

18:32

4G 77%

Git History
enc=encoded=ZP1_-ftGXj2nJ0tmhSXtcK8hWsKi_I-7htUxbHWjo
gQ0cFtdzK8z28MLVvwAz9rsIpAA==

• Came out of Linux development community
• Initial goals:

- Speed
- Support for non-linear development (thousands of parallel branches)
- Fully distributed
- Able to handle large projects like Linux efficiently

Linus Torvalds, 2005

41:07 1:36:16

1X

HW

Scanned by Scanner Go

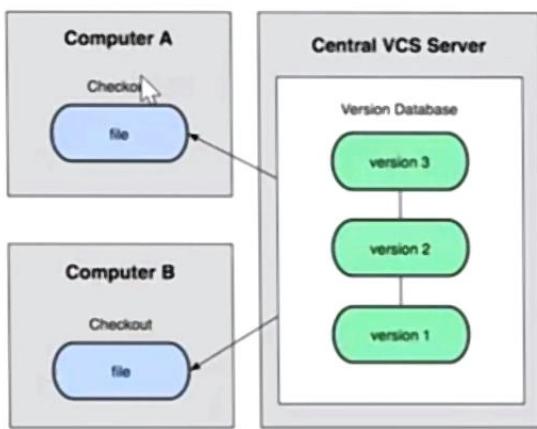
A screenshot of a mobile device displaying a video player interface. The video content is a presentation slide titled "Git History". The slide contains text and bullet points. At the bottom of the slide, there is a timestamp "Linus Torvalds, 2005". The video player has a dark theme with white text. The top right corner shows signal strength and battery level. The bottom of the screen shows playback controls: a lock icon, a seek bar from 41:07 to 1:36:16, and standard media controls (rewind, play/pause, forward). The bottom right corner features the text "Scanned by Scanner Go".

Git History

- Came out of Linux development community
- Linus Torvalds, 2005
- Initial goals:
 - Speed
 - Support for non-linear development (thousands of parallel branches)
 - Fully distributed
 - Able to handle large projects like Linux efficiently

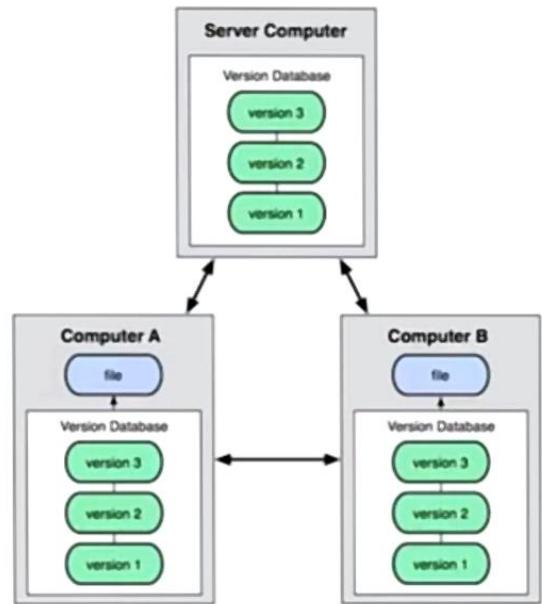
Distributed vs Centralized

Centralized Model



(CVS, Subversion, Perforce)

Distributed Model

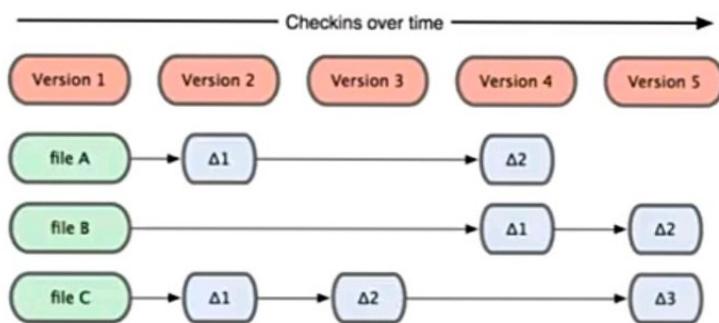


(Git, Mercurial)

