Task

Aspect	Netflix	Google	Amazon
Key Focus	Rapid deployment and resilience	Automation and system reliability	Scalability and operational excellence
Tools	Spinnaker, Chaos Monkey	SRE, Stackdriver	CloudFormation, CodePipeline
Strategies	Microservices, Chaos Engineering	Error Budgets, SLOs	Infrastructure-as-Code, CI/CD
System Reliability	Fault-tolerant, resilient systems	Automated monitoring, error budgets	Proactive monitoring, scalable infra

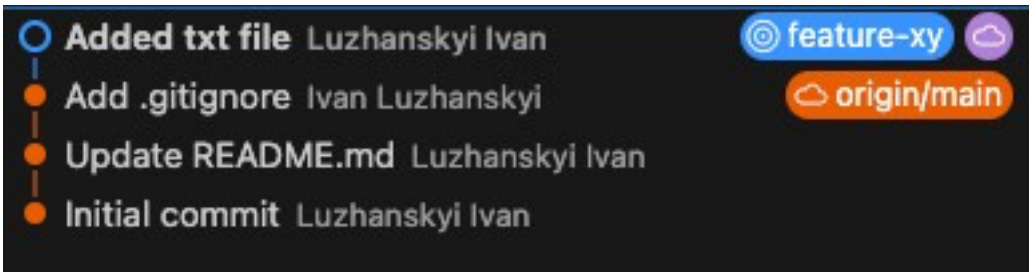
Relevance for Smaller Organizations

Smaller organizations can adopt scaled-down versions of these DevOps practices:

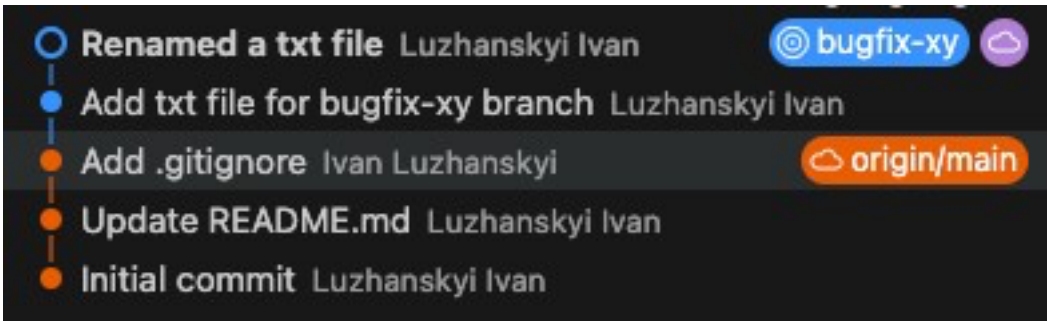
- **Netflix's Microservices:** Smaller teams can start by decoupling applications into manageable components to isolate and fix issues efficiently.
- **Google's SRE Principles:** Establish basic SLOs and use open-source monitoring tools like Prometheus to track performance.
- **Amazon's Automation:** Leverage cost-effective IaC tools like Terraform and simple CI/CD pipelines with tools like GitHub Actions or Jenkins to streamline deployments.

