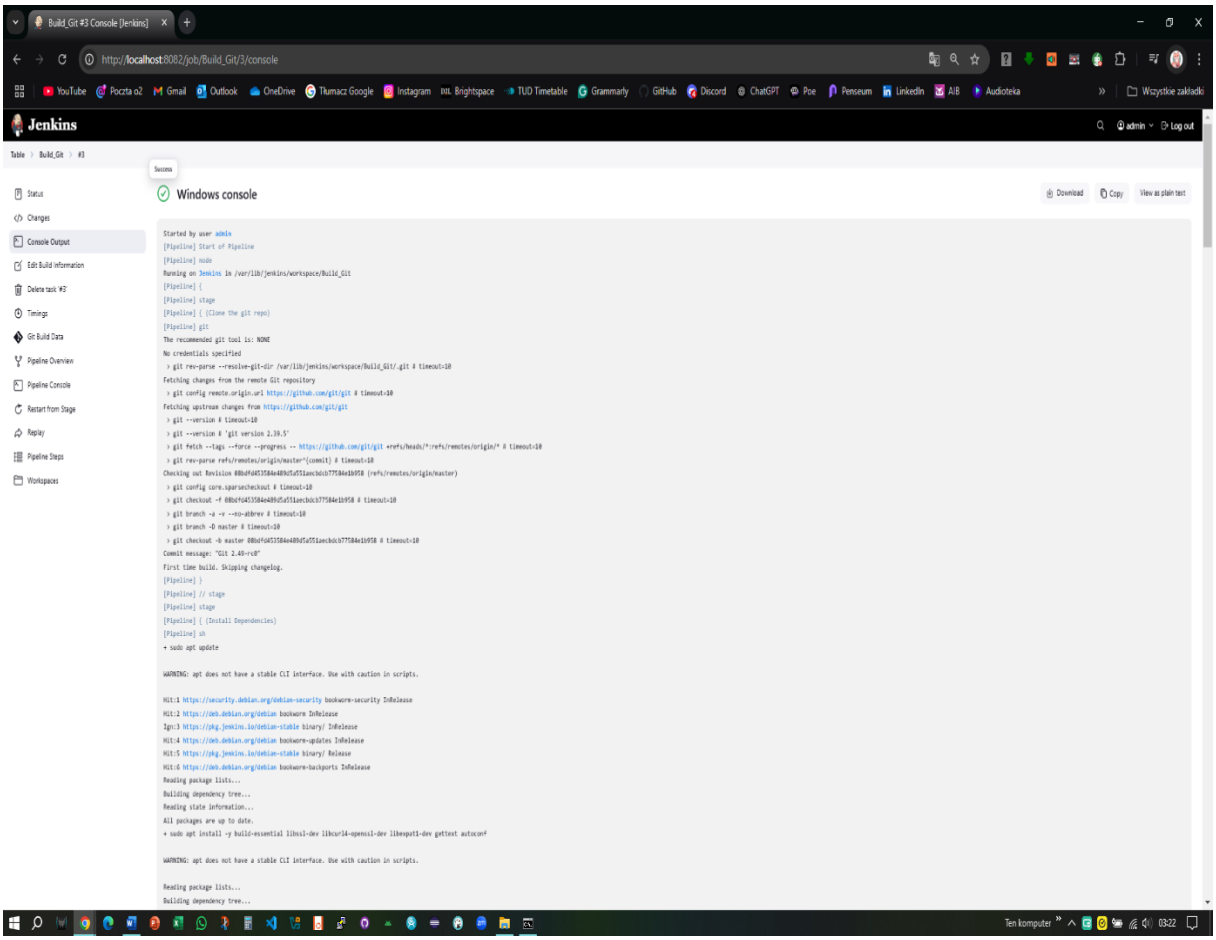
This screenshot shows the Jenkins pipeline script, which consists of the following build stages:

- Cloning the Git repository.
- Configuring the build.
- Compiling Git.
- Installing the final program.