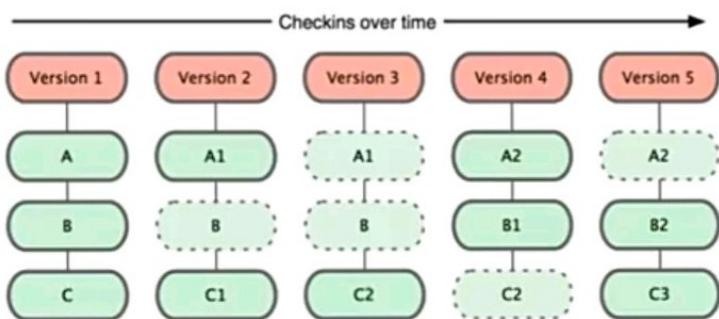
Result: Many operations are local

Git takes snapshots

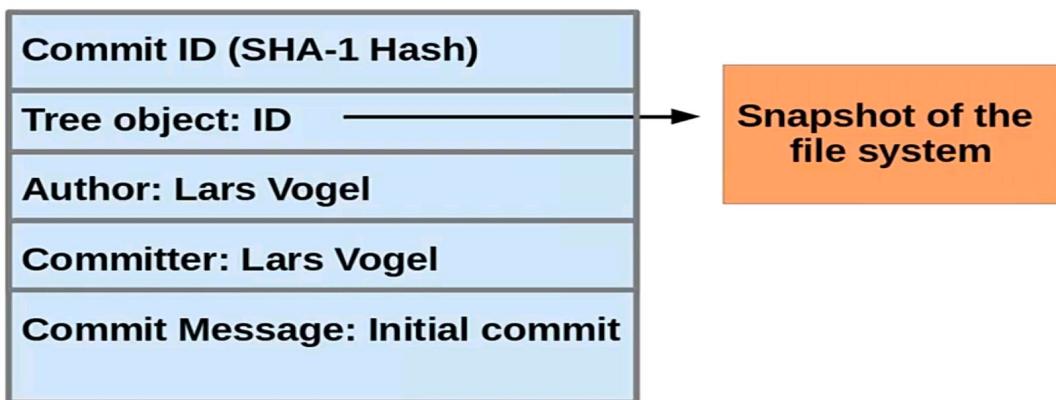
Subversion



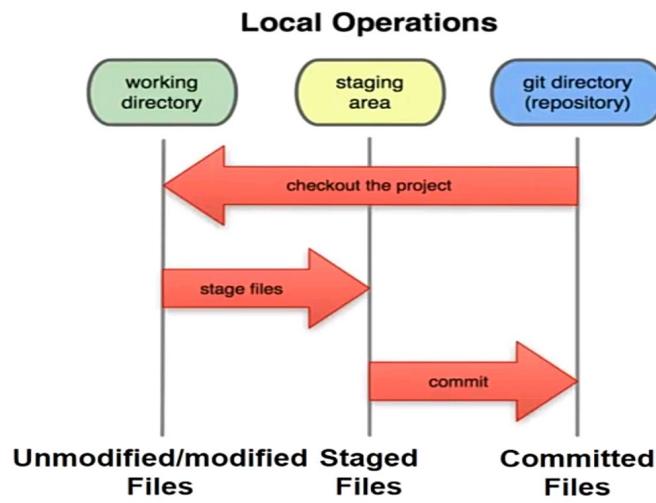
Git



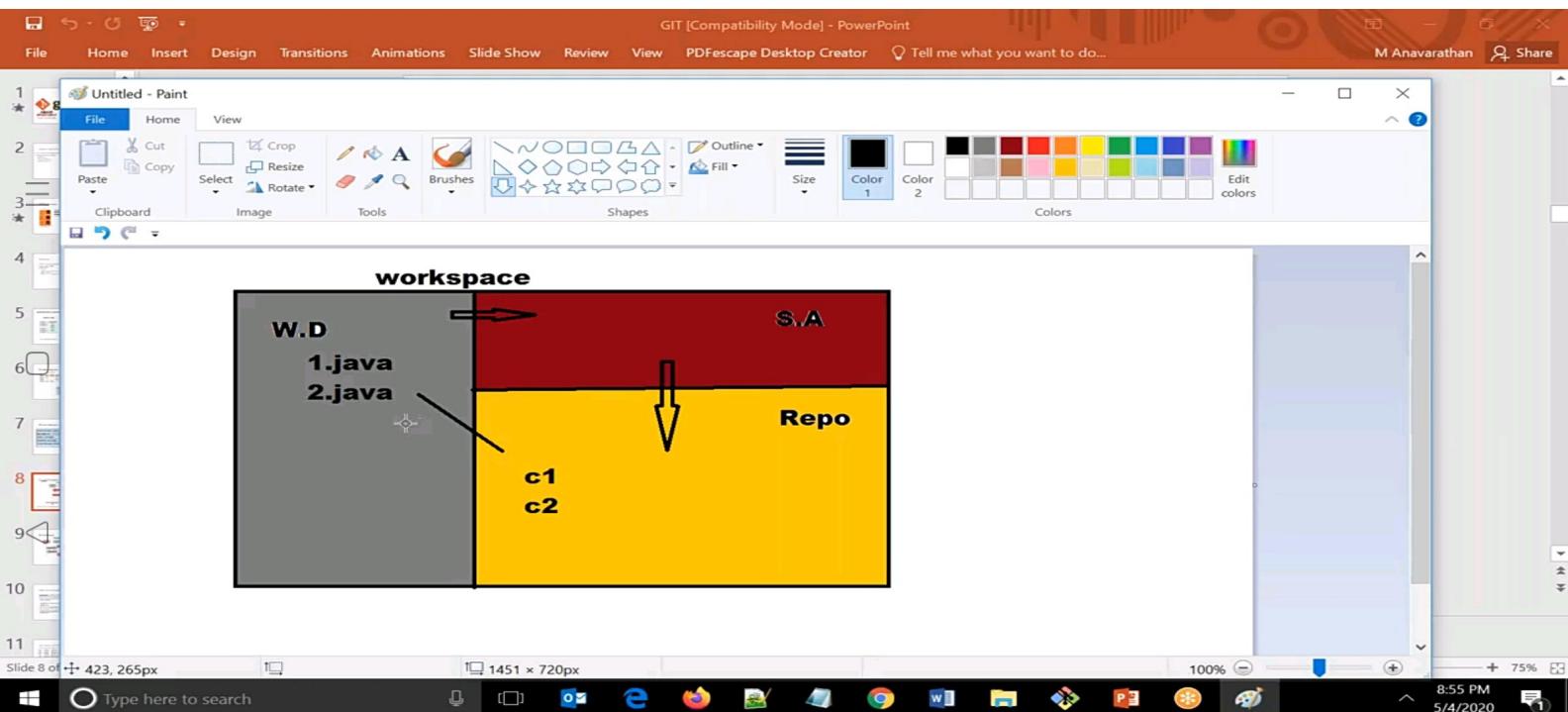
Git uses checksums



A Local Git project has three areas

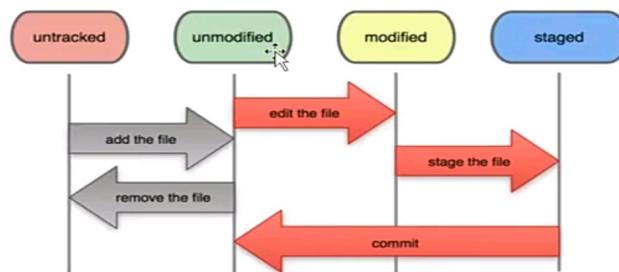


Note: working directory sometimes called the "working tree", staging area sometimes called the "index".



Git file lifecycle

File Status Lifecycle



Click to add notes

Aside: So what is github?

- [GitHub.com](#) is a site for online storage of Git repositories.
- Many open source projects use it, such as the [Linux kernel](#).
- You can get free space for open source projects or you can pay for private projects.

Question: Do I have to use [github](#) to use Git?

Answer: No!

- you can use Git completely locally for your own purposes, or
- you or someone else could set up a server to share files, or
- you could share a repo with users on the same file system, such as we did for homework 9 (as long everyone has the needed file permissions).

Untitled - Notepad
File Edit Format View Help

Central repo: <https://github.com/scmlearningcentre/may2020.git>

```
manavarathan@IN-L1749 MINGW64 ~
$ which git
/mingw64/bin/git
manavarathan@IN-L1749 MINGW64 ~
$ git --version
git version 2.15.1.windows.2
manavarathan@IN-L1749 MINGW64 ~
$ git config --global user.name "Adam M"
manavarathan@IN-L1749 MINGW64 ~
$ git config --global user.email "scmlearningcentre@gmail.com"
manavarathan@IN-L1749 MINGW64 ~
$ git config --global push.default "simple"
manavarathan@IN-L1749 MINGW64 ~
$ █
```

```
ansible/      demo/          demoworkspace01/  fullcicdexample/  test2/
assignments/  demoCI/        deployments/    kubeconfig       test3/
delme/        demoworkspace00/ Docker-Jboss/   test/           WEZVACICD/
                                                               ↑

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ git clone https://github.com/scmlearningcentre/may2020.git
Cloning into 'may2020'...
warning: You appear to have cloned an empty repository.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ ls
ansible/      demo/          demoworkspace01/  fullcicdexample/  test/      WEZVACICD/
assignments/  demoCI/        deployments/    kubeconfig       test2/
delme/        demoworkspace00/ Docker-Jboss/   may2020/         test3/
                                                               ↑

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ git clone https://github.com/scmlearningcentre/may2020.git workspace00
Cloning into 'workspace00'...
warning: You appear to have cloned an empty repository.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ ls
ansible/      demo/          demoworkspace01/  fullcicdexample/  test/      WEZVACICD/
assignments/  demoCI/        deployments/    kubeconfig       test2/
delme/        demoworkspace00/ Docker-Jboss/   may2020/         test3/
                                                               ↑

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ echo "First Line" > 1.java
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master
 未修改文件:
    (使用 "git add <file>..." 包含在将要提交的内容中)
      1.java
nothing added to commit but untracked files present (use "git add" to track)
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
git
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git add .
warning: LF will be replaced by CRLF in 1.java.
The file will have its original line endings in your working directory.
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   1.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ █
```

Slide 13 of 27

8:05 PM 5/5/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:  1.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git commit -m "first change for dummy release"
[master (root-commit) c4bcf92] first change for dummy release
 1 file changed, 1 insertion(+)
 create mode 100644 1.java
1
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master
Your branch is based on 'origin/master', but the upstream is gone.
  (use "git branch --unset-upstream" to fixup)
nothing to commit, working tree clean
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
1
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ echo "Line 2" >> 1.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ cat 1.java
First Line
Line 2

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master
Your branch is based on 'origin/master', but the upstream is gone.
  (use "git branch --unset-upstream" to fixup)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)
    modified:   1.java

no changes added to commit (use "git add" and/or "git commit -a")
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ cat 2.java
First Line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master
Your branch is based on 'origin/master', but the upstream is gone.
  (use "git branch --unset-upstream" to fixup)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)
    modified:   1.java

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
modified:   1.java

Untracked files:
(use "git add <file>..." to include in what will be committed)
      2.java
=-
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master
Your branch is based on 'origin/master', but the upstream is gone.
  (use "git branch --unset-upstream" to fixup)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)
    modified:   1.java
    new file:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
$ git status
On branch master
Your branch is based on 'origin/master', but the upstream is gone.
  (use "git branch --unset-upstream" to fixup)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)
  (use "git add <file>..." to stage these changes)

    modified:   1.java
    new file:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git commit -m "second checkin with set of changes"
[master c4534c1] second checkin with set of changes
 2 files changed, 2 insertions(+)
 create mode 100644 2.java
1

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git status
On branch master
Your branch is based on 'origin/master', but the upstream is gone.
  (use "git branch --unset-upstream" to fixup)

nothing to commit, working tree clean

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
1
```

Untitled - Notepad

```
Central repo: https://github.com/scmlearningcentre/may2020.git

$ git config --global user.name "Adam M"
$ git config --global user.email "scmlearningcentre@gmail.com"
$ git config --global push.default "simple"

$ git clone <source-centralrepo> <dest-localrepo>
$ git status
$ git add <file> or git add .
$ git commit -m "first change for dummy release"

$ git clone https://github.com/scmlearningcentre/may2020.git
```

Slide 5 of 27 8:17 PM 5/5/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls -a
. .git/ 1.java 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log
commit c4534c179ebfc2aa632eb13e2904065883fb9171 (HEAD -> master)
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May 5 20:13:57 2020 +0530

    second checkin with set of changes

commit c4bcf922082d986a2d10d13a749449aa0bbf886e
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May 5 20:08:38 2020 +0530

    first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log
commit c4534c179ebfc2aa632eb13e2904065883fb9171 (HEAD -> master)
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May 5 20:13:57 2020 +0530

    second checkin with set of changes

commit c4bcf922082d986a2d10d13a749449aa0bbf886e
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May 5 20:08:38 2020 +0530

    first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log -1
commit c4534c179ebfc2aa632eb13e2904065883fb9171 (HEAD -> master)
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May 5 20:13:57 2020 +0530

    second checkin with set of changes

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log -3
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
second checkin with set of changes

commit c4bcf922082d986a2d10d13a749449aa0bbf886e
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May  5 20:08:38 2020 +0530
= first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log -1
commit c4534c179ebfc2aa632eb13e2904065883fb9171 (HEAD -> master)
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May  5 20:13:57 2020 +0530
    second checkin with set of changes

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
c4534c1 (HEAD -> master) second checkin with set of changes
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline -1
c4534c1 (HEAD -> master) second checkin with set of changes
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

8:22 PM
5/5/2020

11:49

Ro 4G 34

```
tral repo: https://github.com/scmlearningcentre/may2020.git
it config --global user.name "Adam M"
it config --global user.email "scmlearningcentre@gmail.com"
it config --global push.default "simple"

it clone <source-centralrepo> <dest-localrepo>
it status
it add <file> or git add .
it commit -m "first change for dummy release"
it log -num --oneline
it show <commitId>

it clone https://github.com/scmlearningcentre/may2020.git
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
$ git log --oneline -1
c4534c1 (HEAD -> master) second checkin with set of changes

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git show c4534c1
commit c4534c179ebfc2aa632eb13e2904065883fb9171 (HEAD -> master)
Author: Adam M <scmlearningcentre@gmail.com>
Date:   Tue May 5 20:13:57 2020 +0530

    second checkin with set of changes

diff --git a/1.java b/1.java
index 603cb1b..45c541a 100644
--- a/1.java
+++ b/1.java
@@ -1 +1,2 @@
 First Line
+Line 2
diff --git a/2.java b/2.java
new file mode 100644
index 0000000..603cb1b
--- /dev/null
+++ b/2.java
@@ -0,0 +1 @@
+First Line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00 - □ ×
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': ██████████
☰
□
1
1
1 ◀
1
1
Slide 5 of 27 8:36 PM 5/5/2020
Type here to search Notes Comments
Windows 10 75% 100%
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
Counting objects: 10, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (5/5), done.
Writing objects: 100% (10/10), 762 bytes | 108.00 KiB/s, done.
Total 10 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/scmlearningcentre/may2020.git
 * [new branch]      master -> master
 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ █
```

The screenshot shows a GitHub repository page for 'scmlearningcentre / may2020'. The repository has 3 commits, 1 branch, 0 packages, 0 releases, and 1 contributor. The latest commit was made 11 minutes ago. The commits are:

- test (third checkin) - 11 minutes ago
- 1.java (second checkin with set of changes) - 24 minutes ago
- 2.java (second checkin with set of changes) - 24 minutes ago

A message at the bottom encourages adding a README file.

Repository details:

- No description, website, or topics provided.
- Manage topics
- Branch: master
- New pull request
- Create new file, Upload files, Find file, Clone or download

Commit History:

File	Message	Time
test	third checkin	11 minutes ago
1.java	second checkin with set of changes	24 minutes ago
2.java	second checkin with set of changes	24 minutes ago

scmlearningcentre / may2020

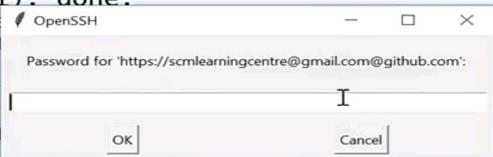
Branch: master

- third checkin
scmlearningcentre committed 11 minutes ago
- second checkin with set of changes
scmlearningcentre committed 24 minutes ago
- first change for dummy release
scmlearningcentre committed 29 minutes ago

Newer Older

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
Counting objects: 10, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (5/5), done.
Writing objects: 100% (10/10), 762 bytes | 108.00 KiB/s, done.
Total 10 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1). done.
To https://github.com/scmlearningce
 * [new branch]      master -> master
 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com