Task

- feature-xy branch with txt file containing unique content



- bugfix-xy branch with txt file containing unique content



Task

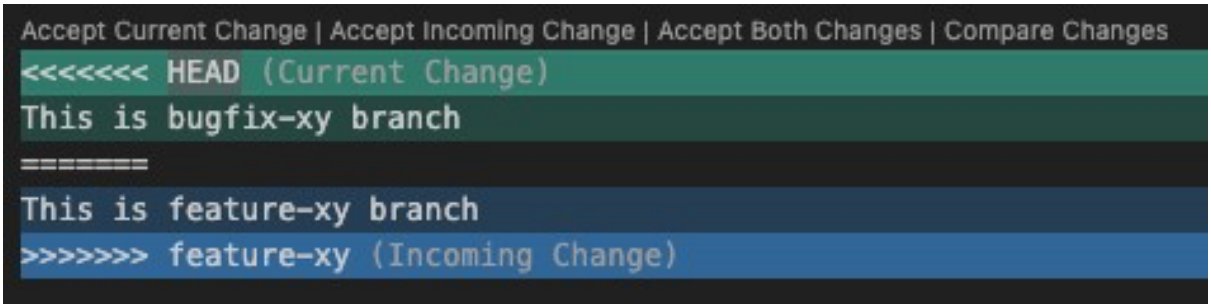
Cause of the Merge Conflict

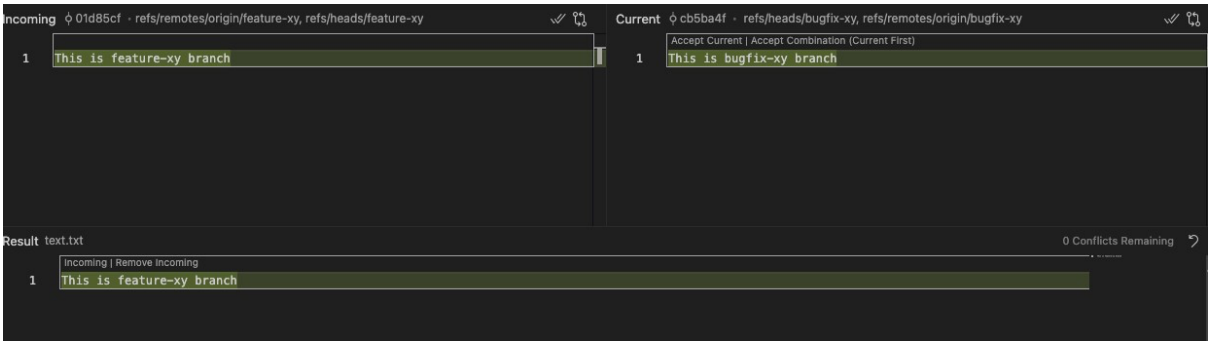
A merge conflict occurs when Git is unable to automatically combine changes from two branches due to conflicting modifications to the same lines of a file. In this scenario:

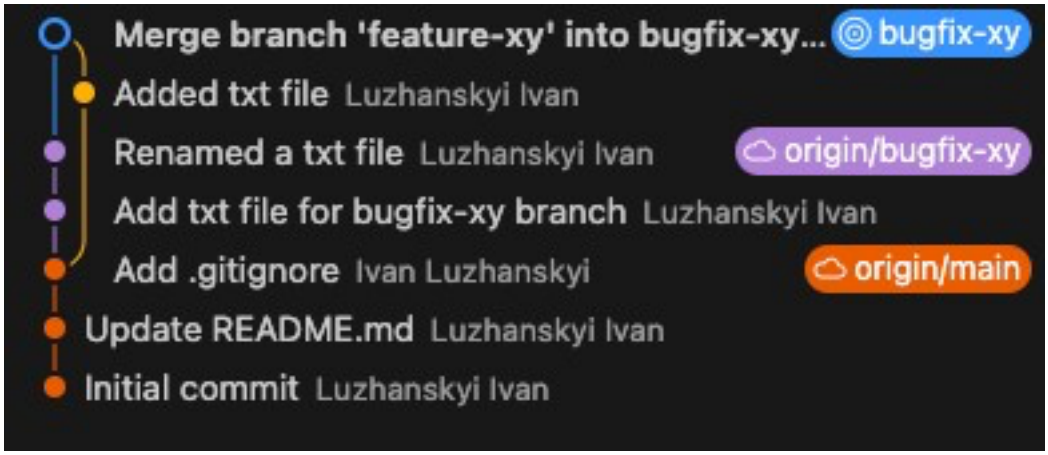
- The feature-xy branch modified text.txt with specific changes.
- The bugfix-xy branch made different, conflicting changes to the same lines in text.txt.
- When attempting to merge bugfix-xy into feature-xy, Git could not decide which version of the changes to keep.

Steps Taken to Resolve the Conflict

- Opened the conflicted file (text.txt) in a text editor.
- Edited the file to resolve the conflict by combining the changes into a meaningful final version.




Incoming 01d85cf · refs/remotes/origin/feature-xy, refs/heads/feature-xy
1 This is feature-xy branch
Current cb5ba4f · refs/heads/bugfix-xy, refs/remotes/origin/bugfix-xy
Accept Current | Accept Combination (Current First)
1 This is bugfix-xy branch
Result text.txt
0 Conflicts Remaining
Incoming | Remove Incoming
1 This is feature-xy branch


Merge branch 'feature-xy' into bugfix-xy... bugfix-xy
Added txt file Luzhanskyi Ivan
Renamed a txt file Luzhanskyi Ivan origin/bugfix-xy
Add txt file for bugfix-xy branch Luzhanskyi Ivan
Add .gitignore Ivan Luzhanskyi origin/main
Update README.md Luzhanskyi Ivan
Initial commit Luzhanskyi Ivan