Session 3.4

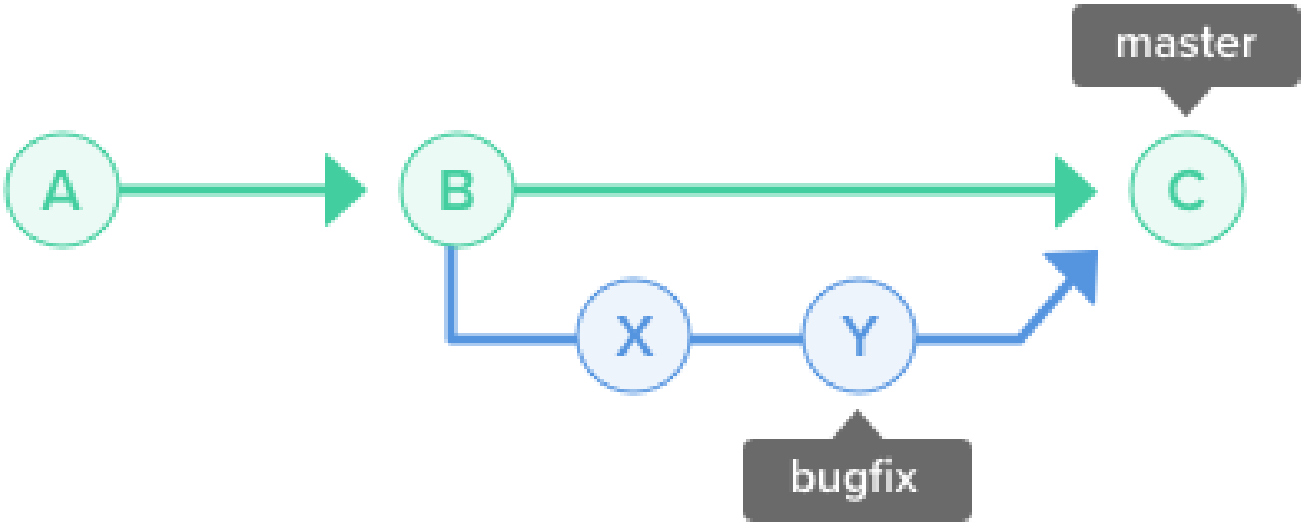
# Git For Version Control System

## Git Merge

Purwadhika
Startup and Coding School

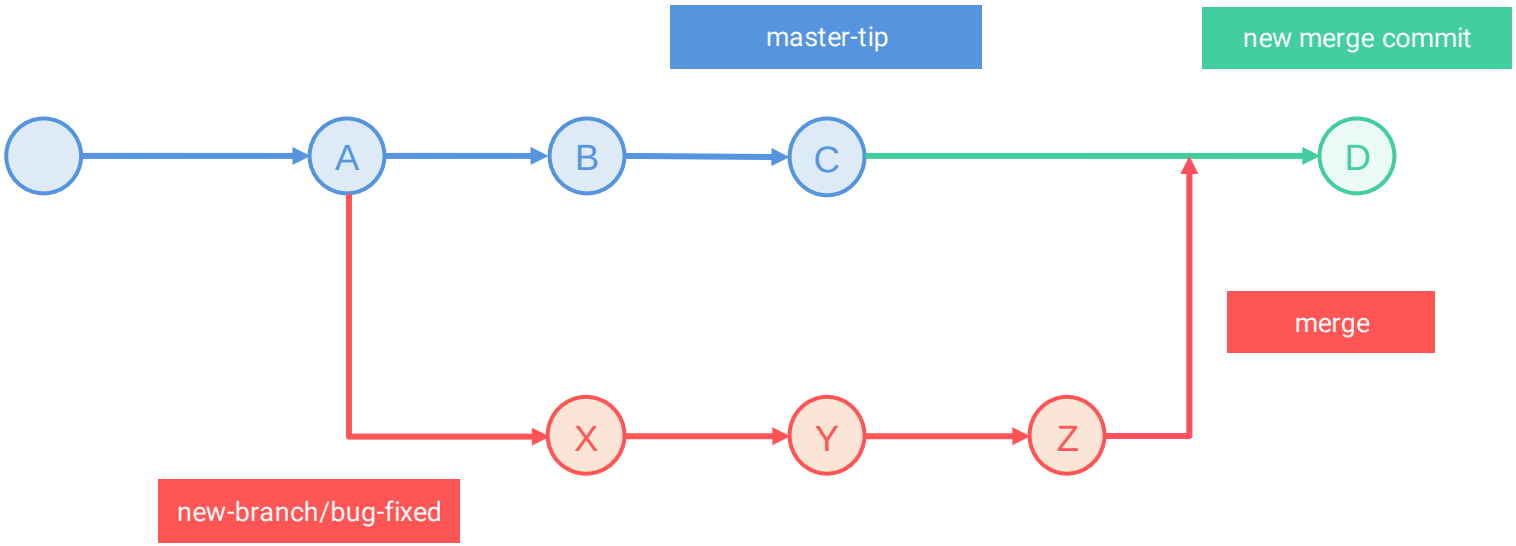
# Git Merge

Merging is Git's way of putting a forked history back together again.




