Fatima Jinnah Women University

*Department of Software Engineering*



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LAB #02

**SUBJECT: CLOUD COMPUTING**

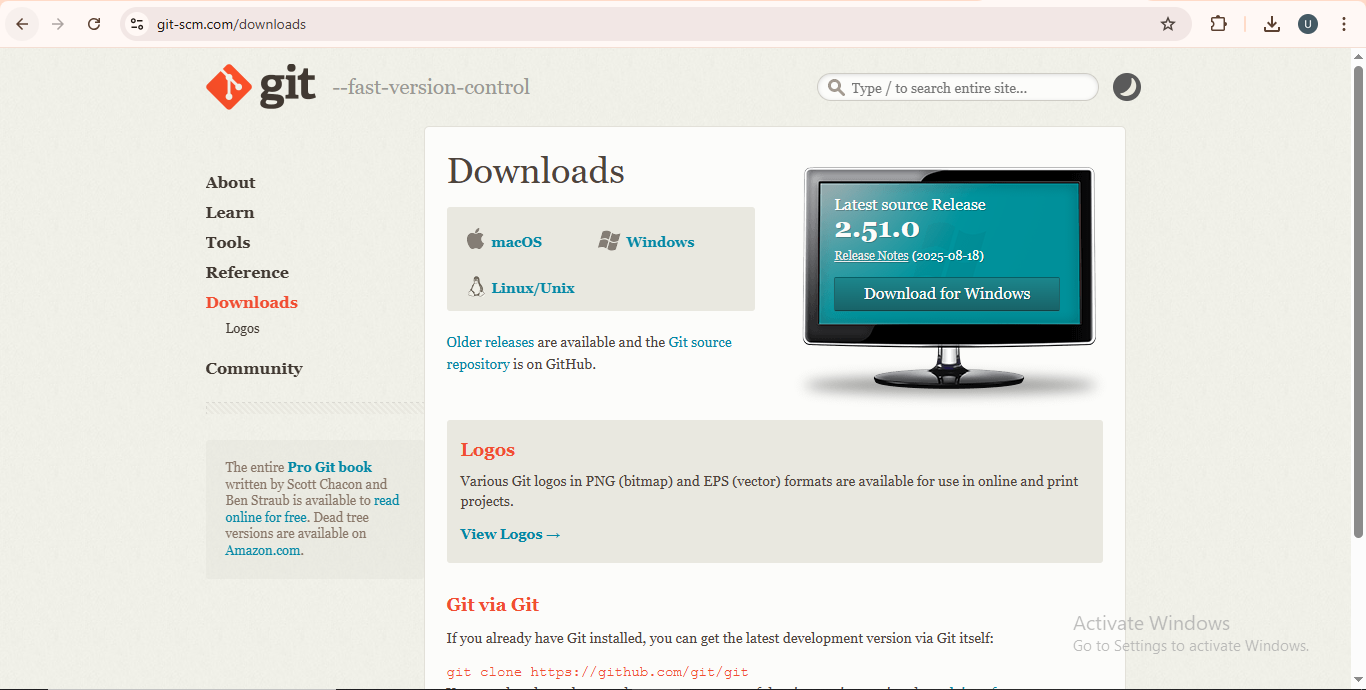
**SUBMITTED TO: SIR MUHAMMAD SHOAIB**

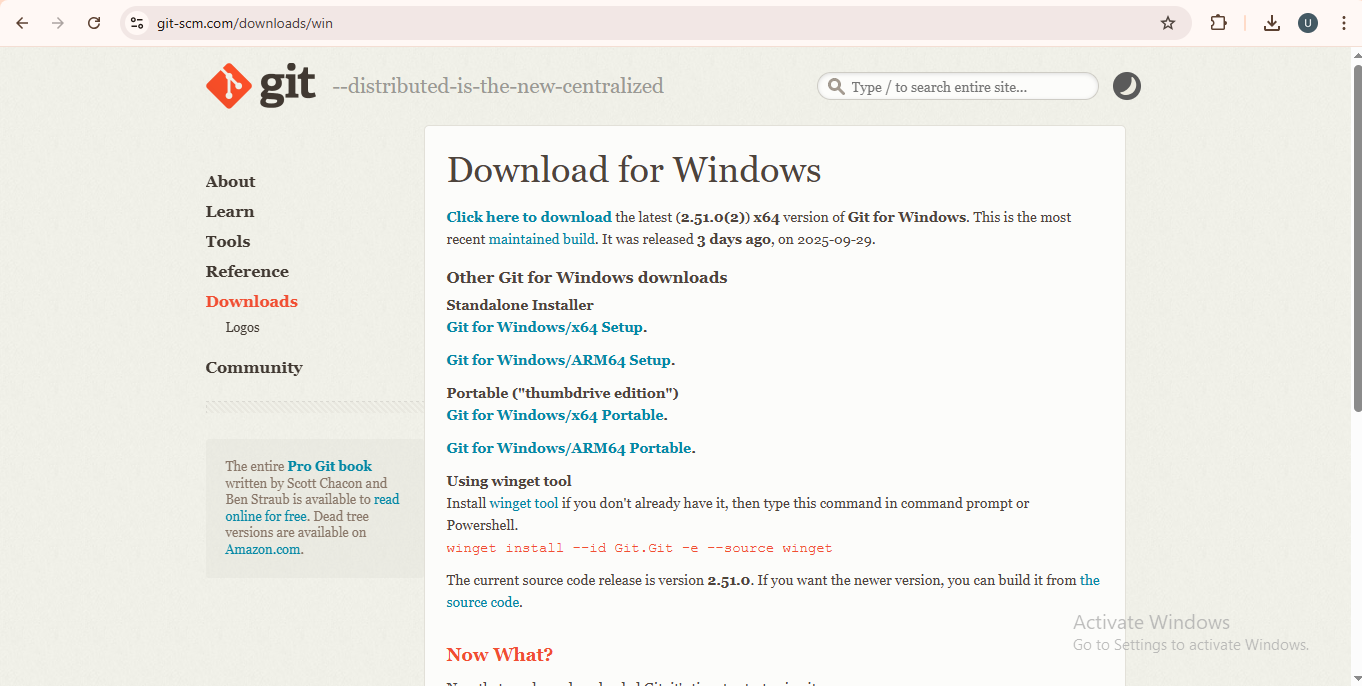
**SUBMITTED BY: UMBER QASIM**

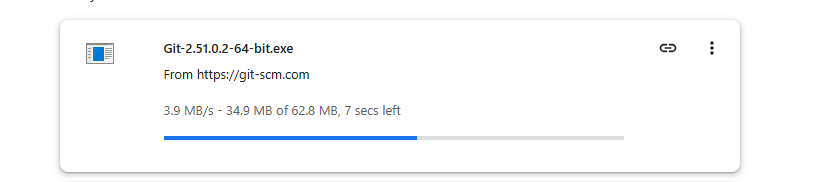
**REGISTRATION NO: 2023-BSE-066**

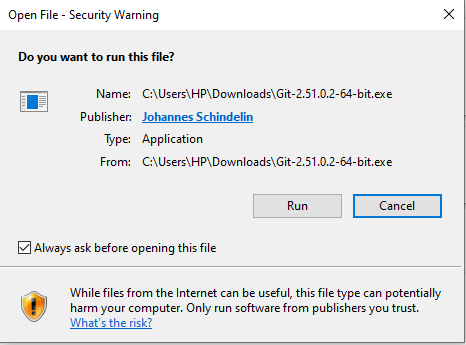
**CLASS: BSSE V-B**

**Installation of Git Bash:**

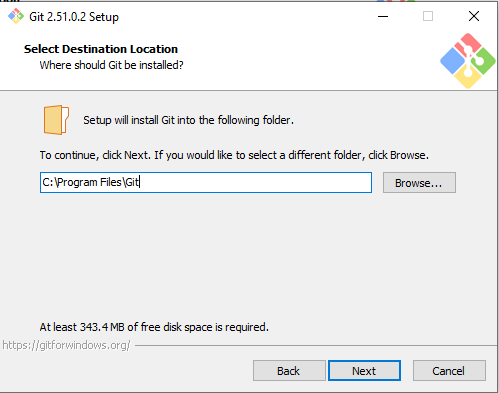


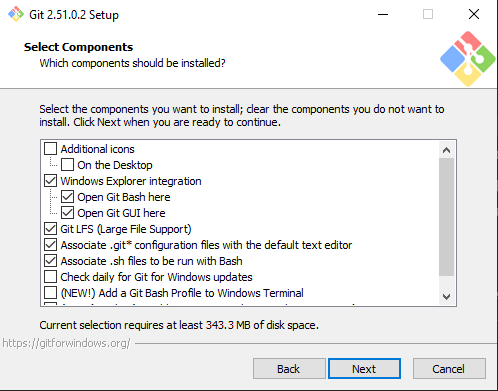


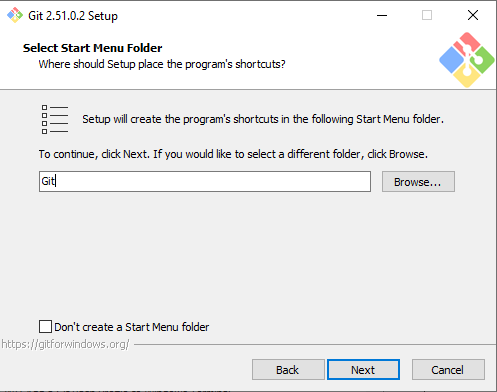


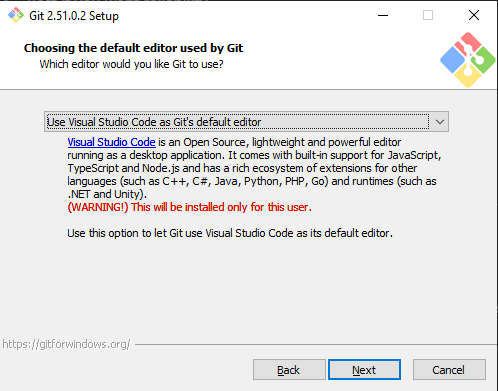


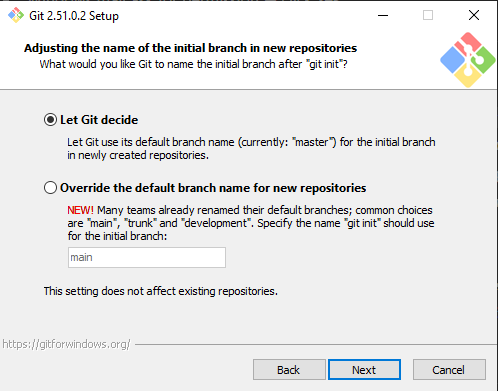


