Principles of DevOps-LAB 3

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**Experiment Steps:**

**Step 1: Creating a Repository**

* Sign in to your GitLab account.

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* Click the "New" button to create a new project.

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* Choose a project name, visibility level (public, private), and other settings.

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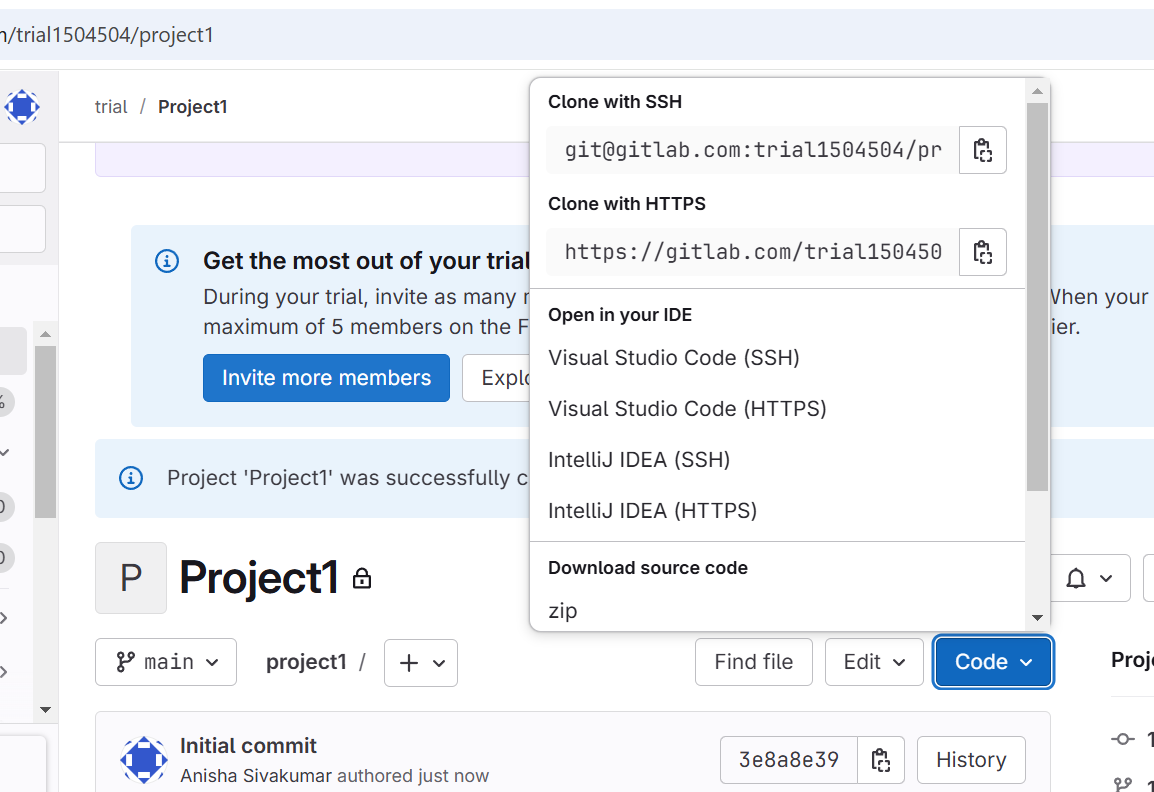
* Click "Create project."

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**Step 2: Cloning a Repository**

* Open your terminal or command prompt.
* Navigate to the directory where you want to clone the repository.
* Copy the repository URL from GitLab.



* Run the following command:

***git clone <repository\_url>***

* Replace <repository\_url> with the URL you copied from GitLab.
* This will clone the repository to your local machine.

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**Step 3: Making Changes and Creating a Branch**

* Navigate into the cloned repository:

***cd <repository\_name>***

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* Create a new text file named "example.txt" using a text editor.
* Add some content to the "example.txt" file.