Purwadhika
Startup and Coding School

# How it work?




Purwadhika
Startup and Coding School

# Preparing to Merge

There are a couple preparation before steps before doing a merge

- Commit all the changes
- Confirm the receiving branch
- Fetch the latest remote commit
- Do git merge

Session 3

# Git For Version Control System

## Git Merge Strategies

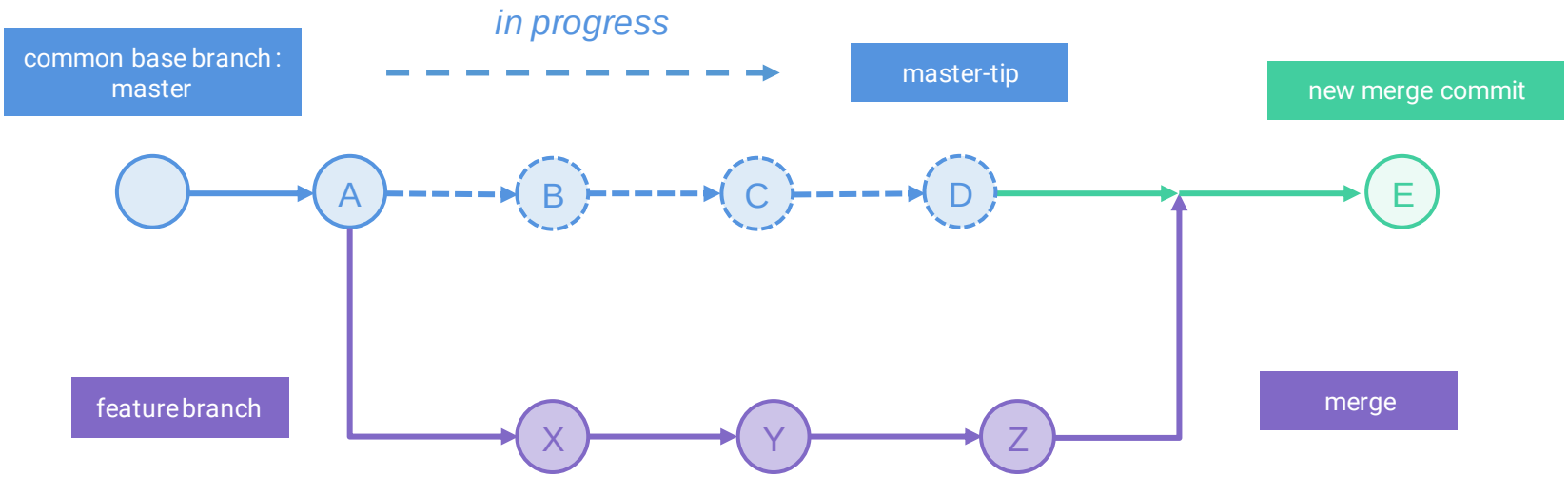
Purwadhika
Startup and Coding School

# Possible Git Merge Strategies

- Explicit, **non-fast-forward** merge
- Implicit via rebase or fast-forward merge
- Squash on merge

# Explicit Merges

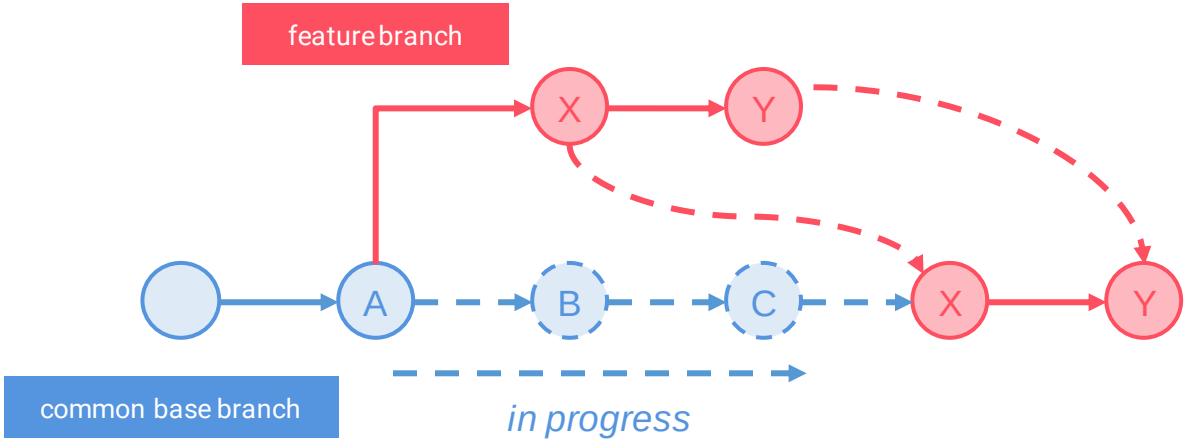
aka non-fast forward merge, this merge is default and commonly used to move our complete feature branch into base branch (master) when the base branch is progressed, the result is one unified commit that came from two parent branch