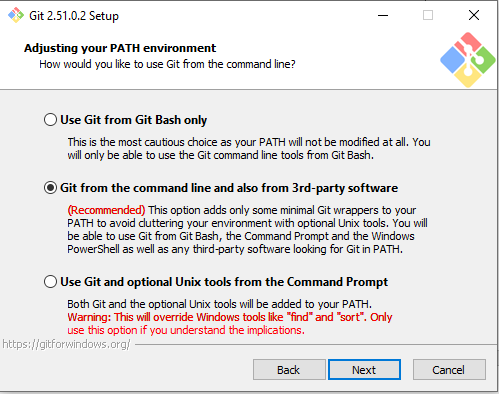


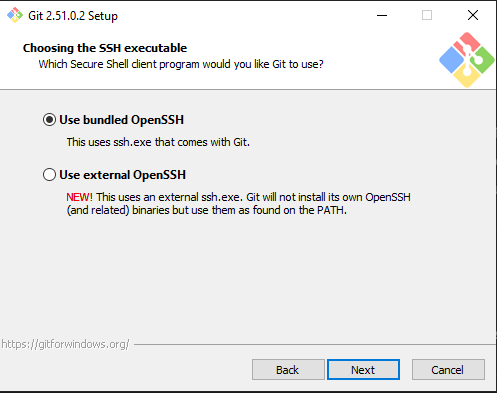


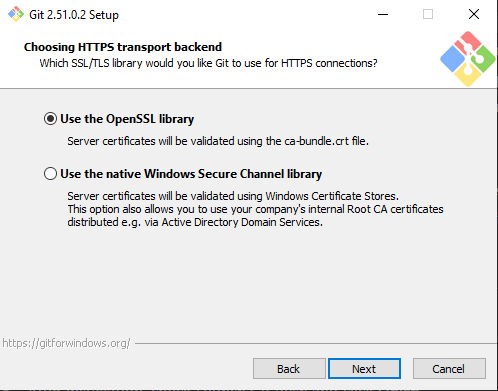


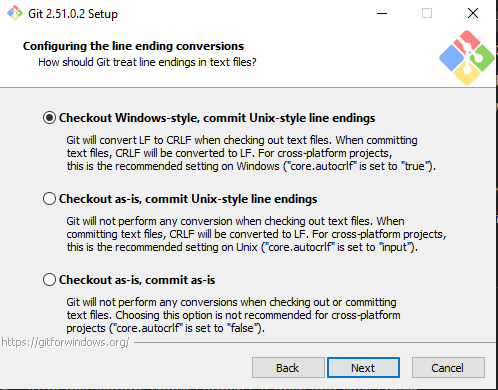


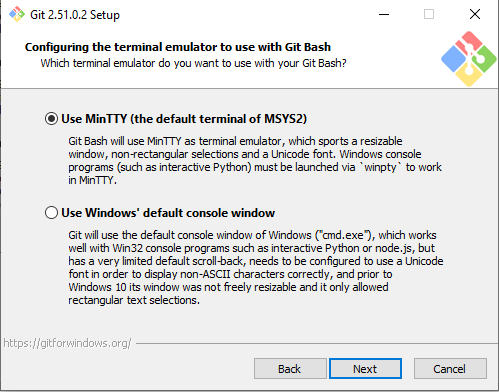


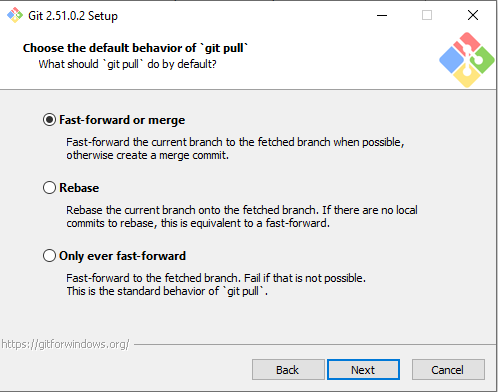


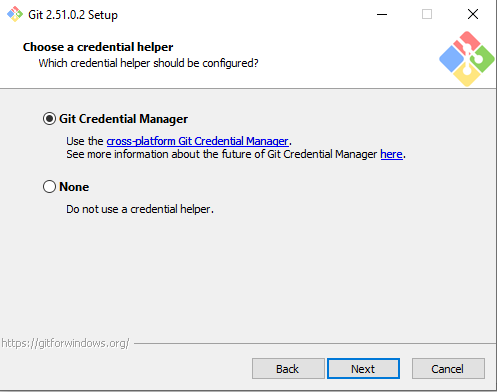


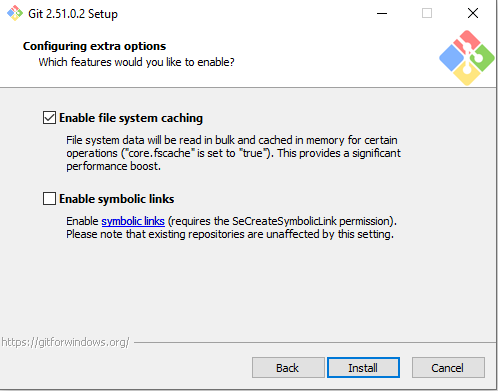


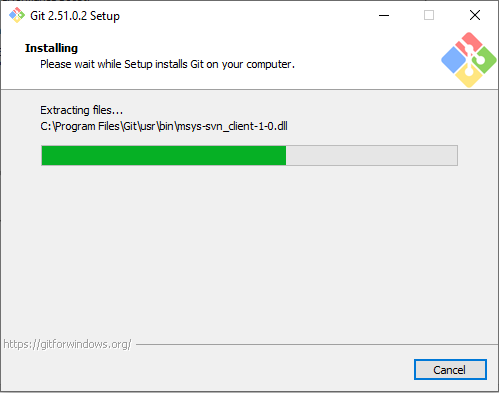


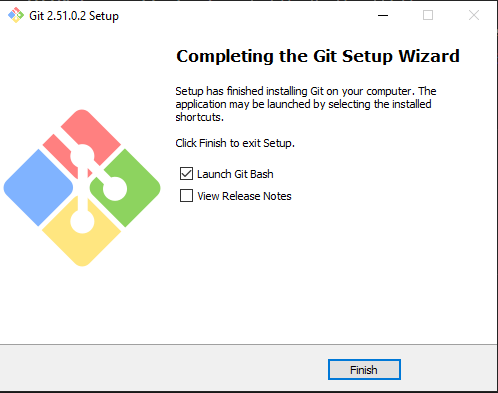


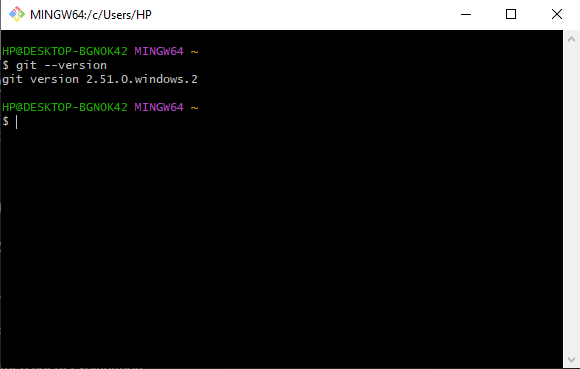




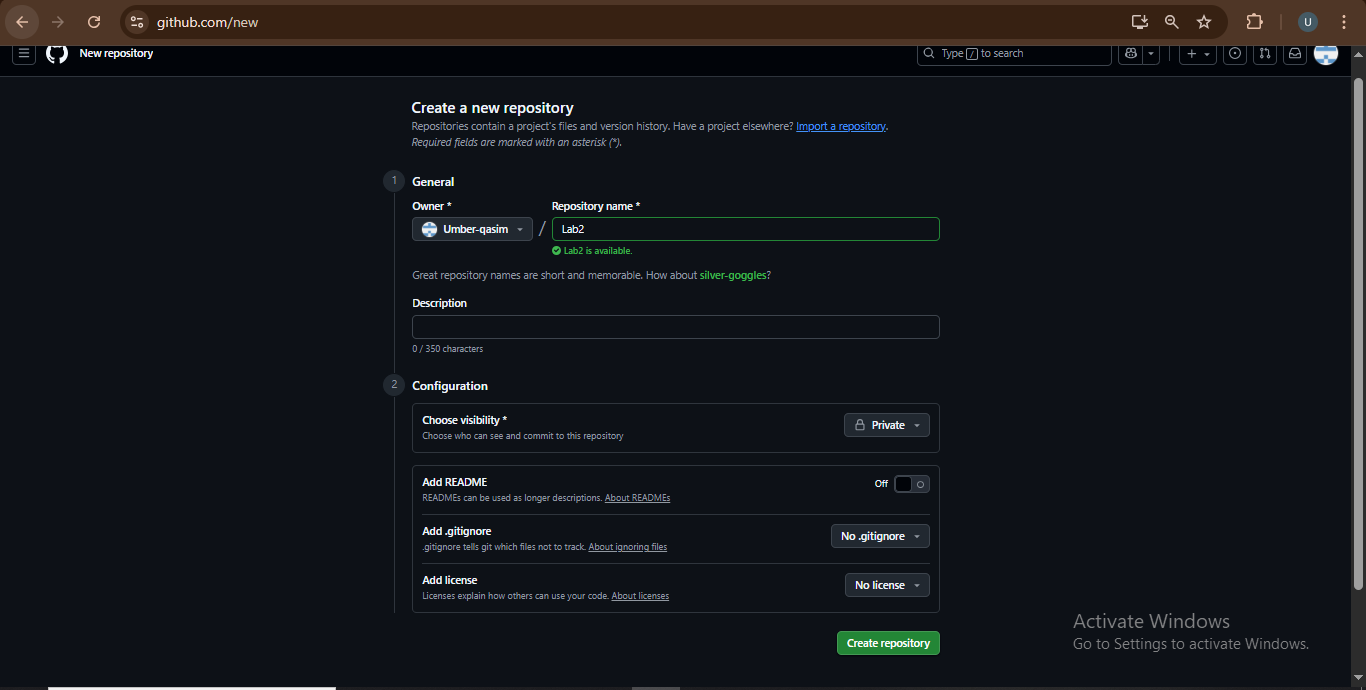




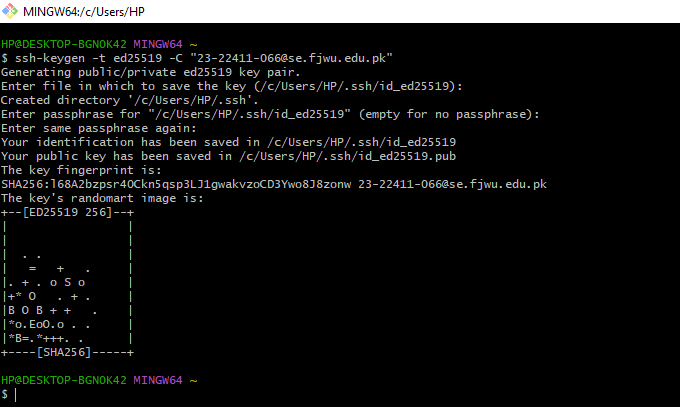


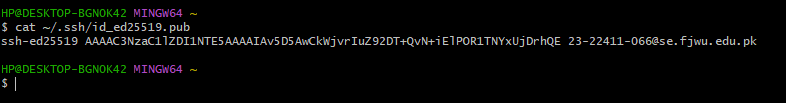


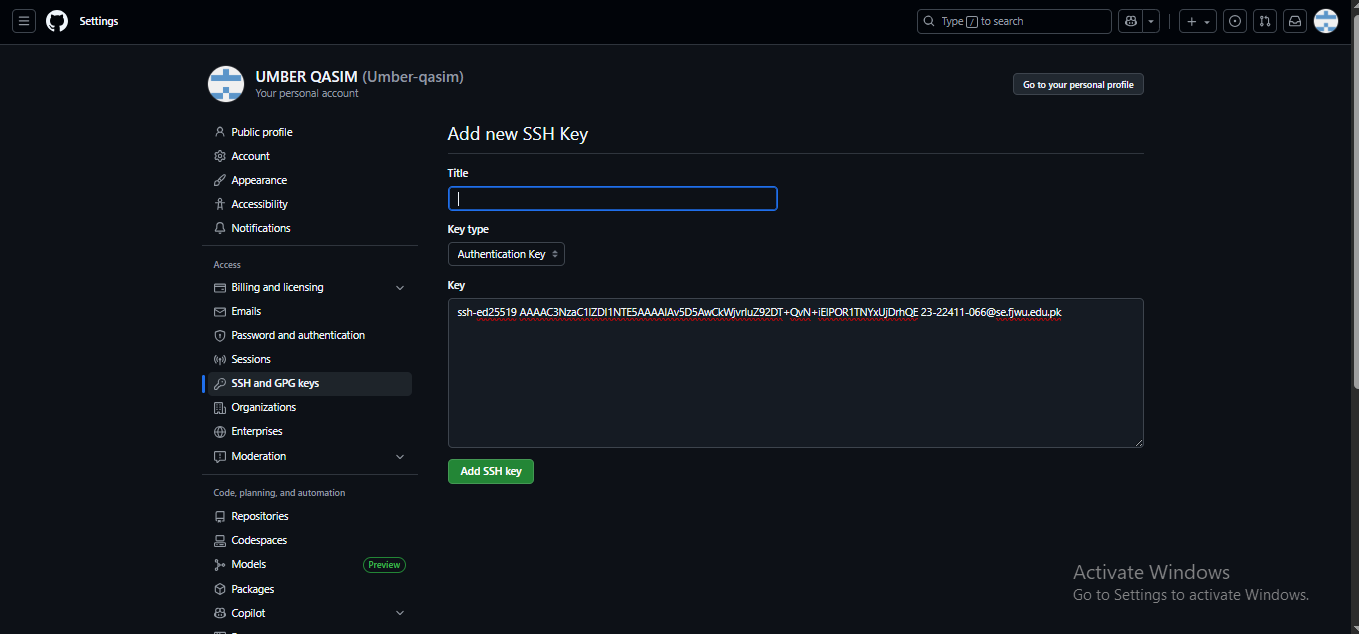
**Task#01: Create Private GitHub Repository**