```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
Counting objects: 10, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (5/5), done.
Writing objects: 100% (10/10), 762 bytes | 108.00 KiB/s, done.
Total 10 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/scmlearningcentre/may2020.git
 * [new branch]      master -> master
 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
Everything up-to-date
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ 
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
Everything up-to-date

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls .git
COMMIT_EDITMSG config description HEAD hooks/ index info/ logs/ objects/ refs/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ cat .git/config
[core]
    repositoryformatversion = 0
    filemode = false
    bare = false
    logallrefupdates = true
    symlinks = false
    ignorecase = true
[remote "origin"]
    url = https://github.com/scmlearningcentre/may2020.git
    fetch = +refs/heads/*:refs/remotes/origin/*
[branch "master"]
    remote = origin
    merge = refs/heads/master

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
Untitled - Notepad  
File Edit Format View Help  
Central repo: https://github.com/scmlearningcentre/may2020.git  
$ git config --global user.name "Adam M"  
$ git config --global user.email "scmlearningcentre@gmail.com"  
$ git config --global push.default "simple"  
$ git clone <source-centralrepo> <dest-localrepo>  
$ git status  
$ git add <file> or git add .  
$ git commit -m "first change for dummy release"  
$ git log -num --oneline  
$ git show <commitId>  
$ git push  
$ git pull  
  
$ git clone https://github.com/scmlearningcentre/may2020.git  
Slide 5 of 27 8:52 PM 5/5/2020 75% Notes Comments
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
adddf40 (HEAD -> master, origin/master) third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/scmlearningcentre/may2020
 adddf40..a57fdbb master      -> origin/master
Updating adddf40..a57fdbb
Fast-forward
 4.java | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 4.java
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

8:53 PM
5/5/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
adddf40 (HEAD -> master, origin/master) third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/scmlearningcentre/may2020
 adddf40..a57fdbb master      -> origin/master
Updating adddf40..a57fdbb
Fast-forward
 4.java | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 4.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
a57fdbb (HEAD -> master, origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
```

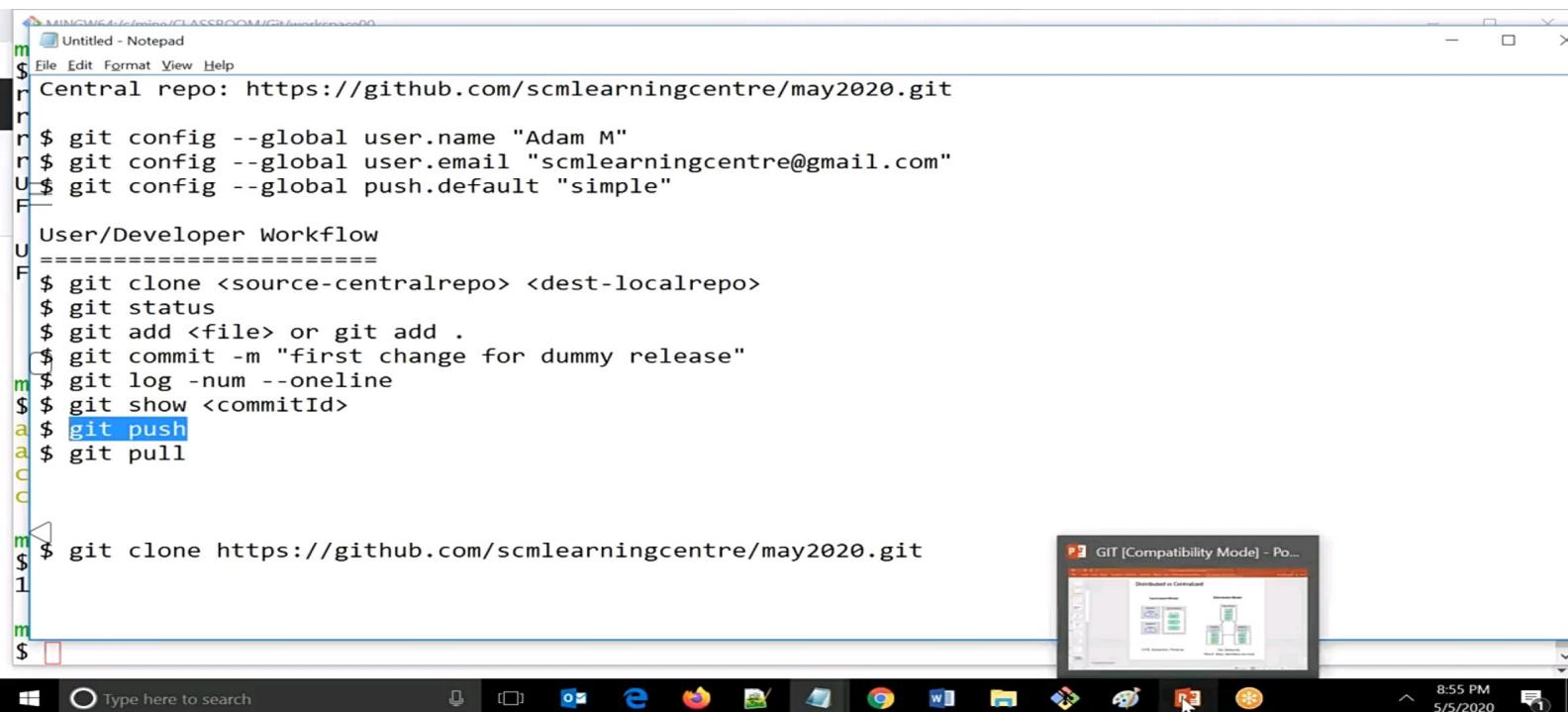


```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/scmlearningcentre/may2020
  adddf40..a57fdbb master      -> origin/master
Updating adddf40..a57fdbb
Fast-forward
 4.java | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 4.java
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
a57fdbb (HEAD -> master, origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```



```
m MINGW64\c\mine\CLASSROOM\GIT\workshop000
m Untitled - Notepad
$ File Edit Format View Help
r Central repo: https://github.com/scmlearningcentre/may2020.git
r
r $ git config --global user.name "Adam M"
r $ git config --global user.email "scmlearningcentre@gmail.com"
U $ git config --global push.default "simple"
F
U User/Developer Workflow
=====
U $ git clone <source-centralrepo> <dest-localrepo>
U $ git status
U $ git add <file> or git add .
U $ git commit -m "first change for dummy release"
U $ git log -num --oneline
U $ git show <commitId>
a $ git push
a $ git pull
C
C

m $ git clone https://github.com/scmlearningcentre/may2020.git
1
m
m
$
```



The screenshot shows a Windows desktop environment. In the center is a terminal window with a black background and white text, displaying a series of Git commands. Above the terminal is a Notepad window titled 'Untitled' containing some text. The taskbar at the bottom has several icons, including the Start button, a search bar, and icons for File Explorer, Edge, and other applications. The system tray shows the date and time as 8:55 PM on 5/5/2020.

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git branch
* master

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
a57fdb (HEAD -> master, origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git branch IOS

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git branch
  IOS
* master

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git checkout
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git branch
  IOS
* master

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git checkout IOS
Switched to branch 'IOS'

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git branch
* IOS
  master
  manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ ls
1.java 2.java 4.java test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git log --oneline
a57fdbcc (HEAD -> IOS, origin/master, master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
1.java 2.java 4.java test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git log --oneline
a57fdb (HEAD -> IOS, origin/master, master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ touch FILEINIOS
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ ls
1.java 2.java 4.java FILEINIOS test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git add .
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git commit -m "adding newfile in IOS branch"
[IOS 90042bc] adding newfile in IOS branch
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 FILEINIOS
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ ls
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ ls
1.java 2.java 4.java FILEINIOS test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "adding newfile in ios branch"
[ios 90042bc] adding newfile in ios branch
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 FILEINIOS

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ ls
1.java 2.java 4.java FILEINIOS test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline
90042bc (HEAD -> IOS) adding newfile in ios branch
a57fdbb (origin/master, master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
F MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git branch
  IOS
* master

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java test/
 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
a57fdb (HEAD -> master, origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

