**DevOps Project Presentation:**

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**Presentation Title**

* **DevOps Project Name**
* **Participant(s) Name(s)**
* **Date**

**1. Introduction**

* **Context:**
  + Description of the initial problem (e.g., manual deployments, lack of automation, poor collaboration).
  + Why DevOps was chosen to address these issues.
* **Objectives:**
  + Automate deployment processes.
  + Improve collaboration between development and operations teams.
  + Reduce time-to-production.

**2. Architecture and Workflow**

* **Architecture Diagram:**
  + Display the tools used at each stage:
    - Source code management (Git, GitLab, GitHub).
    - CI/CD tools (Jenkins, GitHub Actions, GitLab CI/CD, Azure DevOps).
    - Target environments (VMs, physical servers, cloud).
* **General Workflow:**
  + Describe the key steps:
    - **Code commit.**
    - **Automated build and testing.**
    - **Delivery to the target environment.**
    - **Monitoring results.**

**3. Tools and Technologies**

* **List of tools used:**
  + **SCM (Source Code Management):** Git, GitHub, GitLab.
  + **CI/CD:** Jenkins, GitHub Actions, Azure DevOps.
  + **Testing:** JUnit, Selenium, PyTest.
  + **Monitoring:** Nagios, Zabbix.
  + **Deployment tools:** Ansible, Terraform.
* **Reasons for selection:**
  + Justify the choice of tools to meet project needs.

**4. CI/CD Pipeline**

* **Description of main stages:**
  + **Build:** Compiling or packaging the application.
  + **Testing:** Unit, integration, and functional tests.
  + **Deployment:** Automating deployment to the target environment.
  + **Post-deployment validation:** Final tests or smoke tests.
* **Sample YAML or Jenkinsfile pipeline configuration:**
  + Provide an excerpt to explain the configuration.
  + Clarify each step with screenshots or a diagram.

**5. Demonstration**

* **Steps shown in the demo:**
  + Commit code and trigger the pipeline.
  + Show test results in the CI/CD interface.
  + Successful deployment to the target environment.
  + Example logs or a monitoring dashboard.
* **Final result:**
  + Presentation of the functional application.

**6. Conclusion**

* **Summary:**
  + Benefits brought by DevOps to the project.
  + How automation improved workflows.
* **Future outlook:**
  + Extend DevOps best practices to other teams or organizations.

**7. Appendices**

* Example configuration files (YAML, Ansible scripts).
* Detailed diagrams and workflows.
* Links to the project’s Git repository.
* User and technical documentation.