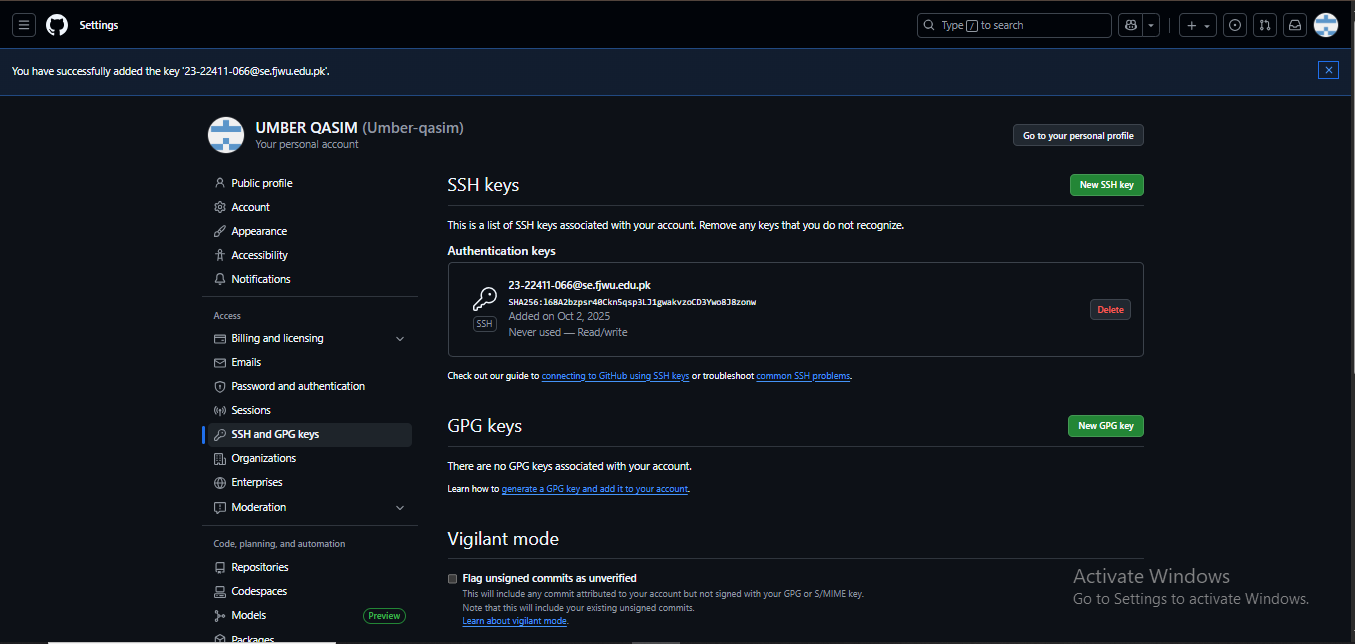


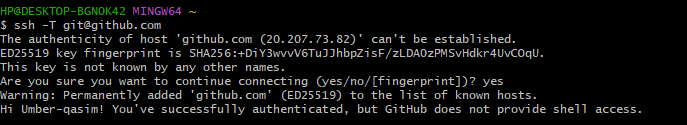
**Task#02: Connect Repository via SSH**

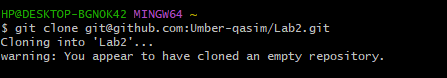




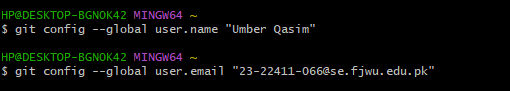


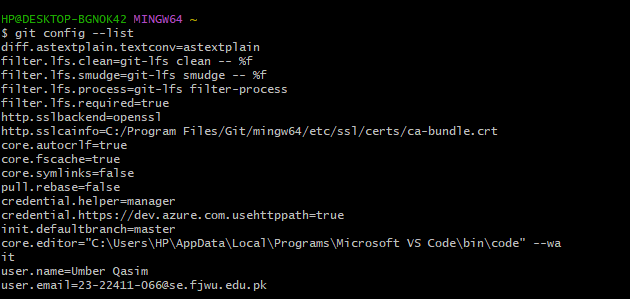




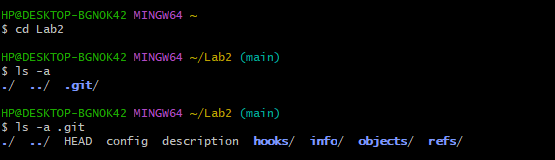


**Task#03: Configure Git Username and Email**

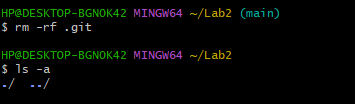
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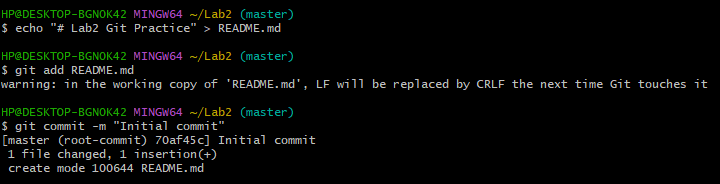
**Task#04: Explore the .git Folder**