Purwadhika
Startup and Coding School

# Implicit Merge

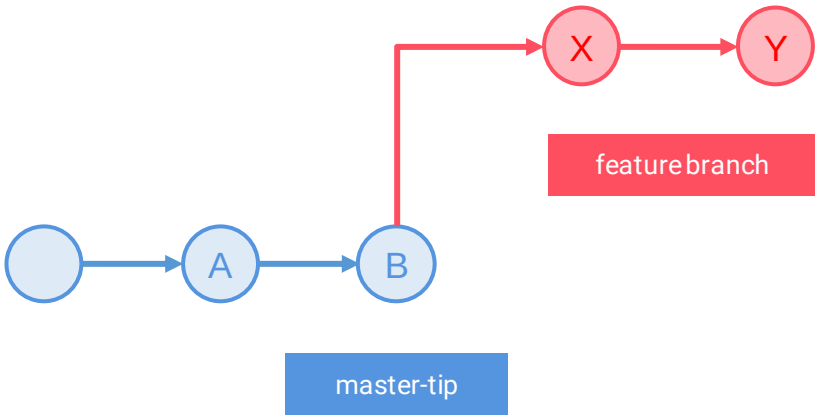
using fast-forward or rebase, this scenario is used to move all our complete commit from feature branch into our base branch, the result is all commit will be move to our base branch, unfortunately we will lose context of where those commits come from



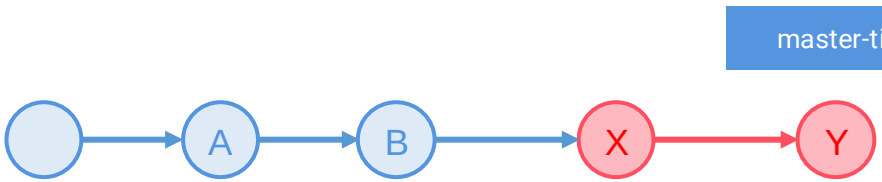

*Rebase Scenario*

Purwadhika
Startup and Coding School

fast-forward merge is similar with rebase, but its only can be perform if in our base branch (master) has no more recent commits than the commits of feature branch. The result is linear commit history in our base branch




*before merge*



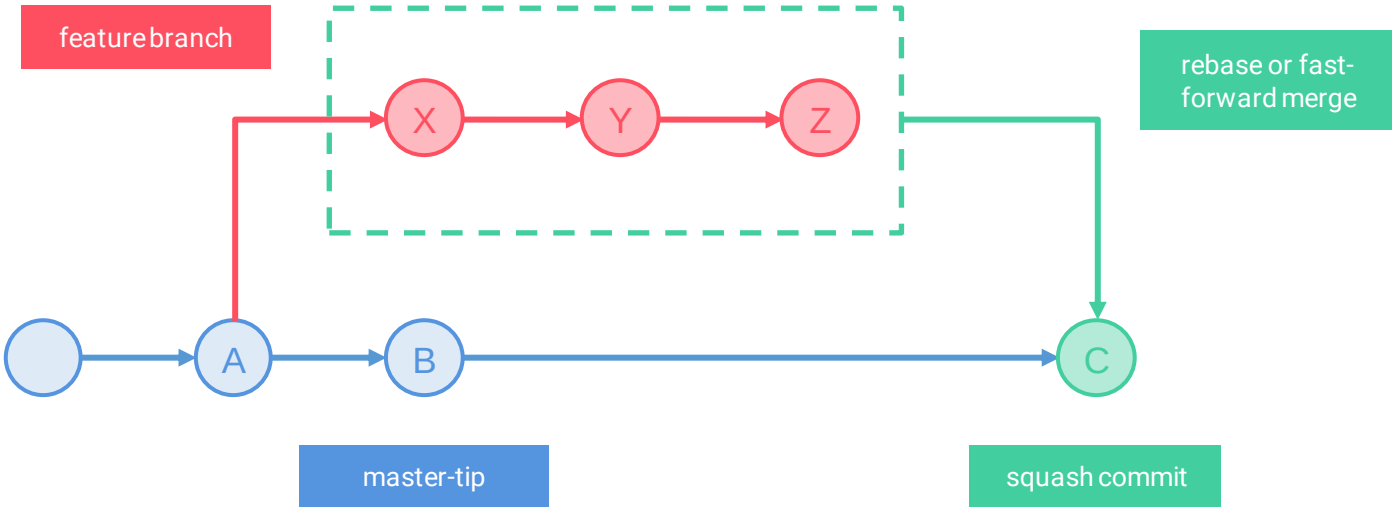

*after merge*

*Fast-Forward Scenario*

Purwadhika
Startup and Coding School

# Squash on merge

In this scenario, we will squash of all commit in our feature branch into single compact commit before performing fast-forward or rebase merge. This techniques will keep mainline branch history linear and clean, but we will lose insight and details on how the feature branch developed throughout.




Purwadhika
Startup and Coding School