8:19 PM
5/6/2020

```
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ touch FILEINMASTER

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git add .

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git commit -m "adding newfile from MASTER branch"
[master 8e0f9ed] adding newfile from MASTER branch
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 FILEINMASTER

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java FILEINMASTER test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
8e0f9ed (HEAD -> master) adding newfile from MASTER branch
a57fdbb (origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git commit -m "adding newfile from MASTER branch"
[master 8e0f9ed] adding newfile from MASTER branch
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 FILEINMASTER

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java FILEINMASTER test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
8e0f9ed (HEAD -> master) adding newfile from MASTER branch
a57fdb (origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git checkout IOS
Switched to branch 'IOS'

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ ls
1.java 2.java 4.java FILEINIOS test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```

8:20 PM
5/6/2020

Untitled - Notepad

File Edit Format View Help

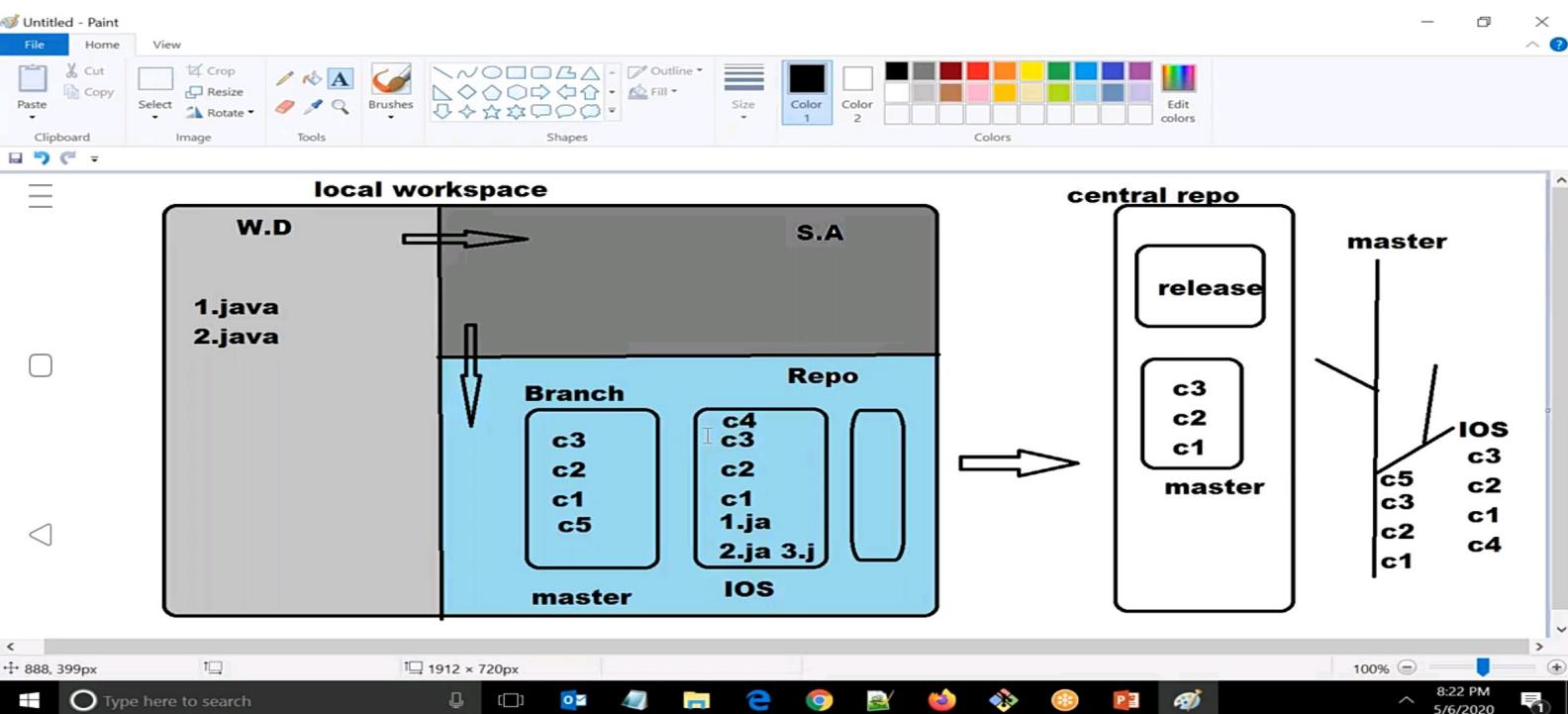
```
Central repo: https://github.com/scmlearningcentre/may2020.git

$ git config --global user.name "Adam M"
$ git config --global user.email "scmlearningcentre@gmail.com"
$ git config --global push.default "simple"

User/Developer Workflow
=====
$ git clone <source-centralrepo> <dest-localrepo>
$ git status
$ git add <file> or git add .
$ git commit -m "first change for dummy release"
$ git log -num --oneline
$ git show <commitId>
$ git push
$ git pull

$ git branch
$ git branch <newbranch>
$ git checkout <branchname>
```

8:22 PM
5/6/2020



```
Untitled - Paint
Untitled - Notepad
File Edit Format View Help
Central repo: https://github.com/scmlearningcentre/may2020.git

$ git config --global user.name "Adam M"
$ git config --global user.email "scmlearningcentre@gmail.com"
$ git config --global push.default "simple"

User/Developer Workflow
=====
$ git clone <source-centralrepo> <dest-localrepo>
$ git status
$ git add <file> or git add .
$ git commit -m "first change for dummy release"
$ git log -num --oneline
$ git show <commitId>
$ git push
$ git pull

$ git branch
$ git branch <newbranch>
$ git checkout <branchname>
$ git merge <srcbranch> <destbranch>

1912 × 720px 100% 8:31 PM 5/6/2020
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)
=_
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java FILEINMASTER test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
8e0f9ed (HEAD -> master) adding newfile from MASTER branch
d57fdbb (origin/master) newfile 4.java
adddf40 third checkin I
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git merge IOS
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
a57fdb (origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git merge IOS
Merge made by the 'recursive' strategy.
 FILEINIOS | 0
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 FILEINIOS

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java FILEINIOS FILEINMASTER test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
712d773 (HEAD -> master) Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc (IOS) adding newfile in IOS branch
a57fdb (origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
Untitled - Paint
Untitled - Notepad
File Edit Format View Help
Central repo: https://github.com/scmlearningcentre/may2020.git

$ git config --global user.name "Adam M"
$ git config --global user.email "scmlearningcentre@gmail.com"
$ git config --global push.default "simple"

User/Developer Workflow
=====
$ git clone <source-centralrepo> <dest-localrepo>
$ git status
$ git add <file> or git add .
$ git commit -m "first change for dummy release"
$ git log -num --oneline
$ git show <commitID>
$ git push
$ git pull

$ git branch
$ git branch <newbranch>
$ git checkout <branchname>
$ git merge <srcbranch> <destbranch>
$ git cherry-pick <commitID>
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ ls
1.java 2.java 4.java FILEINIOS test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline
6af8bd9 (HEAD -> IOS) adding IOS line
90042bc adding newfile in IOS branch
a57fdbc (origin/master) newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ touch DOINEEDTHIS1
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "DOINEEDTHIS 01"
[IOS 98e3934] DOINEEDTHIS 01
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 DOINEEDTHIS1
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -2
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
$ git commit -m "DOINEEDTHIS 01"
[IOS 98e3934] DOINEEDTHIS 01
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DOINEEDTHIS1

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -2
98e3934 (HEAD -> IOS) DOINEEDTHIS 01
6af8bd9 adding IOS line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ touch DOINEEDTHIS2

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "DOINEEDTHIS 02"
[IOS a8d7429] DOINEEDTHIS 02
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DOINEEDTHIS2

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 FILEINIOS test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -3
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -3
a8d7429 (HEAD -> ios) DOINEEDTHIS 02
98e3934 DOINEEDTHIS 01
6af8bd9 adding ios line
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ touch DOINEEDTHIS3

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "DOINEEDTHIS 03"
[ios f5b6460] DOINEEDTHIS 03
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 DOINEEDTHIS3

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -4
f5b6460 (HEAD -> ios) DOINEEDTHIS 03
a8d7429 DOINEEDTHIS 02
98e3934 DOINEEDTHIS 01
6af8bd9 adding ios line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
f5b6460 (HEAD -> IOS) DOINEEDTHIS 03
a8d7429 DOINEEDTHIS 02
98e3934 DOINEEDTHIS 01
6af8bd9 adding IOS line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 DOINEEDTHIS3 FILEINIOS test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 6 commits.
  (use "git push" to publish your local commits)
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git cherry-pick 98e3934
[master 77dae99] DOINEEDTHIS 01
 Date: Wed May 6 20:49:45 2020 +0530
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DOINEEDTHIS1

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 FILEINIOS FILEINMASTER test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git cherry-pick 98e
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 6 commits.
(use "git push" to publish your local commits)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git cherry-pick 98e3934
[master 77dae99] DOINEEDTHIS 01
Date: Wed May 6 20:49:45 2020 +0530
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DOINEEDTHIS1

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 FILEINIOS FILEINMASTER test/
[ manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git cherry-pick a8d7429
[master b27671e] DOINEEDTHIS 02
Date: Wed May 6 20:50:07 2020 +0530
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DOINEEDTHIS2

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 FILEINIOS FILEINMASTER test/
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
Counting objects: 19, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (16/16), done.
Writing objects: 100% (19/19), 1.75 KiB | 163.00 KiB/s, done.
Total 19 (delta 9), reused 0 (delta 0)
remote: Resolving deltas: 100% (9/9), done.
To https://github.com/scmlearningcentre/may2020.git
  a57fdb..b27671e master -> master
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

Stashing committed changes

creates stash, remove changes from working dir:

- **\$ git stash**

To list all stash available for the repository :

- **\$ git stash list**

Reapply the changes, remove stash:

- **\$ git stash pop**

Apply a specific stash from repo:

- **\$ git stash apply stash@{num}**

Remove stash from repo

- **\$ git stash clear**

```
MINGW64:c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-  
$ cat 2.java  
First Line  
Idea 11  
1  
manavarathan@IN-  
$ cat 4.java  
First line  
Idea 11  
1  
manavarathan@IN-  
$ git status  
on branch IOS  
Your branch is u  
Changes not stag  
(use "git add  
(use "git chec  
  
modified  
modified  
no changes added  
1 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)  
$
```