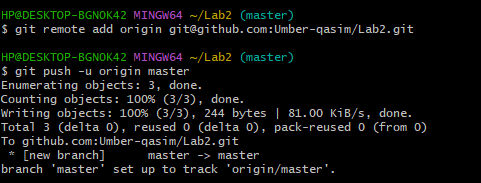


**Task#05: Local Repository Management**

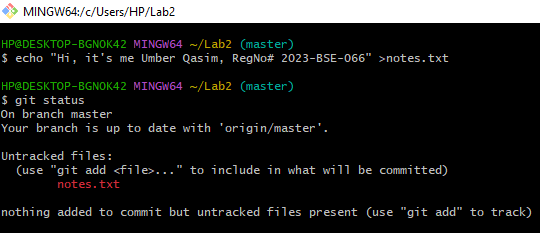


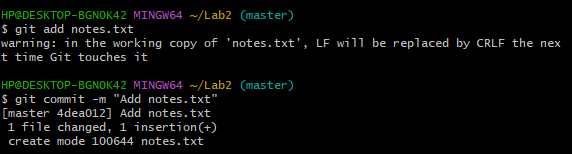


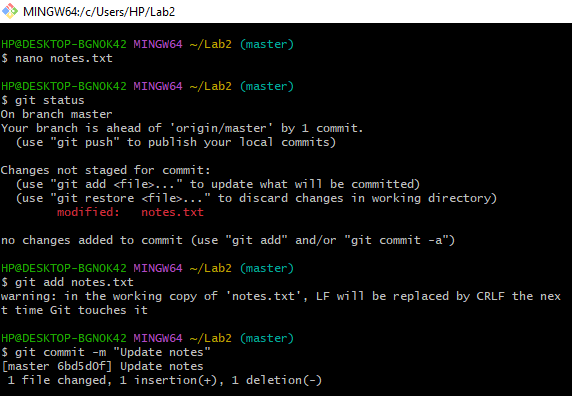




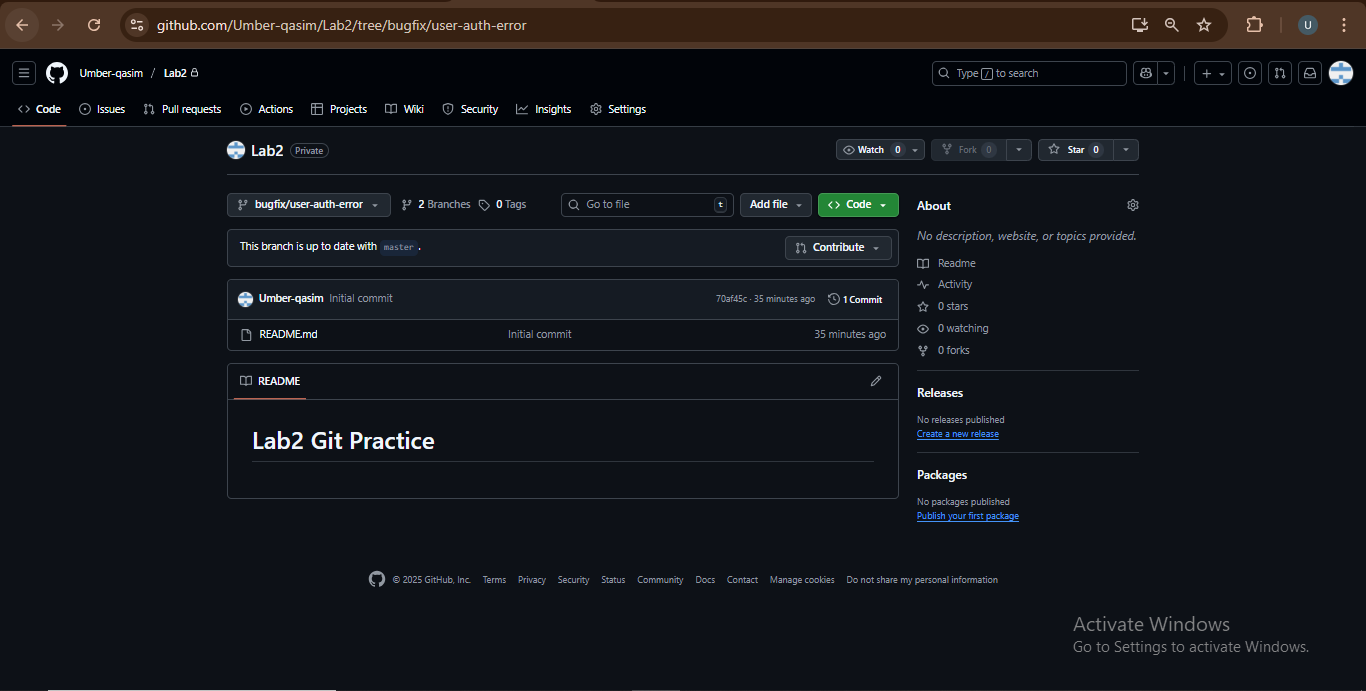
**Task#06: File Status & Staging**

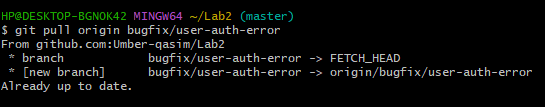




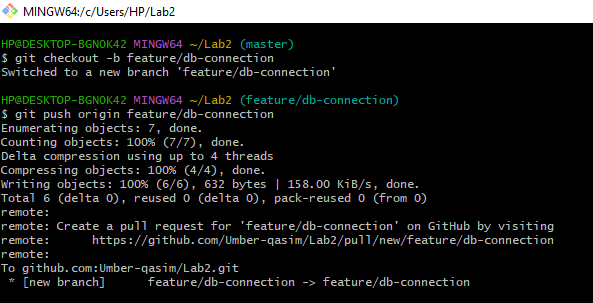


**Task#07: Branch Creation Using GitHub GUI**

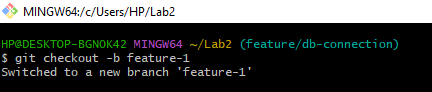


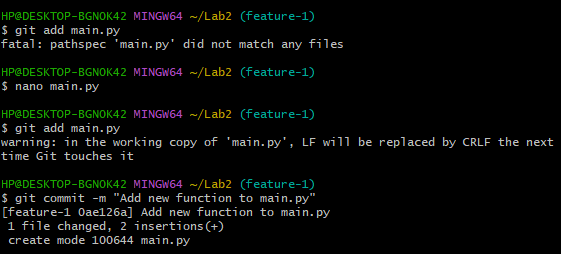


**Task#08: Branch Creation and Push Using Git Bash**

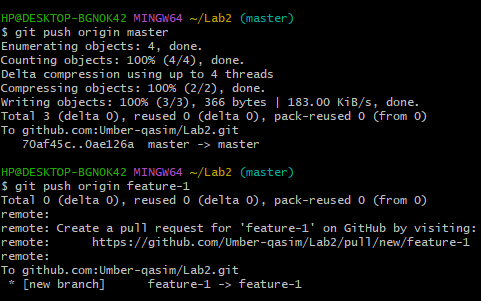


**Task#09: Branching & Merging**

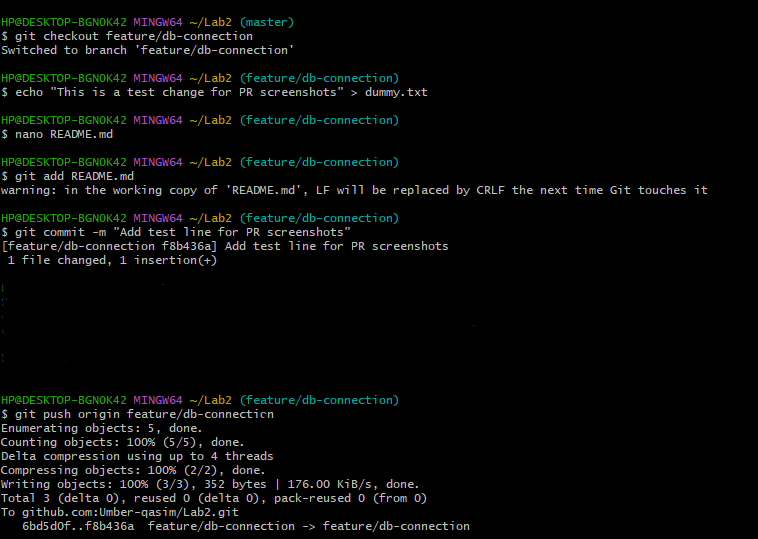


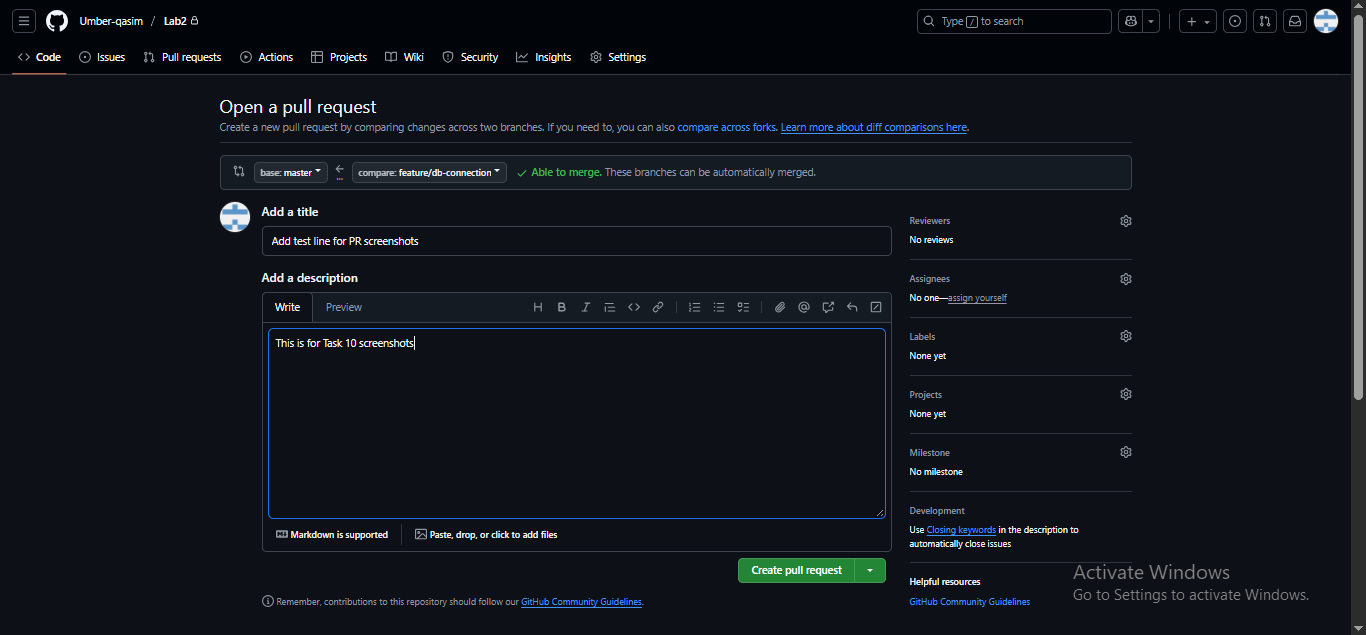


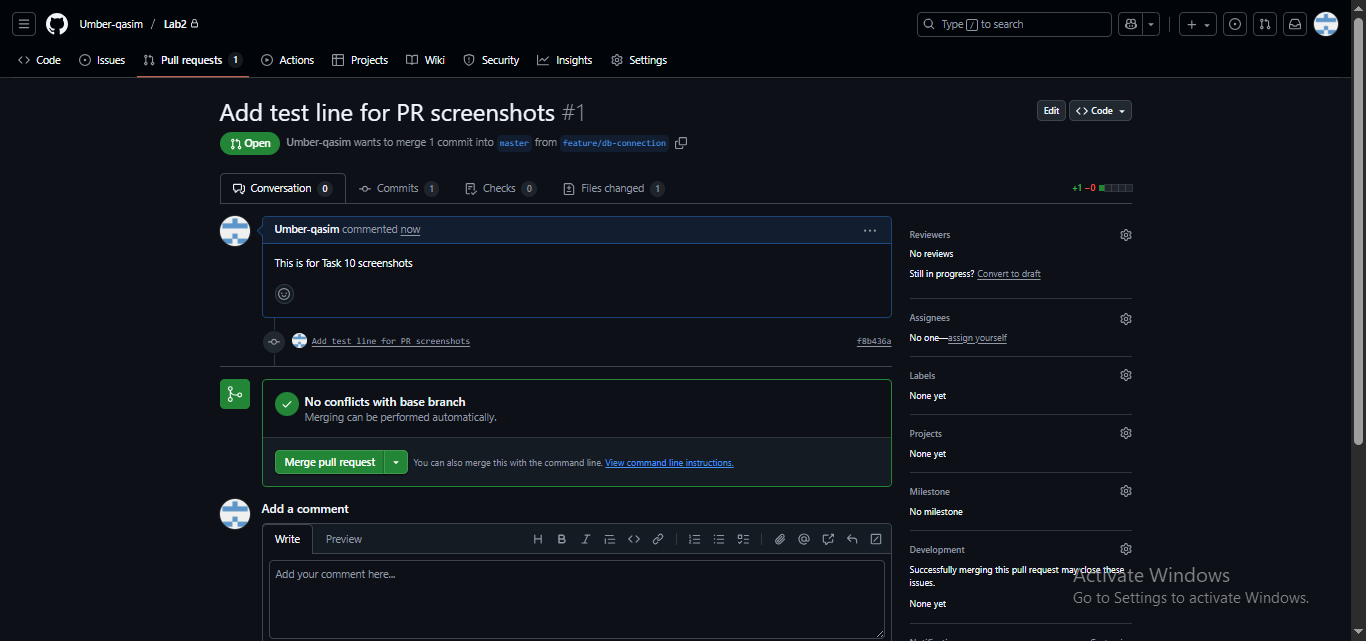


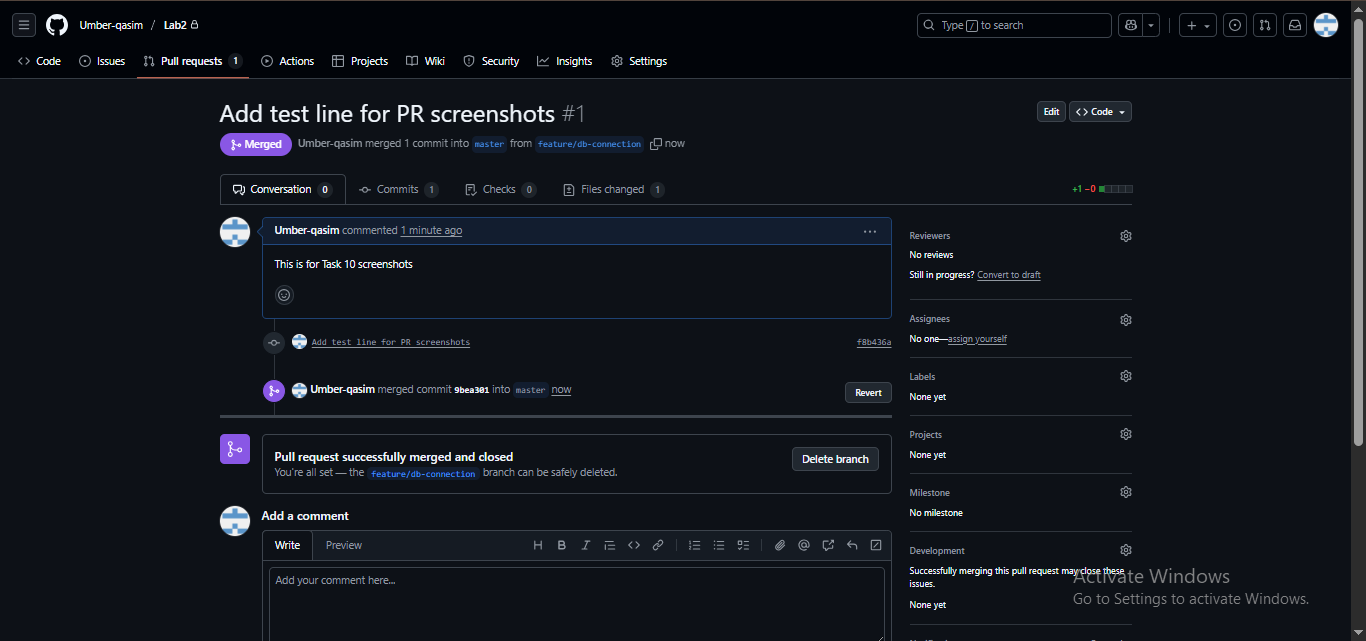


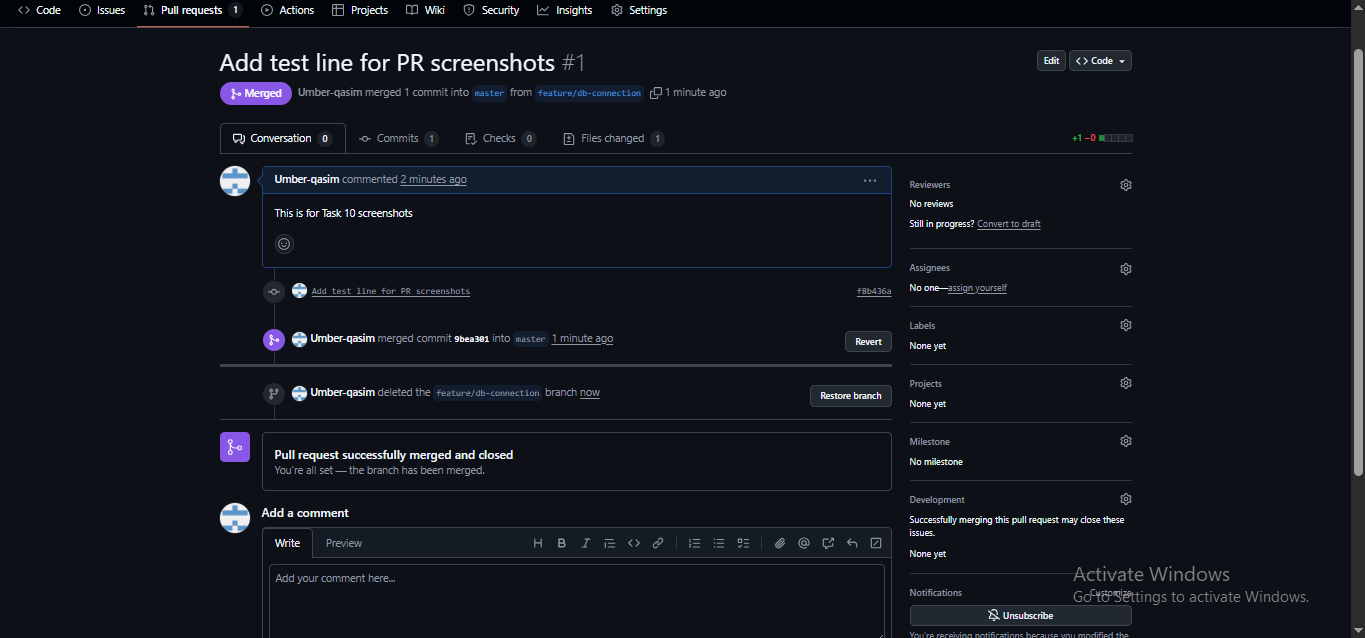
**Task#10: Pull Request and Branch Review (GitHub GUI)**