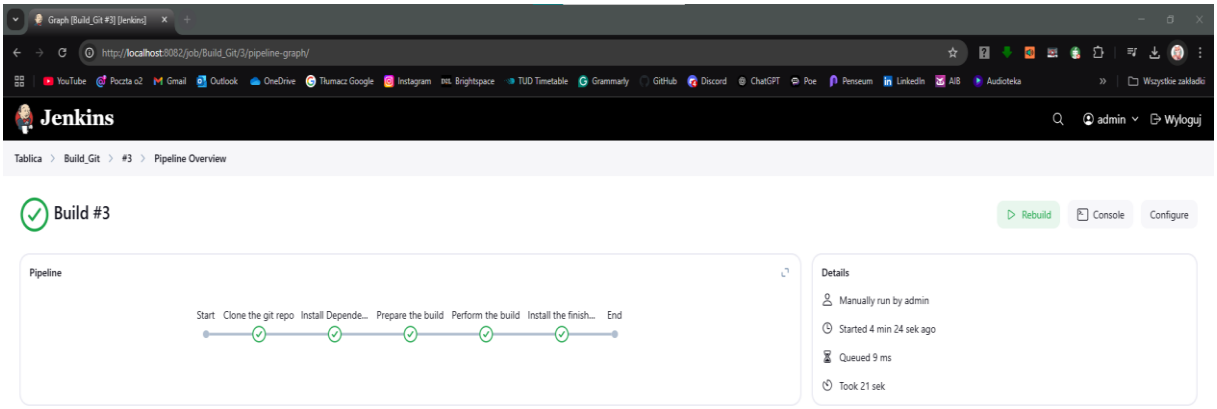
6. VERIFYING PIPELINE EXECUTION

This image captures the Console Output, showing the pipeline running successfully, with each stage executed correctly.



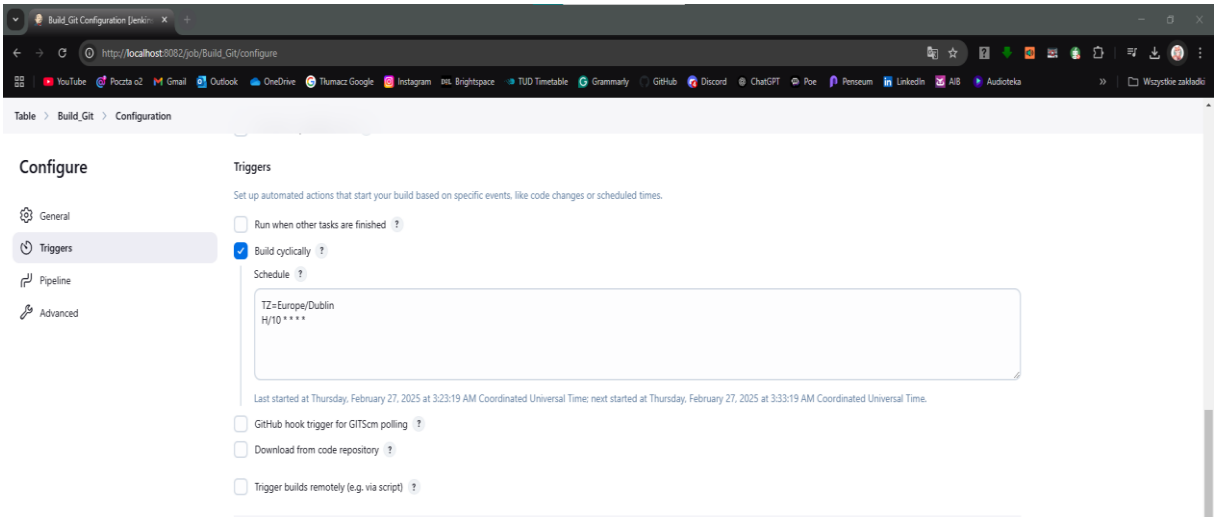
7. SUCCESSFUL PIPELINE EXECUTION OVERVIEW

This screenshot displays the graphical Pipeline Overview, confirming that all stages have completed successfully. The pipeline was executed multiple times, with at least three successful builds, demonstrating its stability and proper configuration.



8. CONFIGURING AUTOMATED BUILD SCHEDULING

This screenshot verifies that the build is scheduled to run every 10 minutes, using the correct cron syntax: `H/10 * * * *`



9. GIT VERSION VERIFICATION ON VM

This final screenshot demonstrates that the compiled Git version is installed and functional by executing: `~/git-latest/bin/git –version`