Untitled - Notepad

```
$ git show <commitID>  
$ git push  
$ git pull  
  
$ git branch  
$ git branch <newbranch>  
$ git checkout <branchname>  
$ git merge <srcbranch> <destbranch>  
$ git cherry-pick <commitID>  
  
$ git stash  
  
$ git clone https://github.com/scmlearningcentre/may2020.git
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
on branch ios
Your branch is up to date with 'origin/ios'.
=-
1 Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

    modified:   2.java
    modified:   4.java

no changes added to commit (use "git add" and/or "git commit -a")

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git stash
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in 4.java.
The file will have its original line endings in your working directory.
Saved working directory and index state WIP on Ios: f5b6460 DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git stash
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in 4.java.
The file will have its original line endings in your working directory.
1 Saved working directory and index state WIP on IOS: f5b6460 DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
On branch IOS
Your branch is up to date with 'origin/IOS'.

nothing to commit, working tree clean

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 4.java
First line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git stash list
stash@{0}: WIP on IOS: f5b6460 DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
1 $ echo "Idea 22" >> 2.java
2
3 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
4 $ echo "Idea 22" >> 4.java
5
6 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
7 $ git status
8 on branch IOS
9 Your branch is up to date with 'origin/IOS'.
10
11 Changes not staged for commit:
12   (use "git add <file>..." to update what will be committed)
13   (use "git checkout -- <file>..." to discard changes in working directory)
14
15     modified:   2.java
16     modified:   4.java
17
18 no changes added to commit (use "git add" and/or "git commit -a")
19
20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
21 $ cat 2.java
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
modified: 2.java
modified: 4.java

no changes added to commit (use "git add" and/or "git commit -a")

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 22

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 4.java
First line
Idea 22

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git stash
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in 4.java.
The file will have its original line endings in your working directory.
Saved working directory and index state WIP on IOS: f5b6460 DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
warning: LF will be replaced by CRLF in 4.java.
The file will have its original line endings in your working directory.
Saved working directory and index state WIP on IOS: f5b6460 DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git status
On branch IOS
Your branch is up to date with 'origin/IOS'.

nothing to commit, working tree clean

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 2.java
First Line
$ cat 4.java
First line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git stash list
stash@{0}: WIP on IOS: f5b6460 DOINEEDTHIS 03
stash@{1}: WIP on IOS: f5b6460 DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
warning: LF will be replaced by CRLF in Untitled - Notepad
The file will have binary content.
Saved working directory.
manavarathan@IN-  
$ git status  
On branch IOS  
Your branch is up-to-date.  
nothing to commit, working directory clean  
manavarathan@IN-  
$ cat 2.java  
First Line  
$ git stash  
$ git stash list  
manavarathan@IN-  
$ cat 4.java  
First line  
stash@{0}: WIP on IOS: f5b6460 DOINEEDTHIS 03  
stash@{1}: WIP on IOS: f5b6460 DOINEEDTHIS 03  
manavarathan@IN-  
$ git clone https://github.com/scmlearningcentre/may2020.git  
$ manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```

Untitled - Notepad

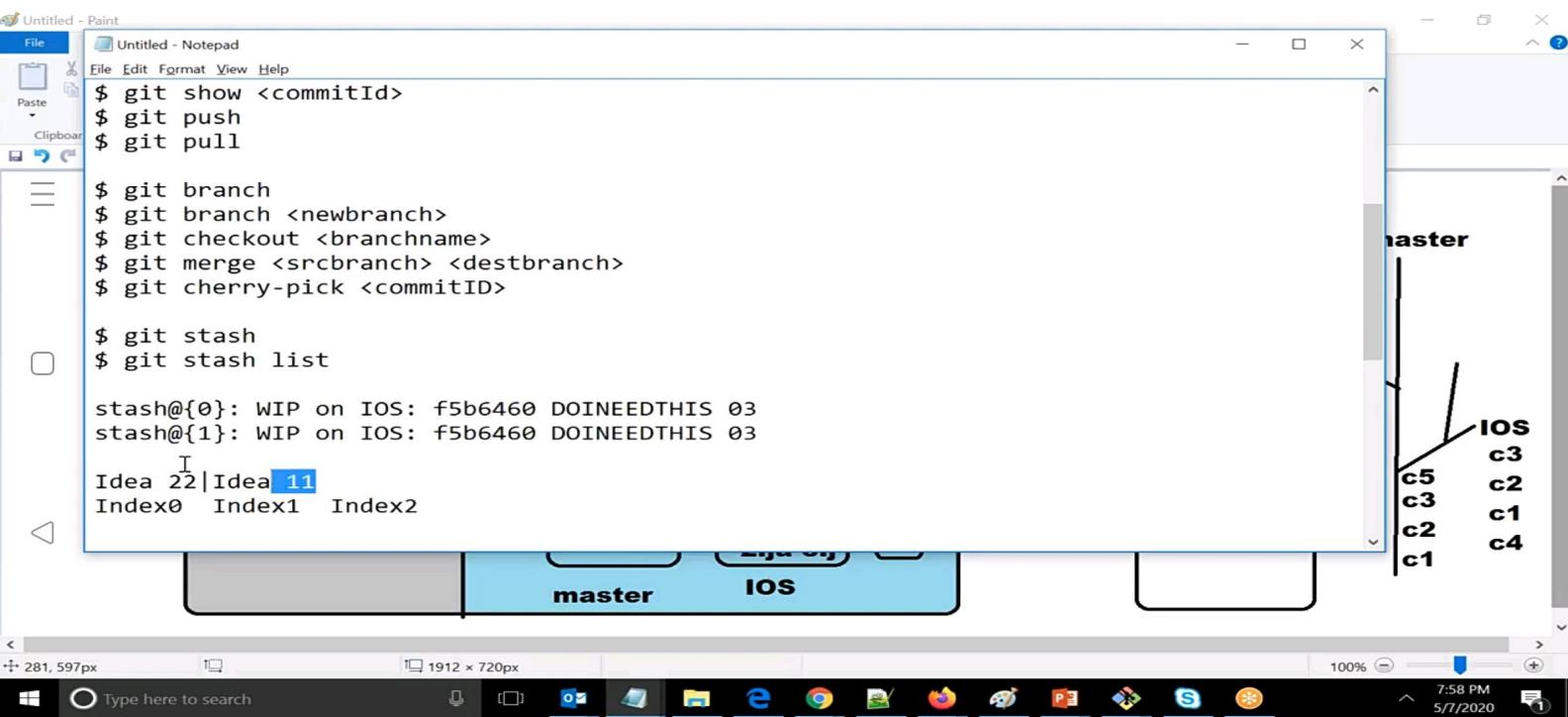
```
$ git show <commitID>
$ git push
$ git pull

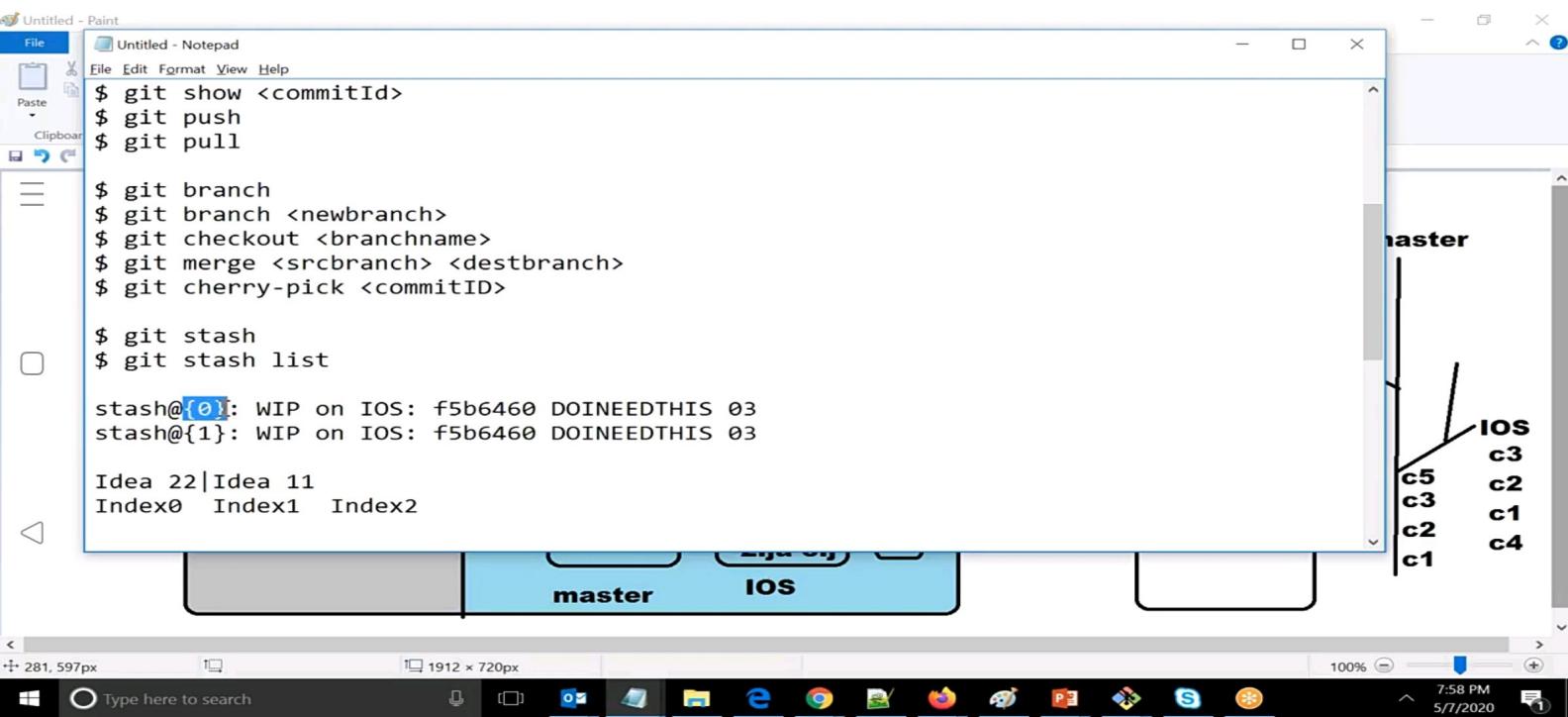
$ git branch
$ git branch <newbranch>
$ git checkout <branchname>
$ git merge <srcbranch> <destbranch>
$ git cherry-pick <commitID>