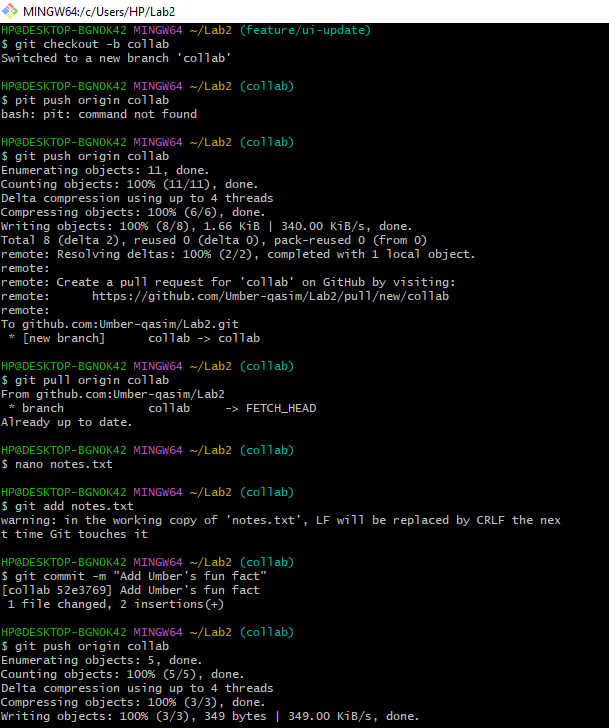


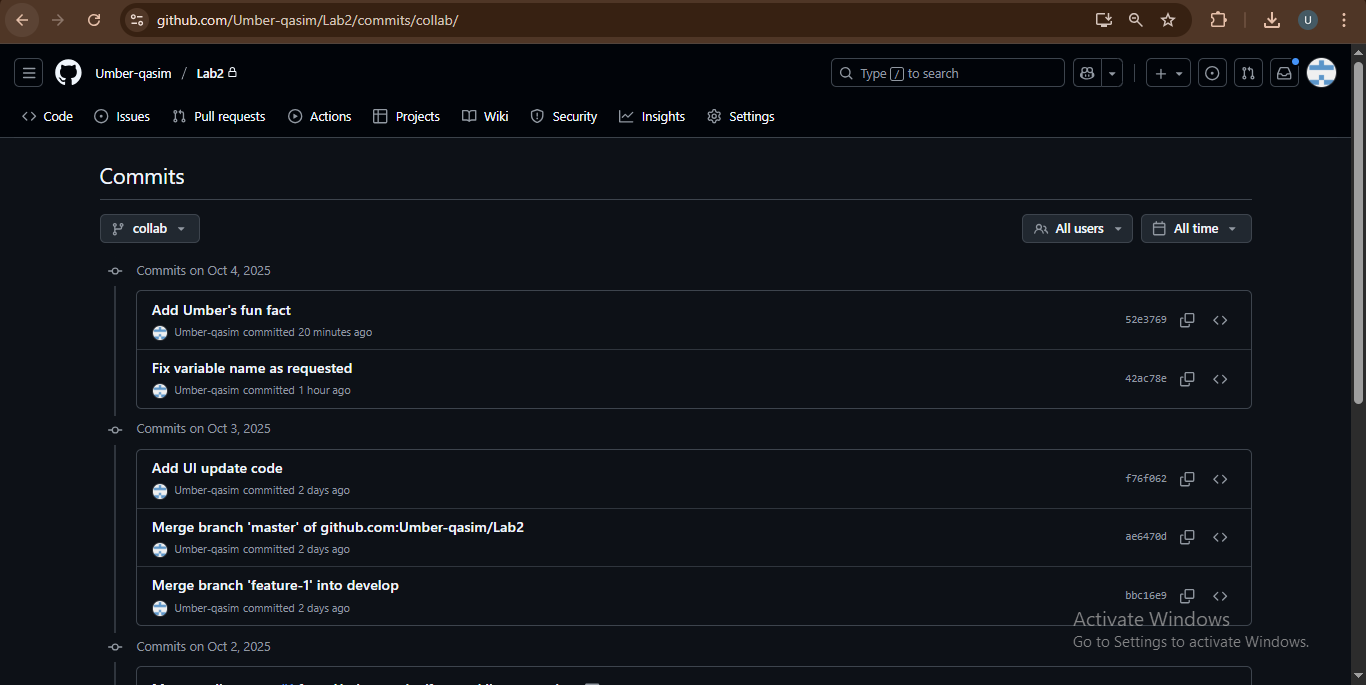


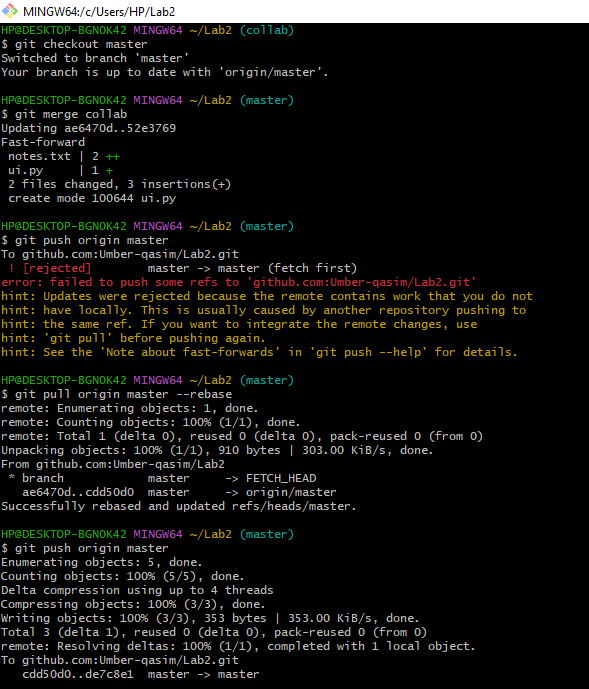


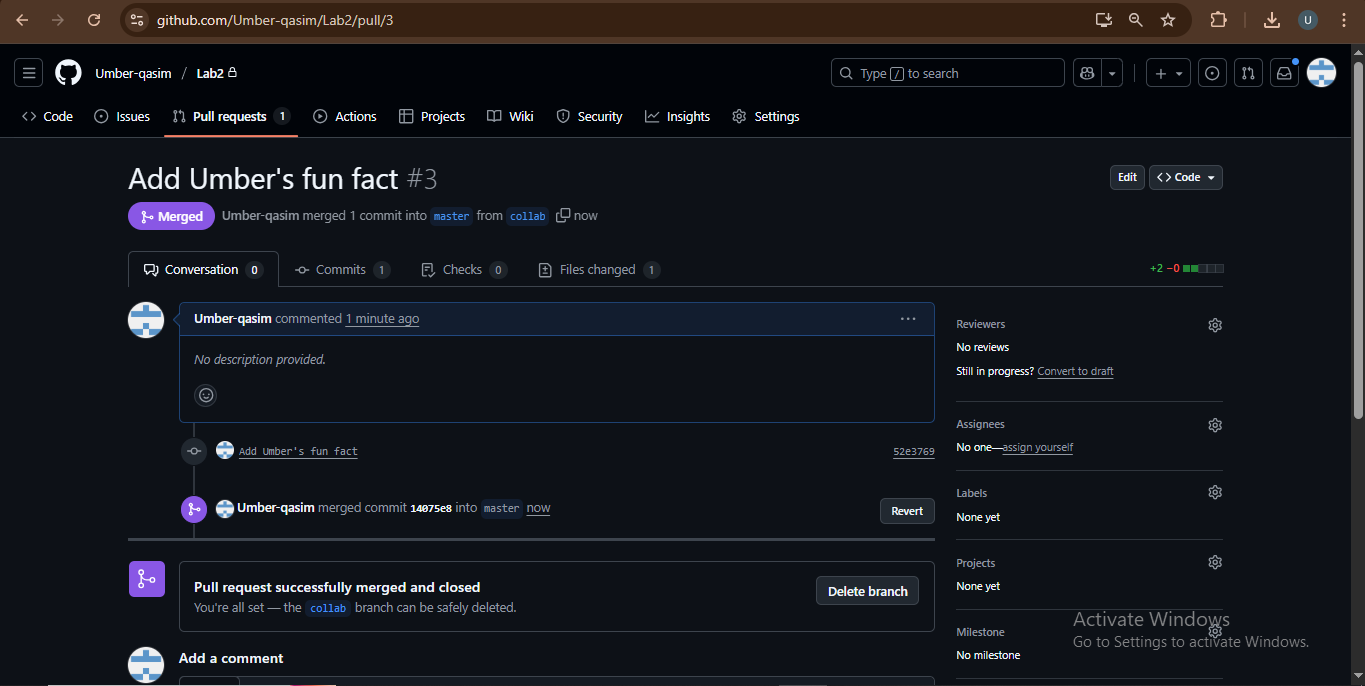


**Bonus Task: Simulated Team Collaboration**





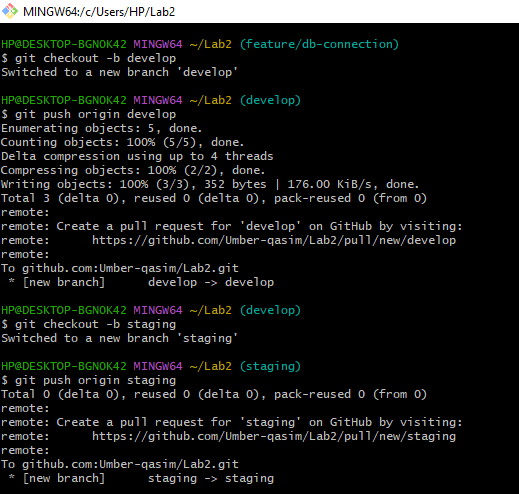




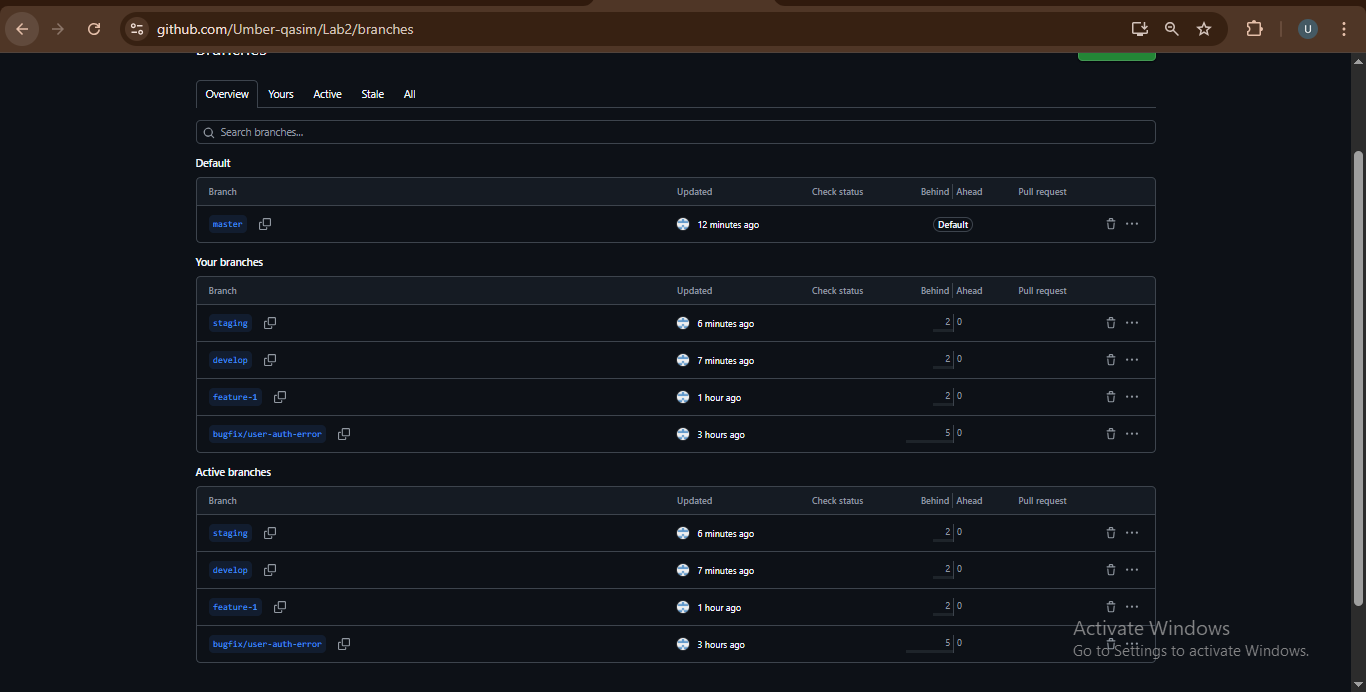
**Task#11: Detailed Branch Strategy (Develop/Staging)**

1. Create the following branches to simulate a professional branching strategy:

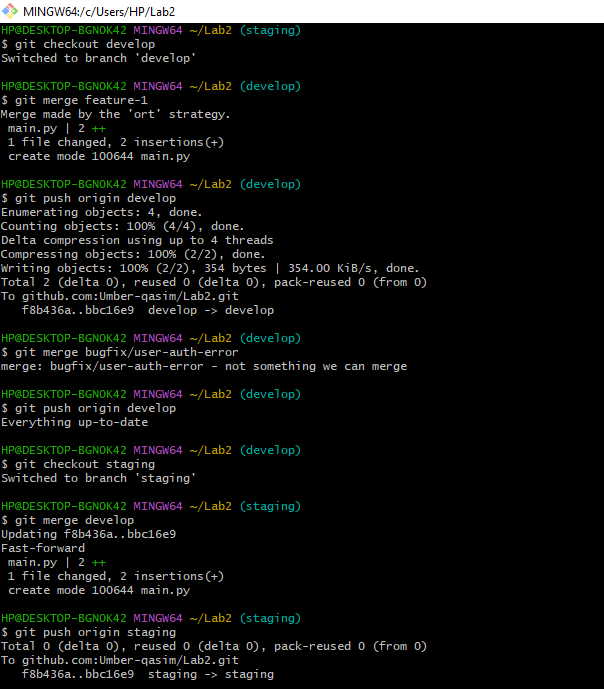
**Create the branches**

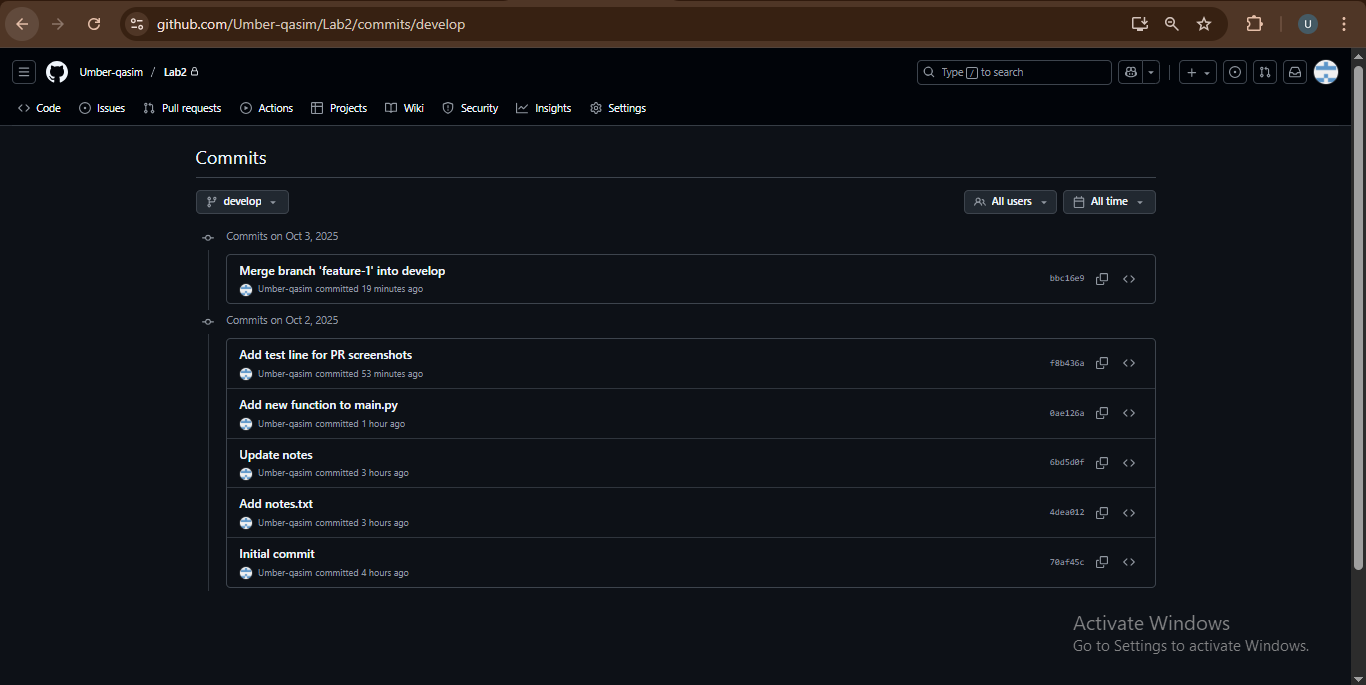


Now we have **develop** and **staging** branches on GitHub.

