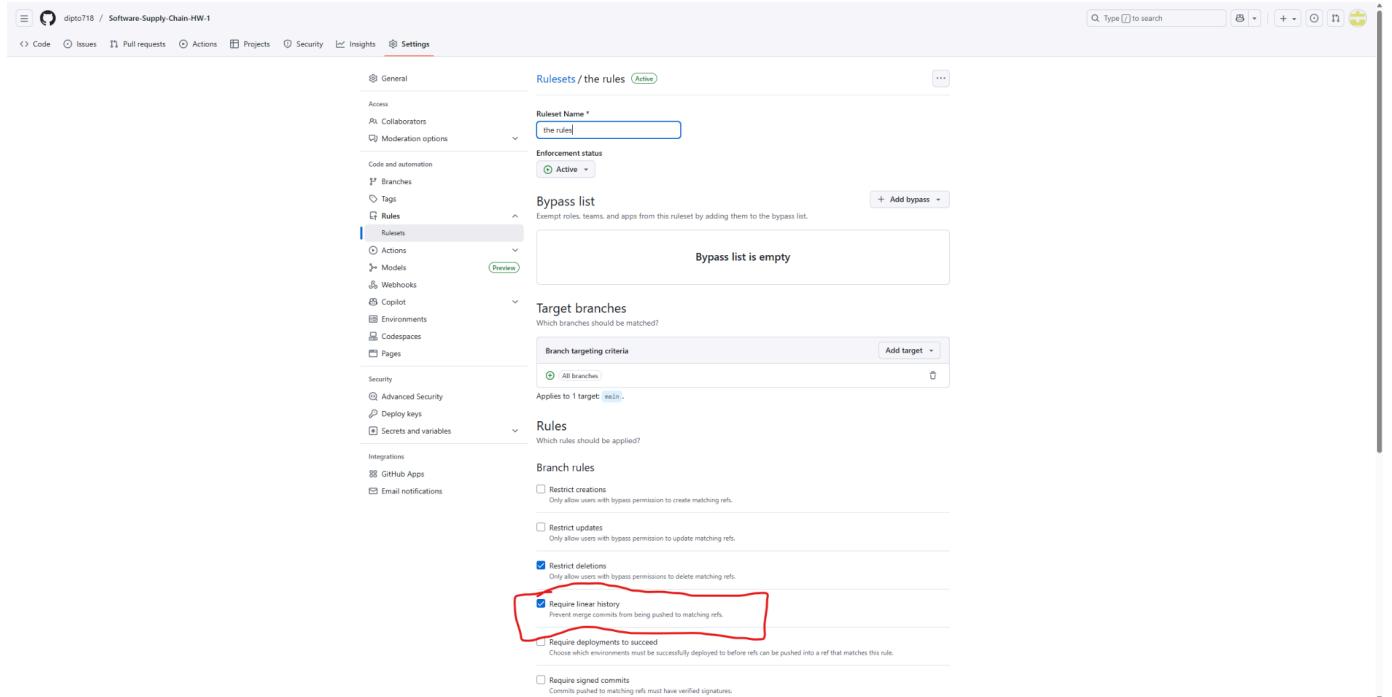


## Part 1

### Branch Protection rules



The screenshot shows the GitHub Branch Protection Rules configuration interface. The left sidebar lists various GitHub features like Code, Issues, Pull requests, Actions, Projects, Security, Insights, and Settings. Under the 'Rules' section, 'Rulesets' is selected. The main area is titled 'Rulesets / the rules' and shows an active rule set named 'the rules'. The rule is set to 'Active' and has an 'Enforcement status' of 'Active'. A 'Bypass list' section indicates that the list is empty. The 'Target branches' section shows 'All branches' as the target. Under the 'Rules' section, several options are listed: 'Restrict creation' (unchecked), 'Restrict update' (unchecked), 'Restrict deletion' (checked), 'Require linear history' (checked), 'Require deployments to succeed' (unchecked), and 'Require signed commits' (unchecked). The 'Require linear history' and 'Restrict deletion' options are highlighted with a red box.

# Sm Shihubullah Dipto

## Rules

Which rules should be applied?

### Branch rules

- Restrict creations**  
Only allow users with bypass permission to create matching refs.
  - Restrict updates**  
Only allow users with bypass permission to update matching refs.
  - Restrict deletions**  
Only allow users with bypass permissions to delete matching refs.
  - Require linear history**  
Prevent merge commits from being pushed to matching refs.
  - Require deployments to succeed**  
Choose which environments must be successfully deployed to before refs can be pushed into a ref that matches this rule.
  - Require signed commits**  
Commits pushed to matching refs must have verified signatures.
  - Require a pull request before merging**  
Require all commits be made to a non-target branch and submitted via a pull request before they can be merged.
- Show additional settings ▾
- Require status checks to pass**  
Choose which status checks must pass before the ref is updated. When enabled, commits must first be pushed to another ref where the checks pass.
  - Block force pushes**  
Prevent users with push access from force pushing to refs.
  - Require code scanning results**  
Choose which tools must provide code scanning results before the reference is updated. When configured, code scanning must be enabled and have results for both the commit and the reference being updated.
  - Require code quality results**  
Choose which severity levels of code quality results should block pull request merges. When configured, a code quality analysis must be done on the pull request before the changes can be merged.
  - Automatically request Copilot code review**  
Request Copilot code review for new pull requests automatically if the author has access to Copilot code review.

**Save changes**

**Revert changes**

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## Part 3

### personal.txt in the repo

The screenshot shows the GitHub interface for the repository 'Software-Supply-Chain-HW-1'. The 'Code' tab is selected. In the left sidebar, under 'Files', the 'personal.txt' file is highlighted. The main area displays the contents of 'personal.txt': 'sample data'. A commit history is visible at the bottom, showing a single commit by 'dipto718' titled 'added personal.txt' made 6 minutes ago. The commit message includes a link to a pull request.

Commit 3d4c1f4  
dipto718 committed 6 minutes ago (Edited)  
added personal.txt

personal.txt

1 file changed +1 -0 lines changed

personal.txt

... @@ -0,0 +1 @@ 1 + sample data

Comments 0

Comment

Subscribe You're not receiving notifications from this thread

## Part 5

**Code Coverage is >= 75%**

```
===== test session starts =====
platform linux -- Python 3.12.3, pytest-9.0.0, pluggy-1.6.0
rootdir: /home/dipto/Software-Supply-Chain-HW-1
configfile: pyproject.toml
plugins: cov-7.0.0
collected 11 items

tests/test_cases.py ..... [ 100%]

===== tests coverage =====
coverage: platform linux, python 3.12.3-final-0

Name          Stmts  Miss  Cover
-----
main.py        118    39   67%
merkle_proof.py 118    25   79%
tests/test_cases.py 91    11   88%
util.py       27     3   89%
-----
TOTAL          354    78   78%
===== 11 passed in 30.89s =====
(myenv) dipto@dipto-VirtualBox:~/Software-Supply-Chain-HW-1$
```