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* Save the file and return to the command line.
* Check the status of the repository:

***git status***

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* Stage the changes for commit:

***git add example.txt***

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* Commit the changes with a descriptive message:

***git commit -m "Add content to example.txt"***

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* Create a new branch named "feature":

***git branch feature***

* Switch to the "feature" branch:

***git checkout feature***

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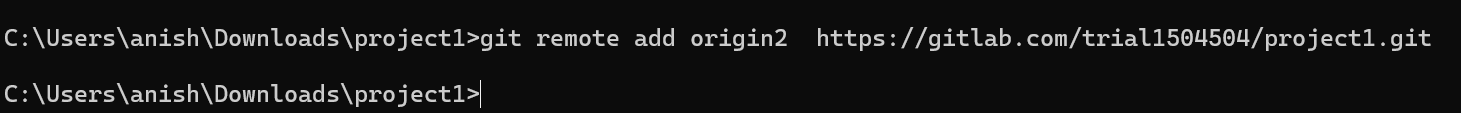
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**Step 4: Pushing Changes to GitLab**

* Add Repository URL in a variable

***git remote add origin  <repository\_url>***

* Replace <repository\_url> with the URL you copied from GitLab.



* Push the "feature" branch to GitLab:

**git push origin feature**

* Check your GitLab repository to confirm that the new branch "feature" is available.

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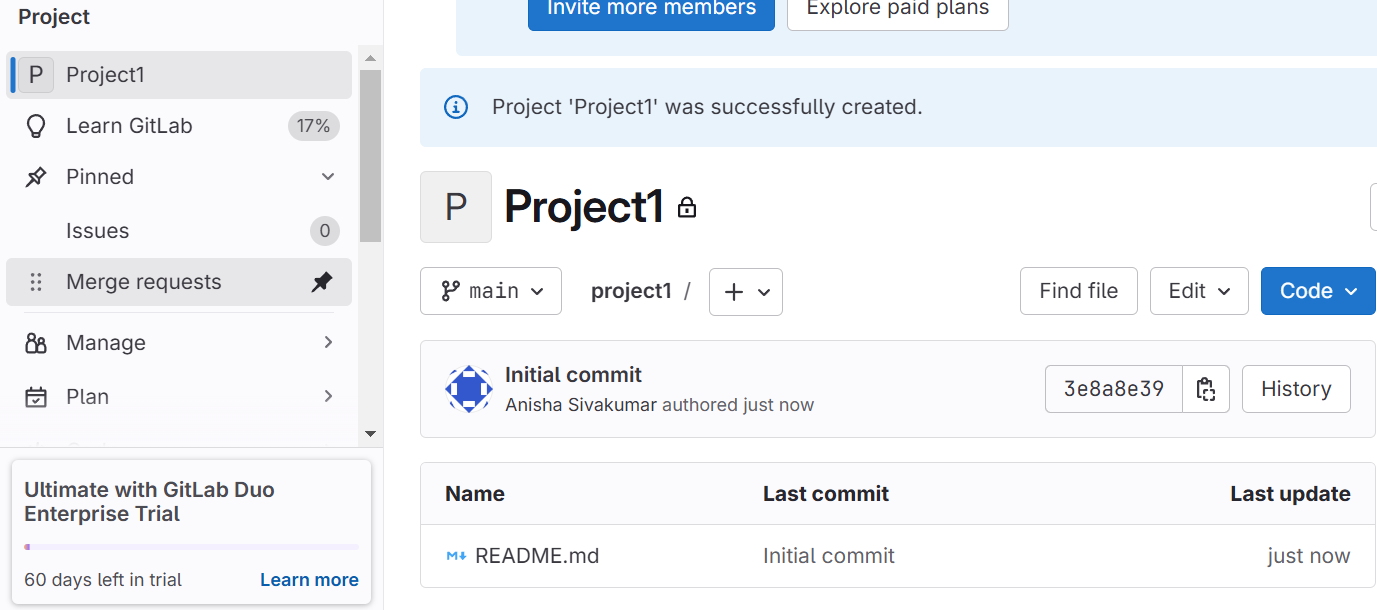
**Step 5: Collaborating through Merge Requests**

1. Create a merge request on GitLab:
   * Go to the repository on GitLab.
   * Click on "Merge Requests" and then "New Merge Request."

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* + Choose the source branch ("feature") and the target branch ("main" or "master").

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* + Review the changes and click "Submit merge request."

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1. Review and merge the merge request:
   * Add a title and description for the merge request.
   * Assign reviewers if needed.
   * Once the merge request is approved, merge it into the target branch.

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**Step 6: Syncing Changes**

* After the merge request is merged, update your local repository:

***git checkout main***

***git pull origin main***

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