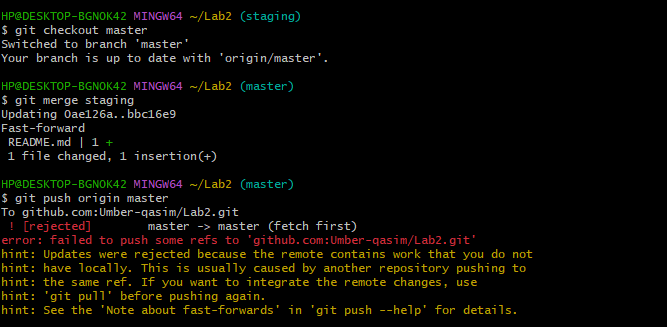


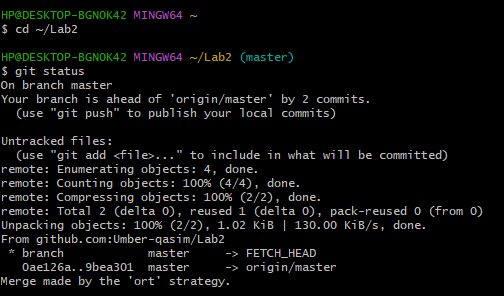
**Merge a feature into develop and staging**

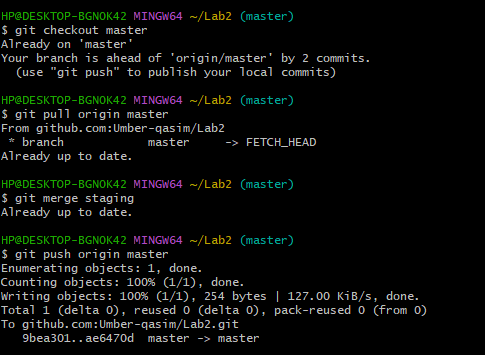


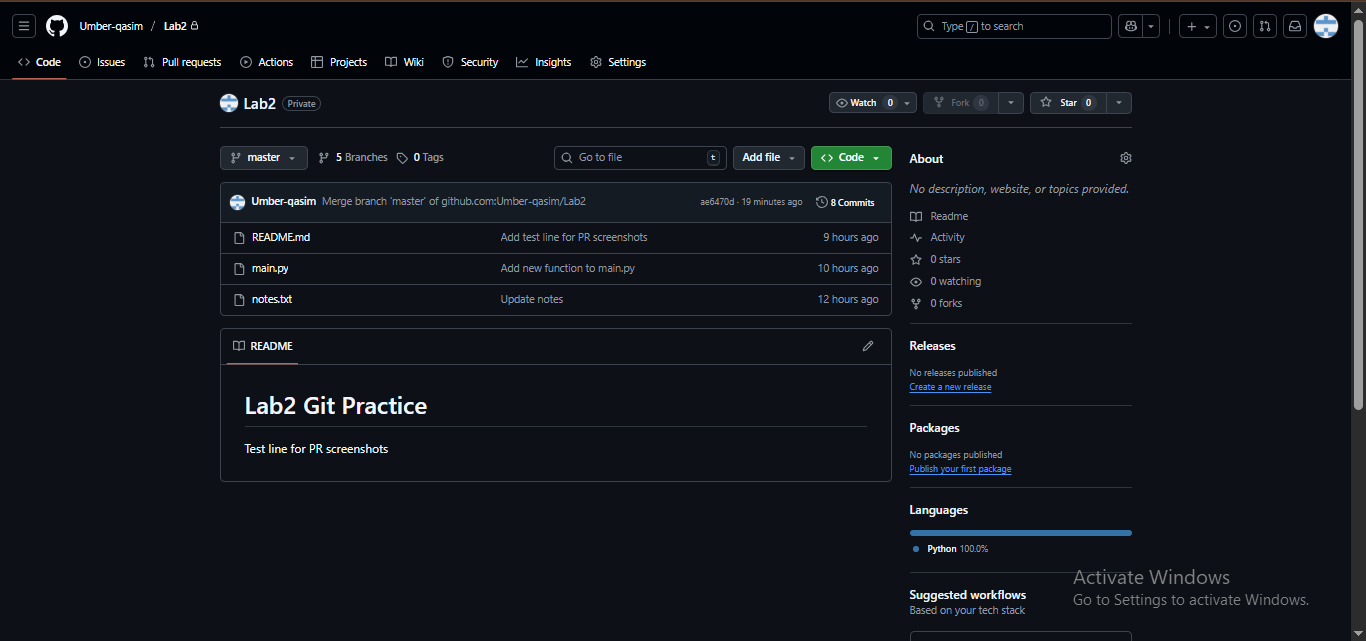


**Merge staging into master (production)**

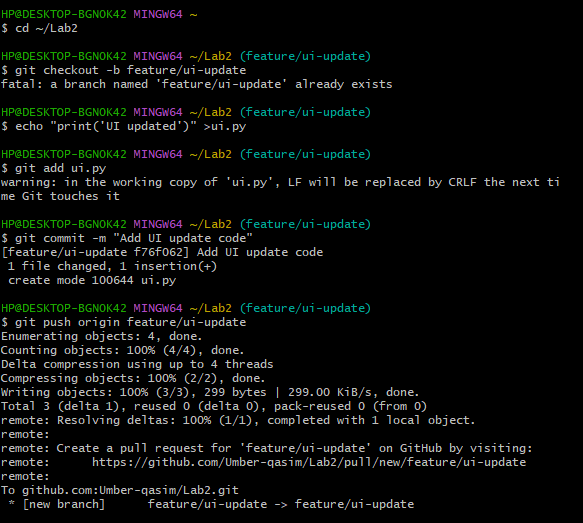


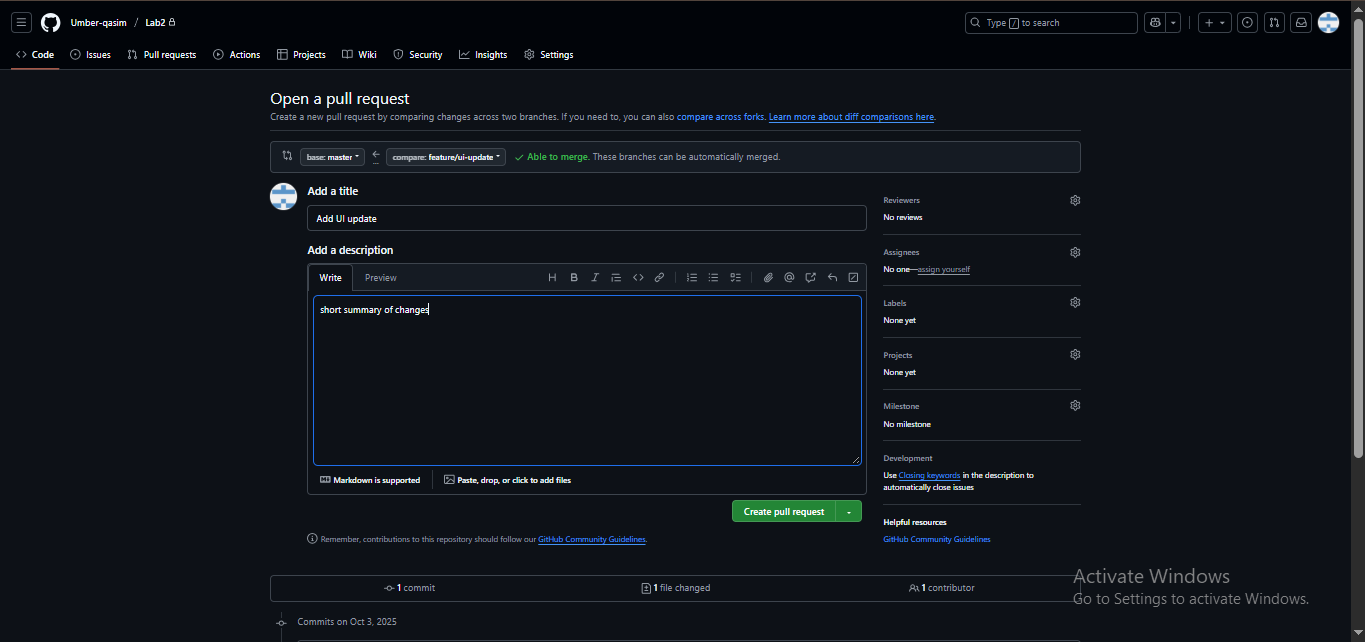


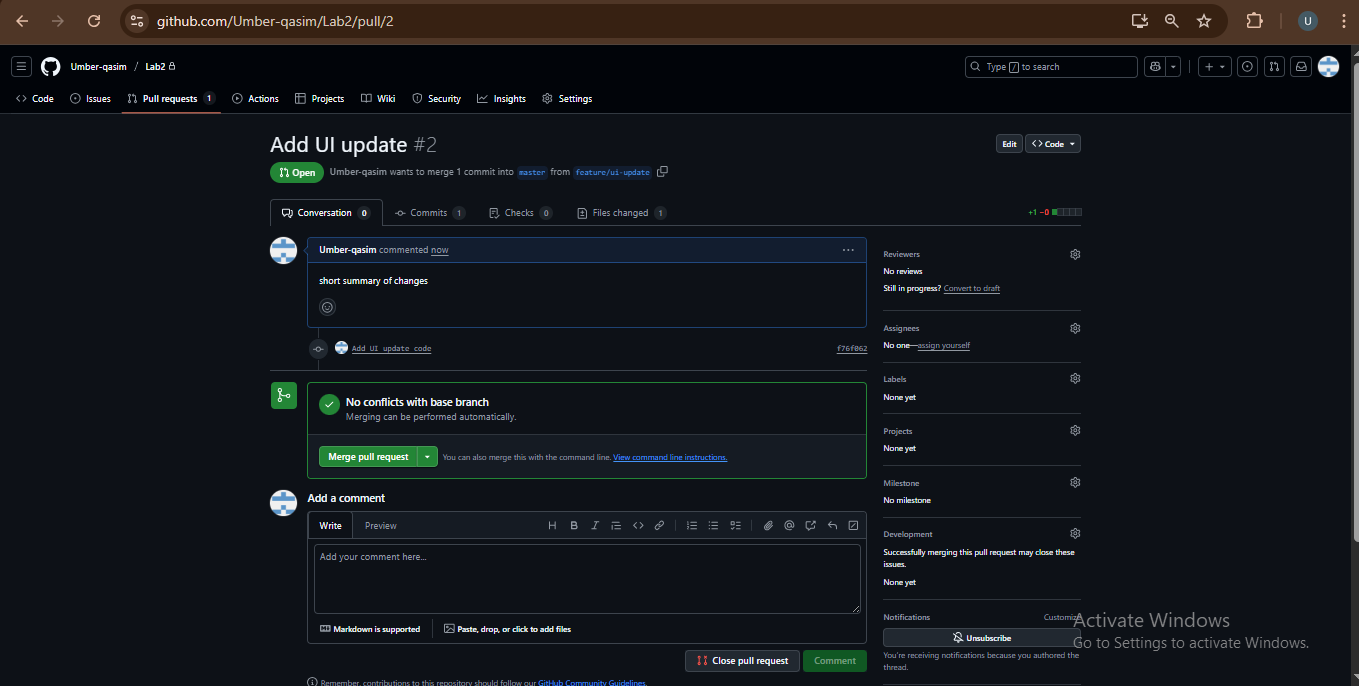


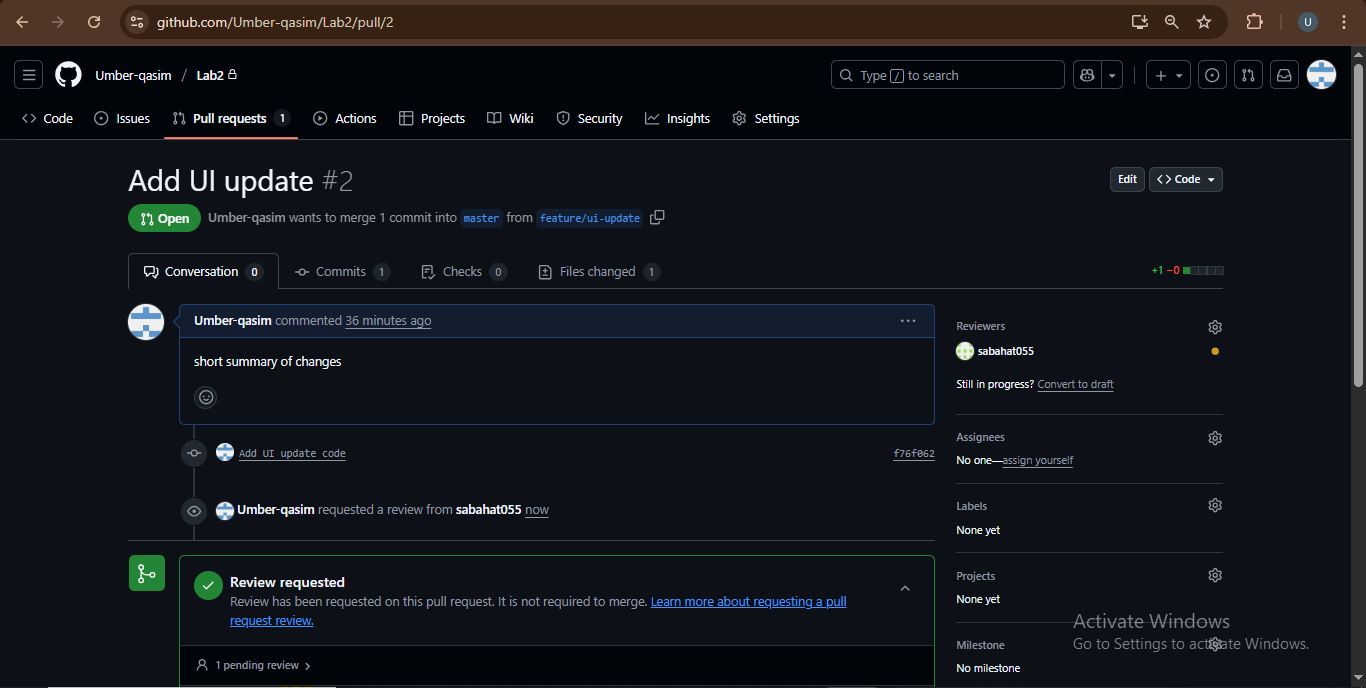


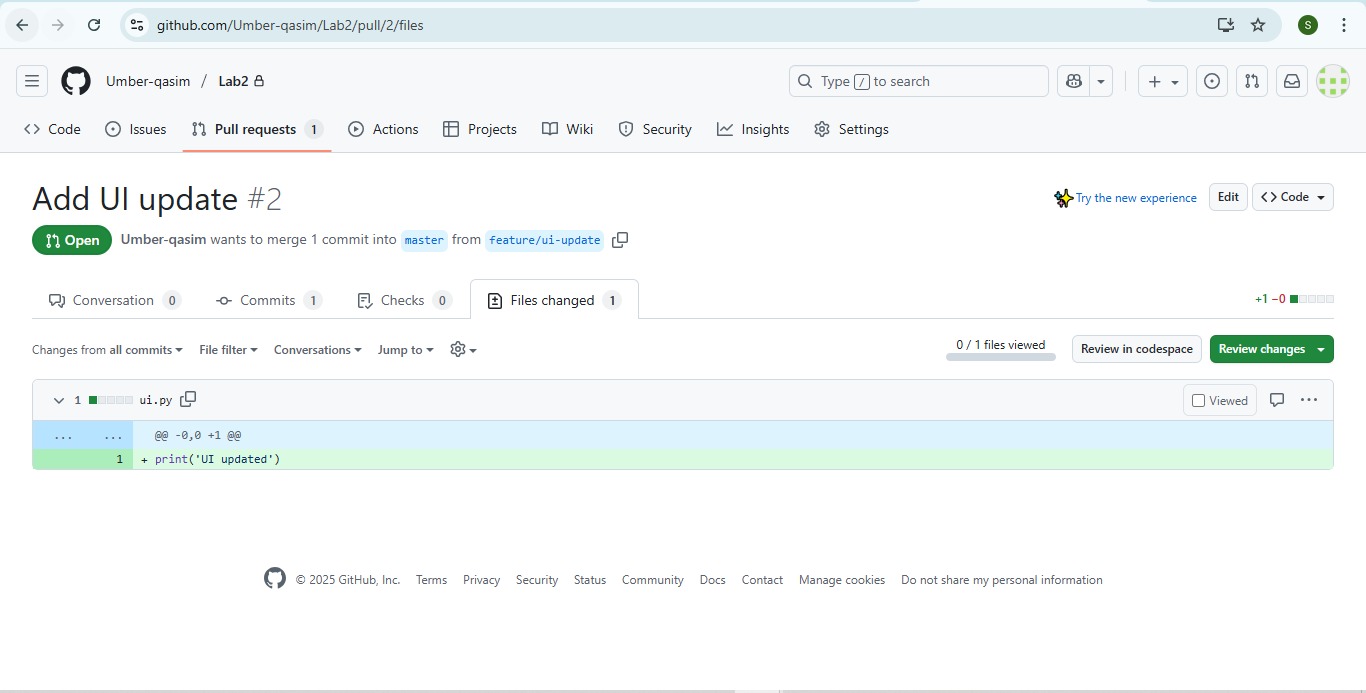
**Task#12: Code Review Workflow**

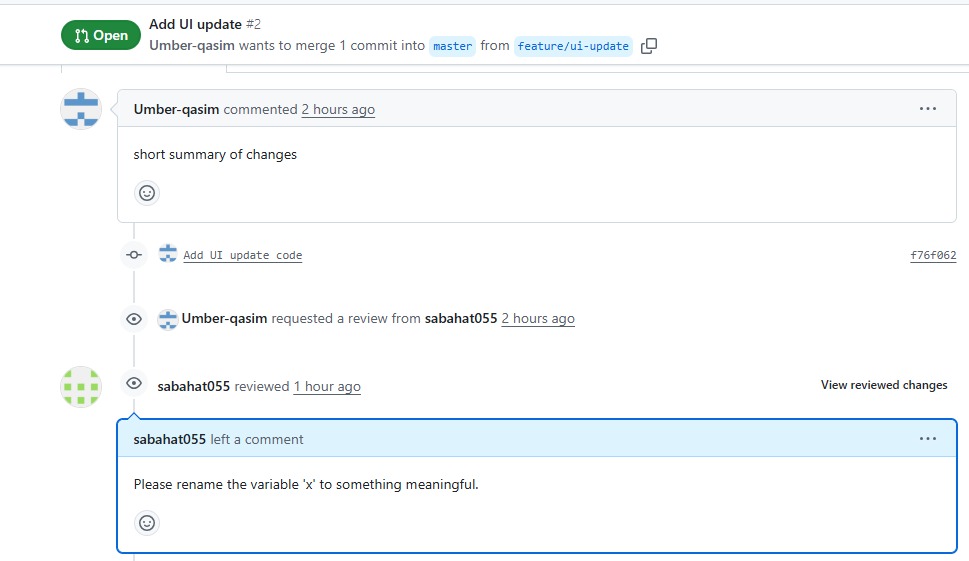


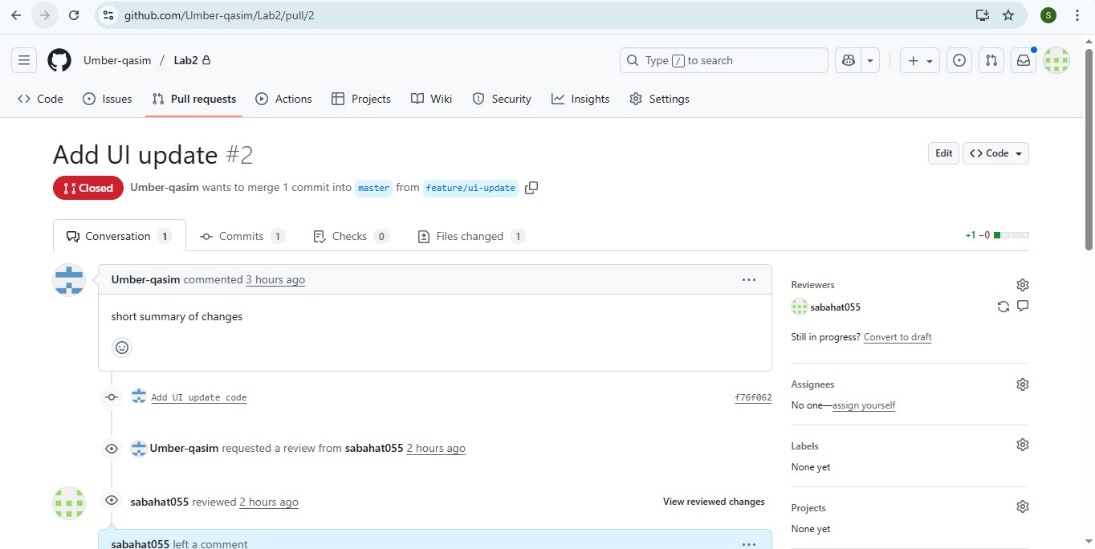


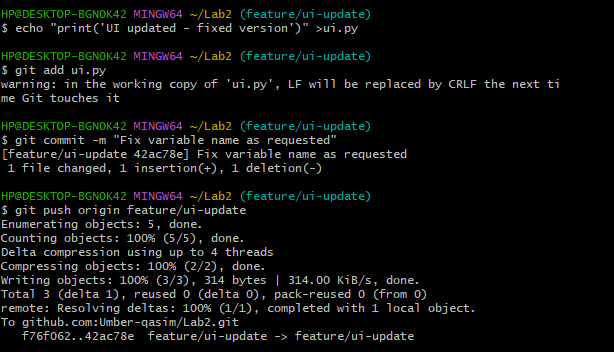


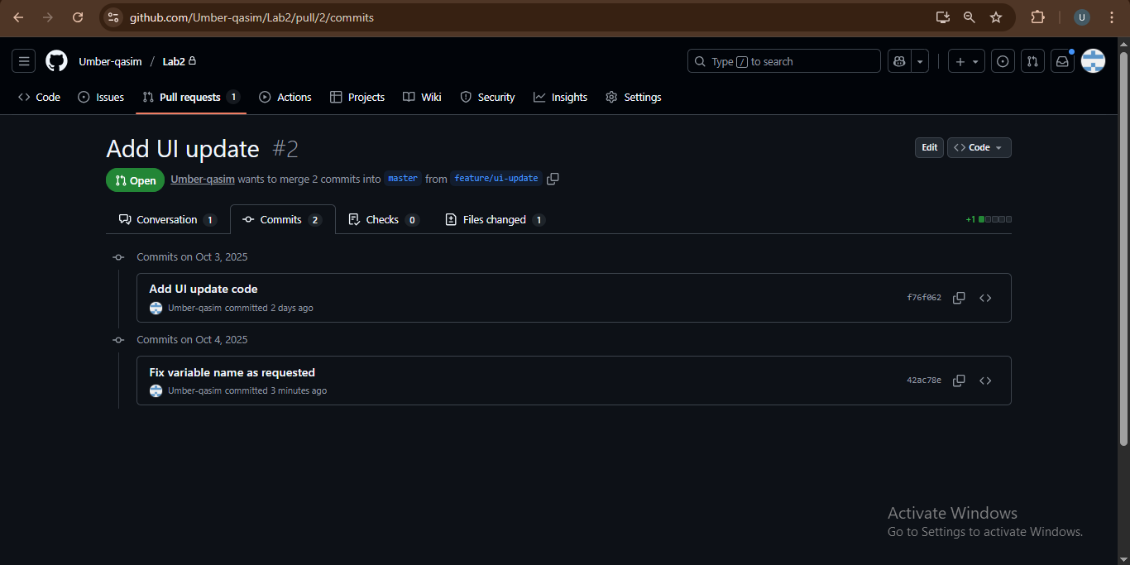


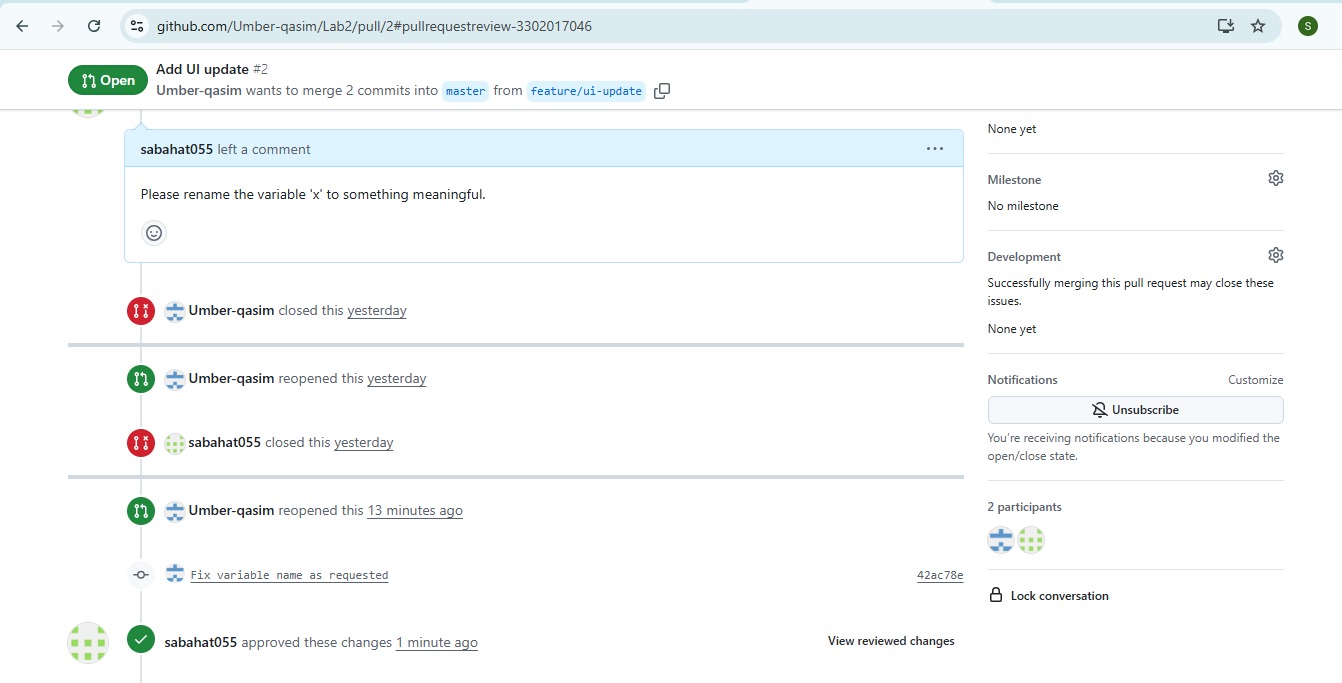
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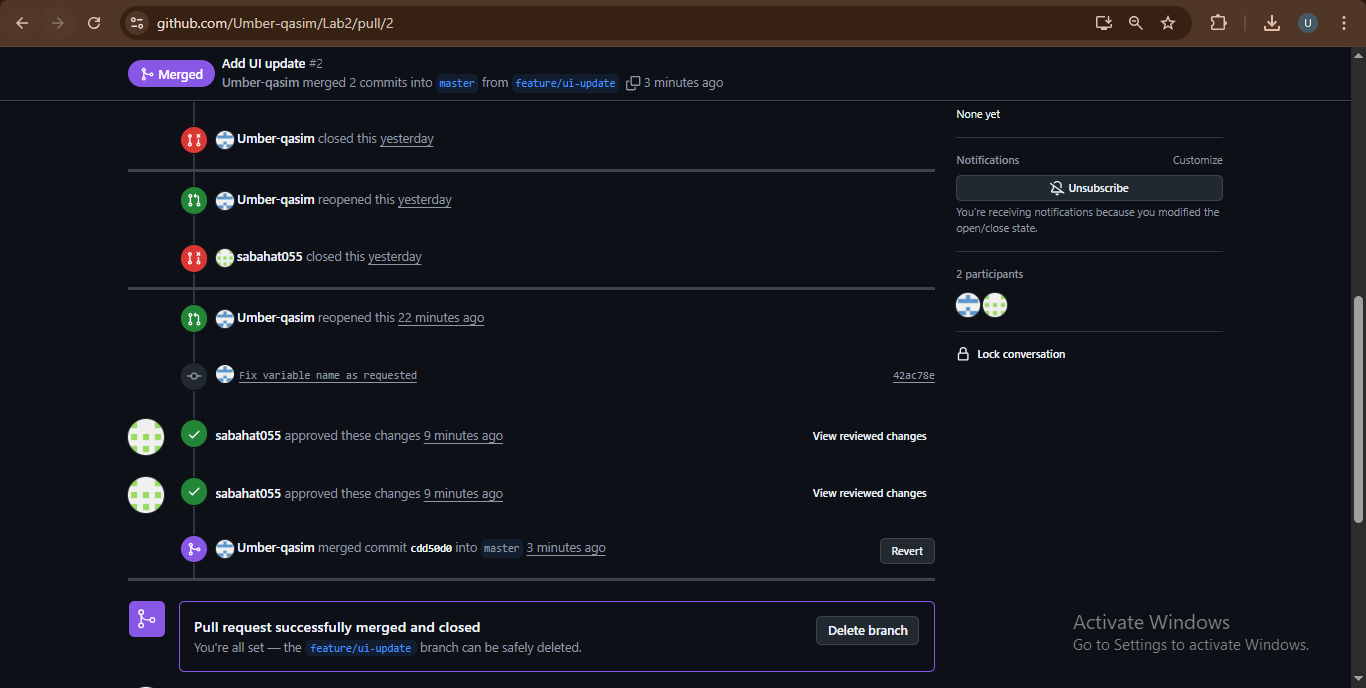
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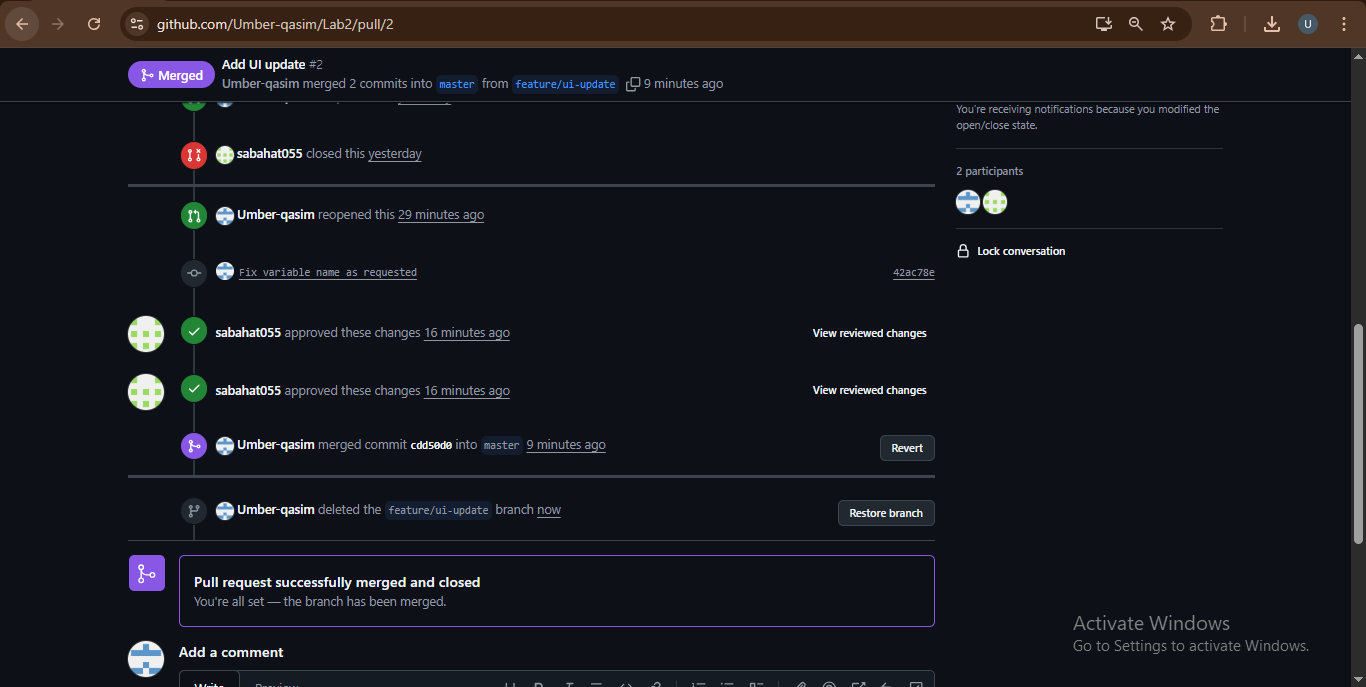
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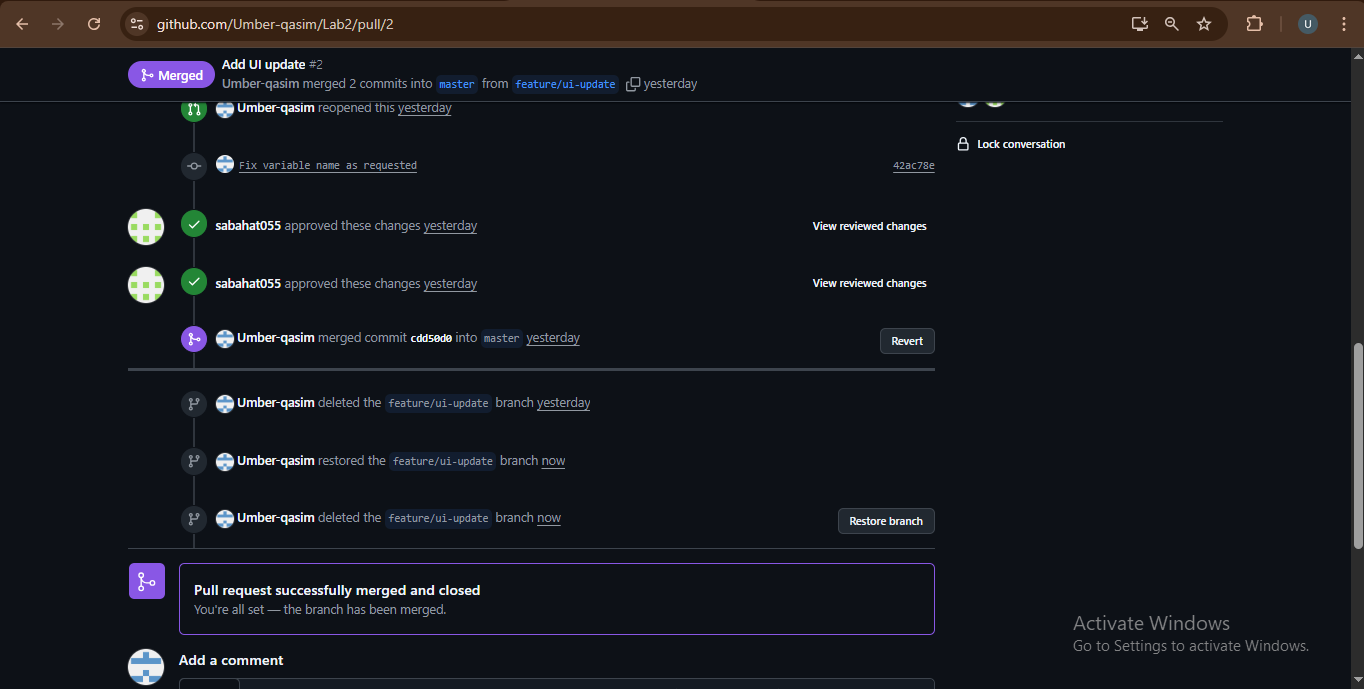


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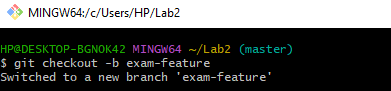
**Task#13: Branch Cleanup Best Practices**

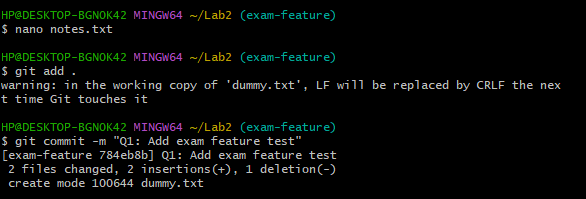


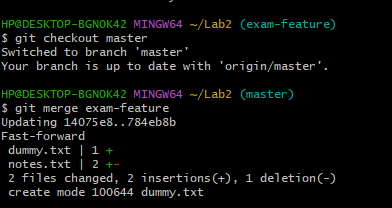


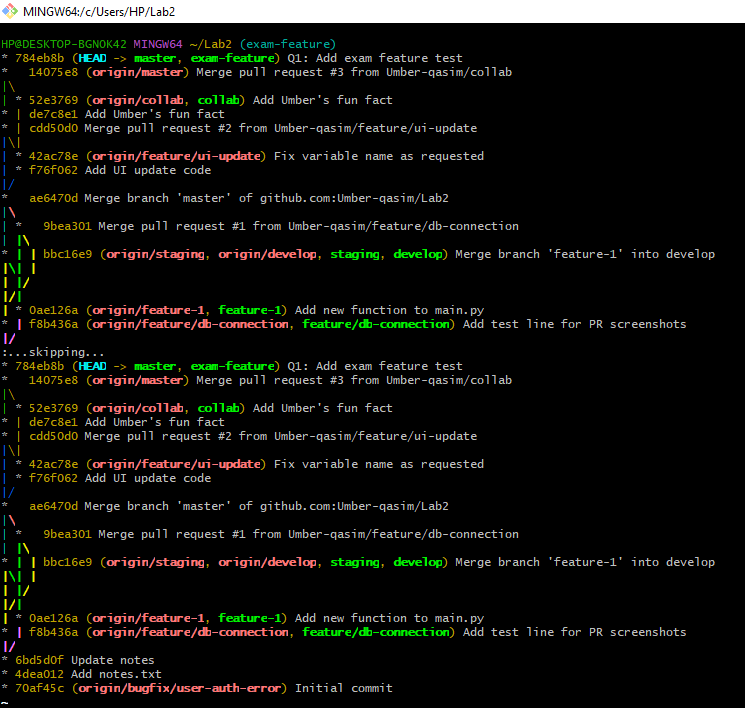
**Exam Evaluation Questions**

***Q1: Advanced Branching & Merge Verification***

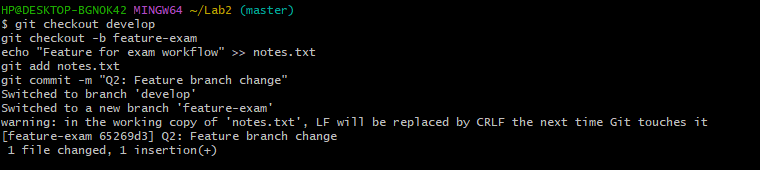
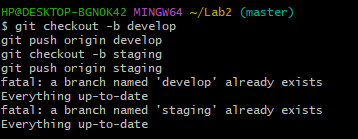


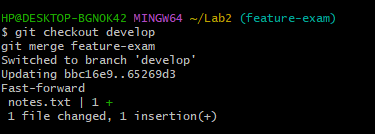


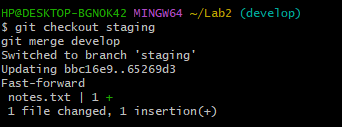


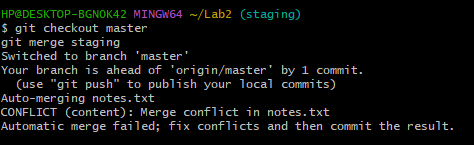


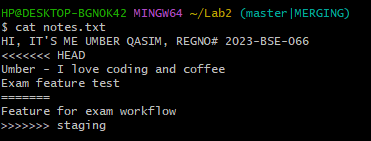
***Q2: Multi-Stage Workflow Simulation***











***Q3: Collaboration & Conflict Resolution***