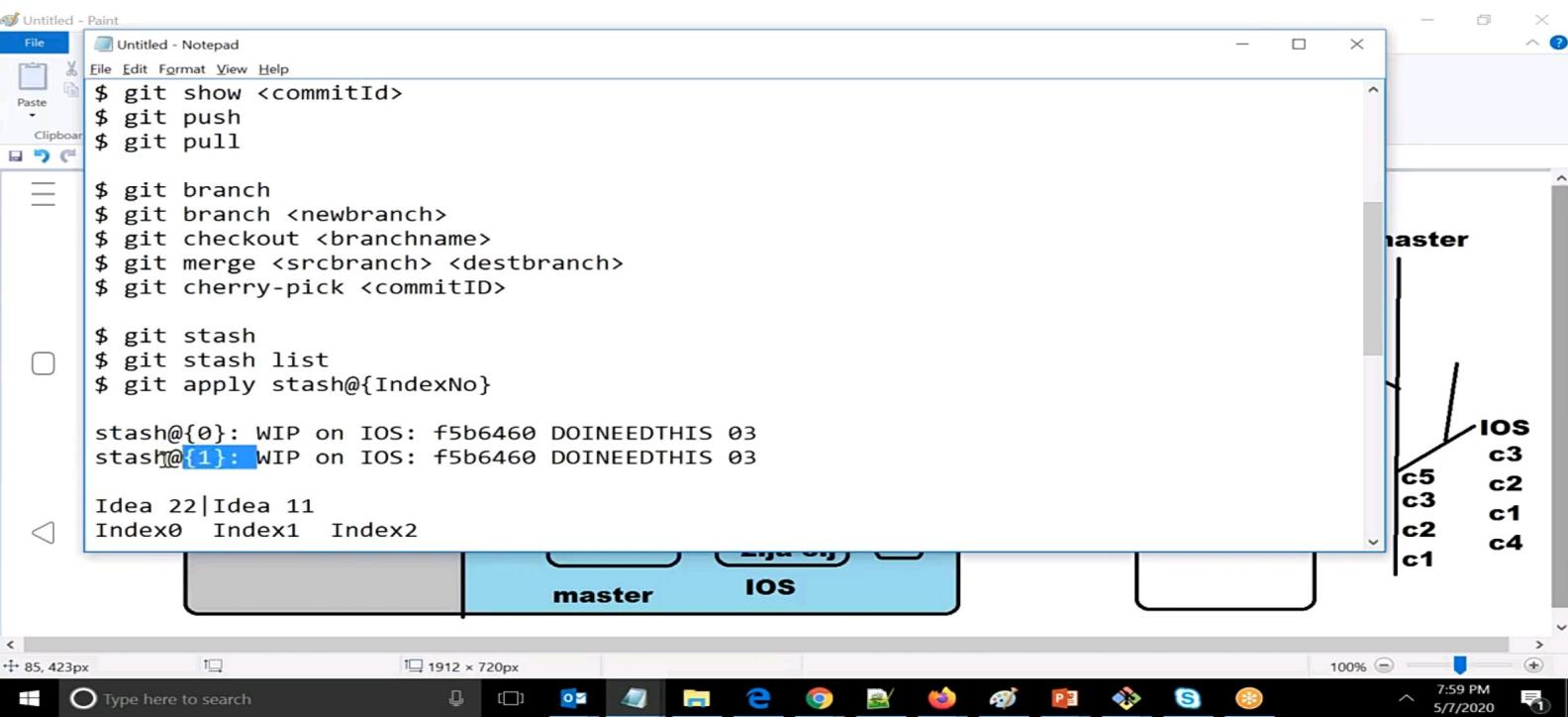
$ git stash
$ git stash list

stash@{0}: WIP on IOS: f5b6460 DOINEEDTHIS 03
stash@{1}: WIP on IOS: f5b6460 DOINEEDTHIS 03

$ git clone https://github.com/scmlearningcentre/may2020.git
```







```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
nothing to commit, working tree clean

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 2.java
First Line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 4.java
First line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git stash apply stash@{1}
On branch IOS
Your branch is up to date with 'origin/IOS'.
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

    modified:   2.java
    modified:   4.java

no changes added to commit (use "git add" and/or "git commit -a")

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git status
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git status
On branch IOS
Your branch is up to date with 'origin/IOS'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
    (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   2.java
        modified:   4.java

no changes added to commit (use "git add" and/or "git commit -a")
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 2.java
First Line
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 4.java
First line
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
on branch ios
Your branch is up to date with 'origin/ios'.
=_
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

    modified:   2.java
    modified:   4.java

no changes added to commit (use "git add" and/or "git commit -a")

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git stash apply stash@{0}
error: Your local changes to the following files would be overwritten by merge:
  2.java
  4.java
Please commit your changes or stash them before you merge.
Aborting

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
no changes added to commit (use "git add" and/or "git commit -a")
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git stash apply stash@{0}
error: Your local changes to the following files would be overwritten by merge:
 2.java
 4.java
Please commit your changes or stash them before you merge.
Aborting
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "add stashed file"
[ios f3da46e] add stashed file
 2 files changed, 2 insertions(+)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git stash list
stash@{0}: WIP on IOS: f5b6460 DOINEEDTHIS 03
stash@{1}: WIP on IOS: f5b6460 DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git stash
```

A screenshot of a Windows desktop environment. In the center is a terminal window titled 'MINGW64' with the command prompt '\$'. The terminal displays a series of git commands:

```
mana$ git show <commitId>
$ git push
$ git pull
Plea
Abo$ git branch
$ git branch <newbranch>
$ git checkout <branchname>
$ git merge <srcbranch> <destbranch>
$ git cherry-pick <commitID>
mana$ git stash
[IOS
(2) f$ git stash list      I
$ git apply stash@{IndexNo}
$ git stash clear
mana$ git stash@{0}: WIP on IOS: f5b6460 DOINeedThis 03
stas$ git stash@{1}: WIP on IOS: f5b6460 DOINeedThis 03
mana$ Idea 22|Idea 11
$ git stash clear
```

Below the terminal, the status bar shows the path 'c/mine/CLASSROOM/Git/workspace00 (IOS)' and the prompt '\$'. To the left of the terminal is a 'Notepad' window titled 'Untitled - Notepad' containing a single line of text: 'File Edit Format View Help'. The desktop taskbar at the bottom includes icons for File Explorer, Edge, and other system utilities. The system tray shows the date and time as '5/7/2020 8:06 PM'.

Resetting changes

Revert uncommitted changes:

```
$ git reset <file>
```

Move only to HEAD pointer:

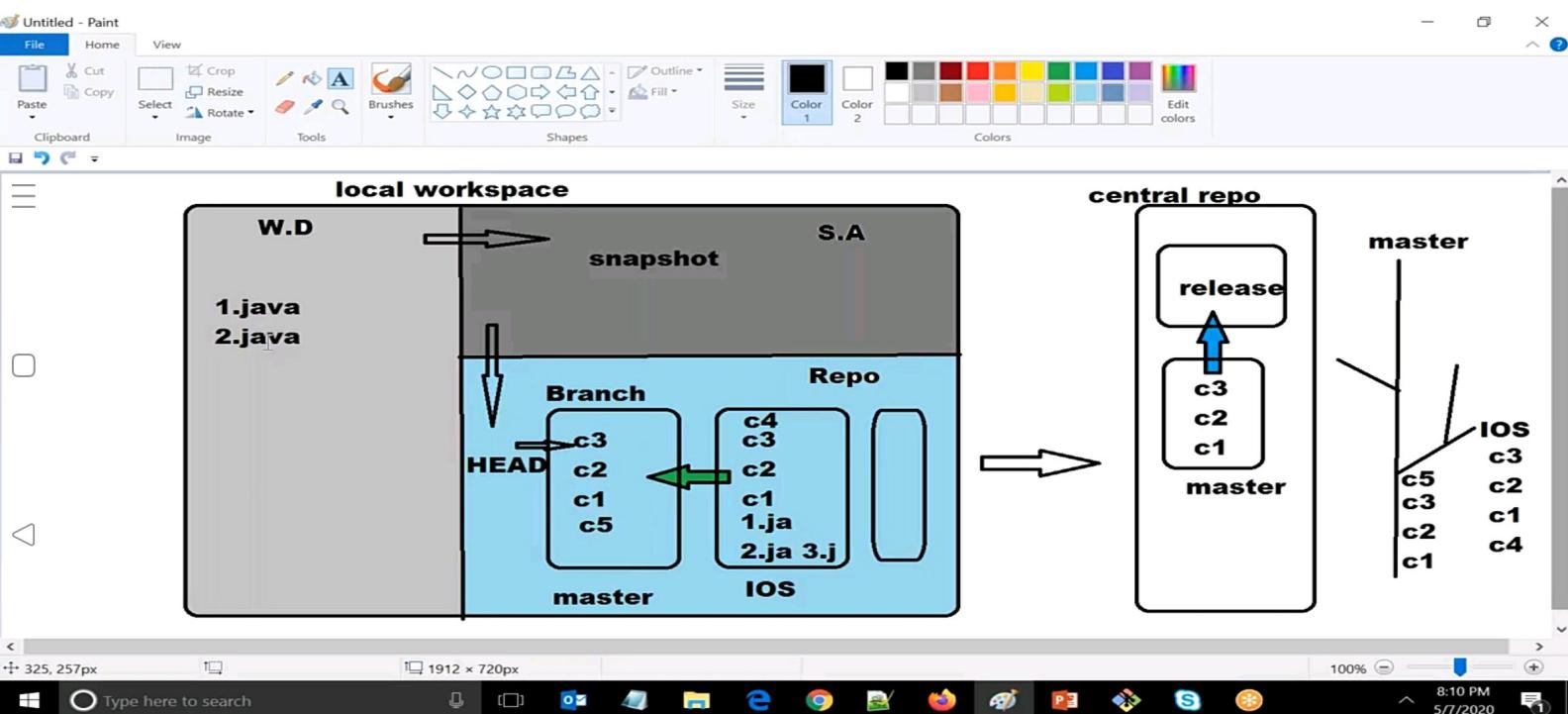
```
$ git reset --soft
```

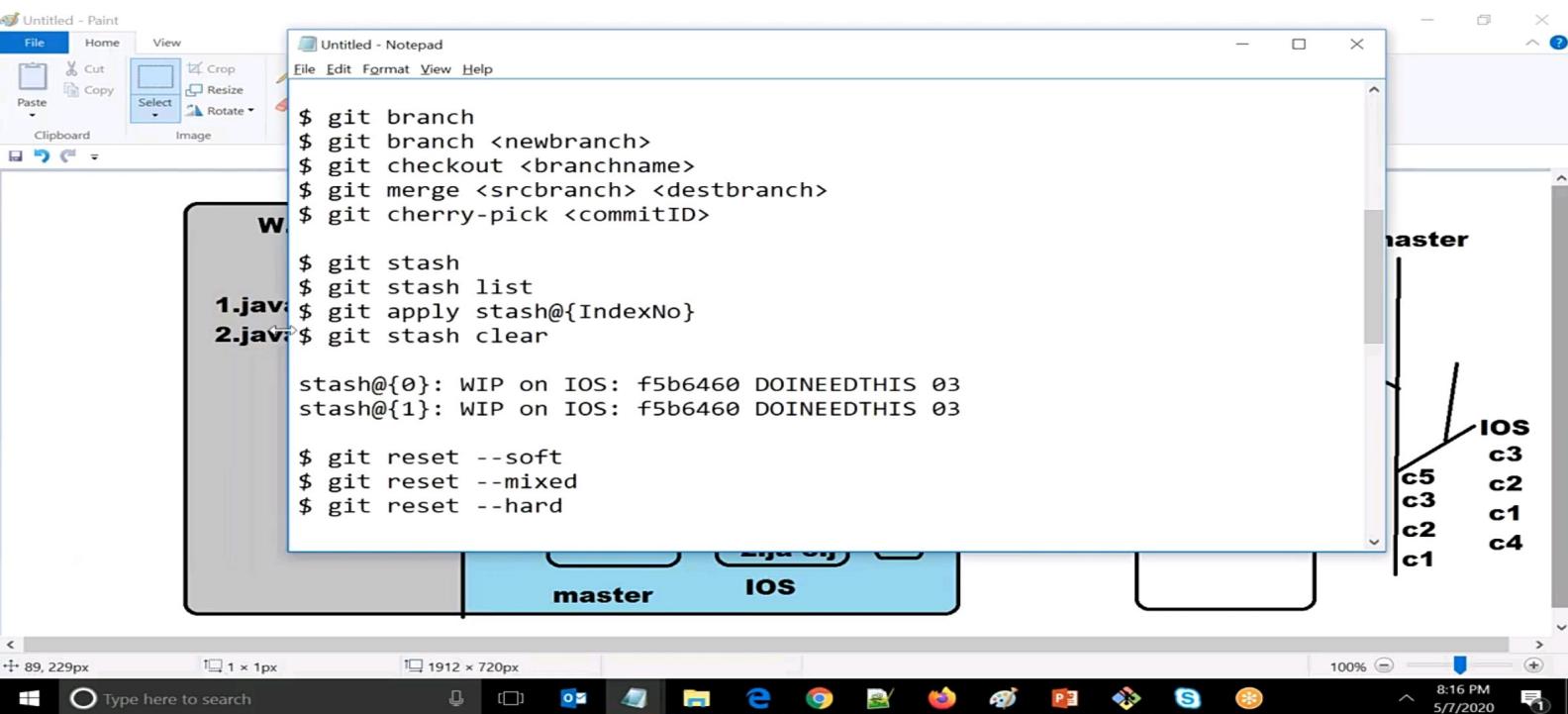
Move the HEAD pointer & reset the staging area (default):

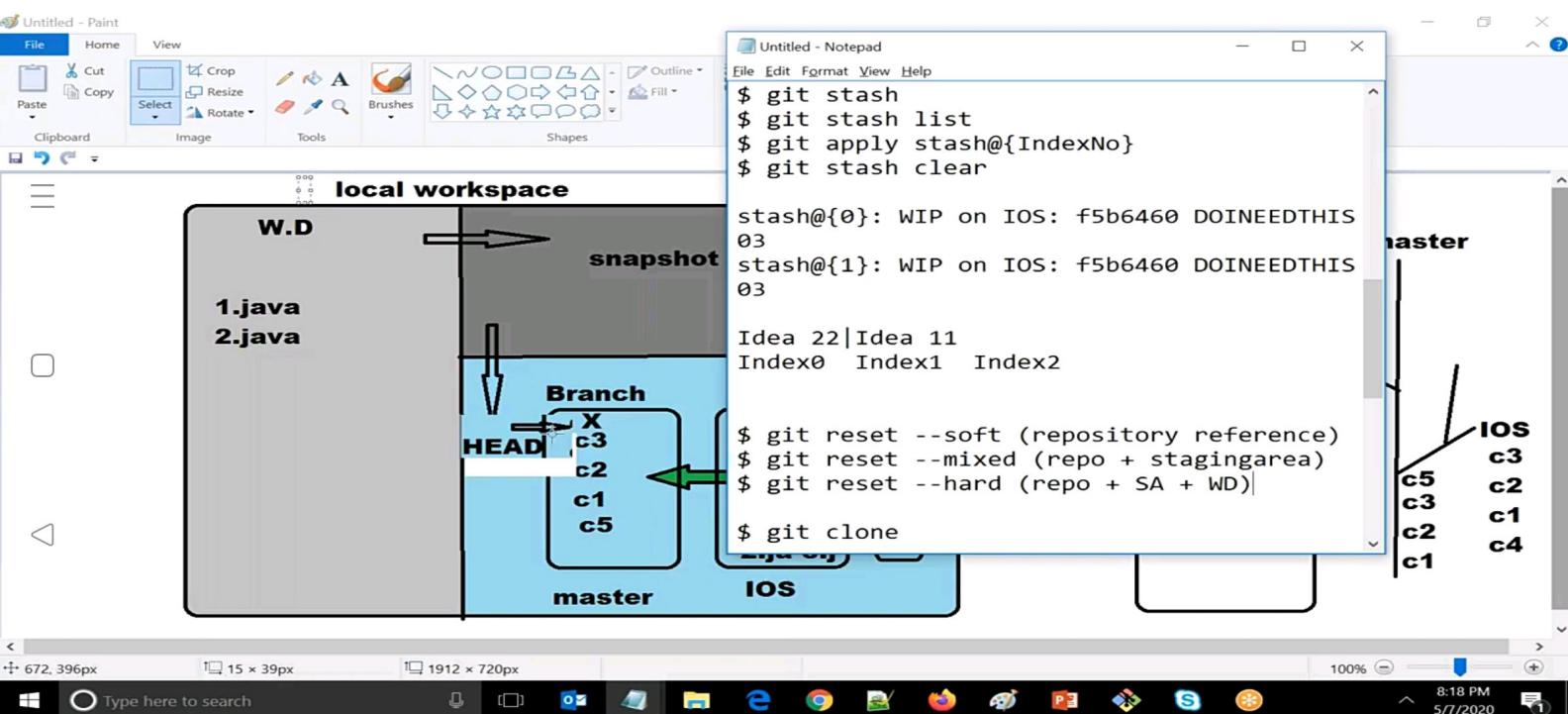
```
$ git reset --mixed
```

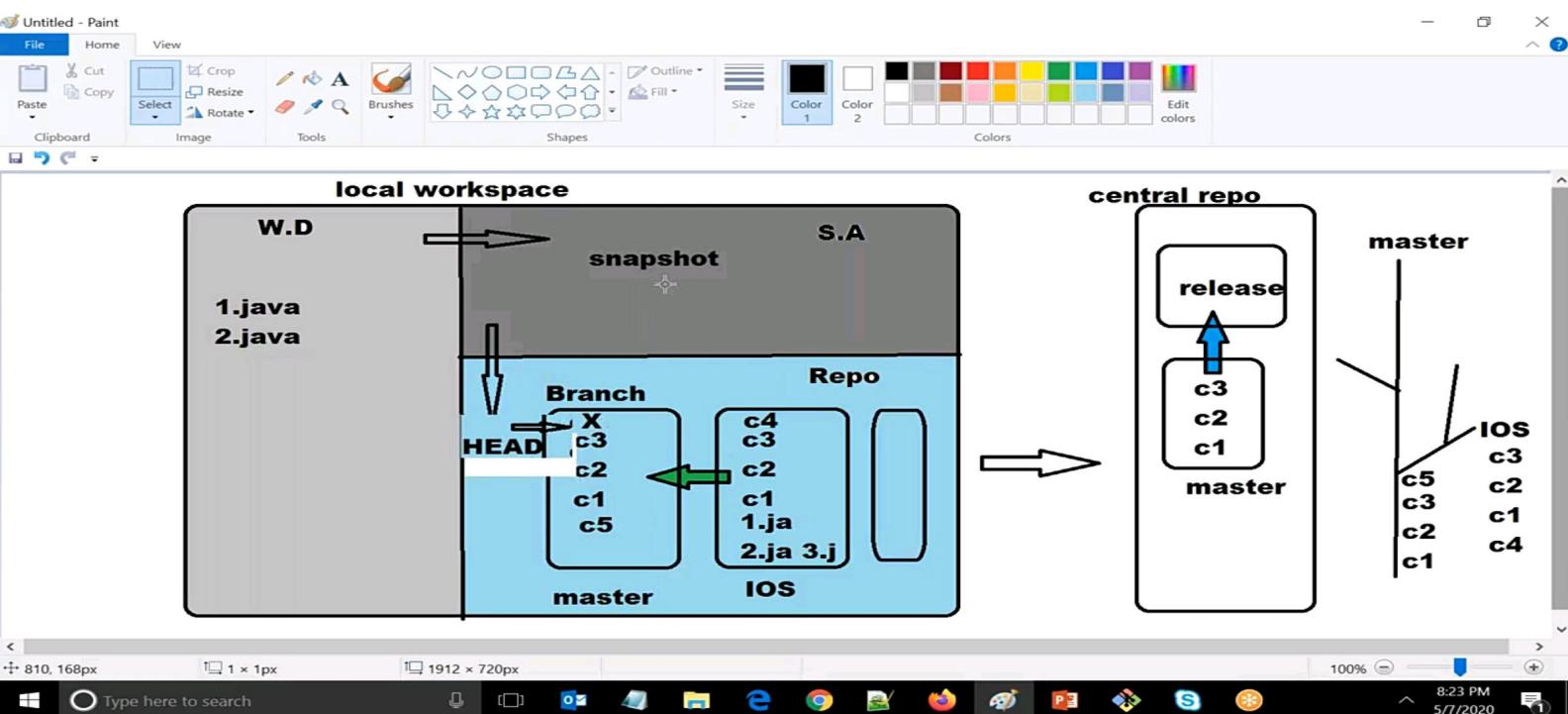
Move the HEAD pointer, resets staging area & working tree to the new HEAD:

```
$ git reset --hard
```









```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
Your branch is ahead of 'origin/IOS' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git log --oneline -2
f3da46e (HEAD -> IOS) add stashed file
f5b6460 (origin/IOS) DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 2.java
First Line
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ echo "DUMMY LINE" >> 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 2.java
First Line
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ clear
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git log --oneline -2
f3da46e (HEAD -> IOS) add stashed file
f5b6460 (origin/IOS) DOINEEDTHIS 03

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 2.java
First Line
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ echo "DUMMY LINE" >> 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ cat 2.java
First Line
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ clear
 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git status
On branch IOS
Your branch is ahead of 'origin/IOS' by 1 commit.
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
On branch ios
Your branch is ahead of 'origin/ios' by 1 commit.
  (use "git push" to publish your local commits)
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)
    modified:   2.java

no changes added to commit (use "git add" and/or "git commit -a")
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
modified: 2.java

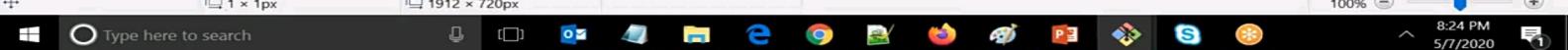
no changes added to commit (use "git add" and/or "git commit -a")
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ __
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git status
on branch IOS
Your branch is ahead of 'origin/IOS' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    modified: 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ clear
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git reset --soft

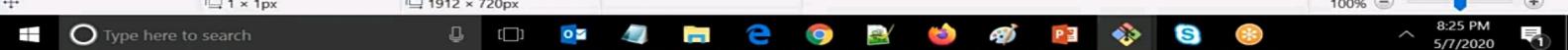
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
On branch ios
Your branch is ahead of 'origin/ios' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    modified:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11
DUMMY LINE
==

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
On branch ios
Your branch is ahead of 'origin/ios' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)
    modified:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git reset --mixed
Unstaged changes after reset:
M       2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git reset --mixed
```

< + 1 x 1px 1912 x 720px 100% 8:25 PM 5/7/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
(use "git reset HEAD <file>..." to unstage)
    modified:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git reset --mixed
Unstaged changes after reset:
M      2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git status
On branch IOS
Your branch is ahead of 'origin/IOS' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

    modified:   2.java

no changes added to commit (use "git add" and/or "git commit -a")
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11
DUMMY LINE
=
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
On branch ios
Your branch is ahead of 'origin/ios' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    modified:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

< 1912 x 720px 100% 8:26 PM 5/7/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
On branch ios
Your branch is ahead of 'origin/ios' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    modified:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git reset --hard
HEAD is now at f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
Changes to be committed:
(use "git reset HEAD <file>..." to unstage)
    modified:   2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git reset --hard
HEAD is now at f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git status
On branch ios
Your branch is ahead of 'origin/ios' by 1 commit.
  (use "git push" to publish your local commits)
nothing to commit, working tree clean

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

+ 9, 543px 1 1 x 1px 1912 x 720px 100% 8:26 PM 5/7/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git status
On branch IOS
Your branch is ahead of 'origin/IOS' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ git log --oneline
f3da46e (HEAD -> IOS) add stashed file
f5b6460 (origin/IOS) DOINEEDTHIS 03
a8d7429 DOINEEDTHIS 02
98e3934 DOINEEDTHIS 01
6af8bd9 adding IOS line
90042bc adding newfile in IOS branch
a57fdbd newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$ clear
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ echo "DUMMY LINE" >> 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11
DUMMy LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "adding dummy line"
[ios ea10ad5] adding dummy line
 1 file changed, 1 insertion(+)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ echo "DUMMY LINE" >> 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "adding dummy line"
[ios ea10ad5] adding dummy line
 1 file changed, 1 insertion(+)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -2
ea10ad5 (HEAD -> ios) adding dummy line
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ echo "DUMMY LINE" >> 2.java

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git add .
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "adding dummy line"
[ios ea10ad5] adding dummy line
 1 file changed, 1 insertion(+)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -2
ea10ad5 (HEAD -> ios) adding dummy line
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git revert ea10ad5
```



```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
warning: LF will be replaced by CRLF in 2.java.
The file will have its original line endings in your working directory.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git commit -m "adding dummy line"
[ios ea10ad5] adding dummy line
 1 file changed, 1 insertion(+)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -2
ea10ad5 (HEAD -> ios) adding dummy line
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git revert ea10ad5
[ios bd23a03] Revert "adding dummy line"
 1 file changed, 1 deletion(-)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -3
bd23a03 (HEAD -> ios) Revert "adding dummy line"
ea10ad5 adding dummy line
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
[IOS ea10ad5] adding dummy line
1 file changed, 1 insertion(+)

manavarathan@IN-L1749 MINGW64 %
$ git log --oneline -2
ea10ad5 (HEAD -> IOS) adding du
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 %
$ git revert ea10ad5
[IOS bd23a03] Revert "adding du
1 file changed, 1 deletion(-)

manavarathan@IN-L1749 MINGW64 %
$ git log --oneline -3
bd23a03 (HEAD -> IOS) Revert "a
ea10ad5 adding dummy line
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 %
$ cat 2.java
First Line
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```

Untitled - Notepad

```
stash@{1}: WIP on IOS: f5b6460 DOINEEDTHIS 03
Idea 22|Idea 11
Index0 Index1 Index2
```

```
$ git reset --soft (repository reference)
$ git reset --mixed (repo + stagingarea)
$ git reset --hard (repo + SA + WD)

$ git revert <CommitID>
$ git checkout <CommitId>
$ git clone https://github.com/scmlearningcentre/may2020.git
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
ea10ad5 adding dummy line
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git checkout ea10ad5
Note: checking out 'ea10ad5'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by performing another checkout.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -b with the checkout command again. Example:
  git checkout -b <new-branch-name>
HEAD is now at ea10ad5... adding dummy line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 ((ea10ad5...))
$ cat 2.java
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
First Line
Idea 11

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git checkout ea10ad5
Note: checking out 'ea10ad5'.
=-
You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by performing another checkout.
If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -b with the checkout command again. Example:
  git checkout -b <new-branch-name>
HEAD is now at ea10ad5... adding dummy line

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 ((ea10ad5...))
$ cat 2.java
First Line
Idea 11
DUMMY LINE

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 ((ea10ad5...))
$
```

```
MINGW64:/c/mini manavarat$ Untitled - Notepad
File Edit Format View Help
$ git stash clear
stash@{0}: WIP on IOS: f5b6460 DOINEEDTHIS 03
stash@{1}: WIP on IOS: f5b6460 DOINEEDTHIS 03

Idea 22| Idea 11
Index0  Index1  Index2

$ git reset --soft (repository reference)
$ git reset --mixed (repo + stagingarea)
$ git reset --hard (repo + SA + WD)

$ git revert <CommitID>
$ git checkout <CommitId>

$ git clone https://github.com/scmlearningcentre/may2020.git
BRANCH+Commitid
    LATEST - COMMITID
CURRENT- BRANCH|
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 ((ea10ad5...))
$ git log --oneline -3
ea10ad5 (HEAD) adding dummy line
f3da46e add stashed file
f5b6460 (origin/IOS) DOINEEDTHIS 03
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 ((ea10ad5...))
$ git checkout IOS
Previous HEAD position was ea10ad5... adding dummy line
Switched to branch 'IOS'
Your branch is ahead of 'origin/IOS' by 3 commits.
  (use "git push" to publish your local commits)
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (IOS)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
(use "git push" to publish your local commits)

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ cat 2.java
First Line
Idea 11
==

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git log --oneline -3
bd23a03 (HEAD -> ios) Revert "adding dummy line"
ea10ad5 adding dummy line
f3da46e add stashed file

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (ios)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline -3
b27671e (HEAD -> master, origin/master, origin/TESTRELEASE) DOINEEDTHIS 02
7dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
I
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

9,239px 1912 x 720px 100% 9:01 PM 5/7/2020

Tags

Git has the option to *tag* a commit in the repository history so that you find it easier at a later point in time

Apply tag to a commit:

```
$ git tag -a <pattern> -m 'comment' <commitid>
```

Contents of the tag:

```
$ git show <pattern>
```

Display list of tags available:

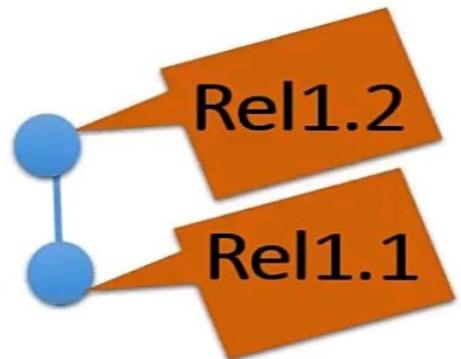
```
$ git tag
```

Push the tags:

```
$ git push --tags
```

Delete a tag:

```
$ git tag -d <tag>
```



```
ub$ manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00
1 ssmanavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
2 +2$ git clone https://github.com/scmlearningcentre/may2020.git
3 t5fatal: destination path 'may2020' already exists and is not an empty directory.
4 MC
5 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
6 ub$ git clone https://github.com/scmlearningcentre/may2020.git workspace00
7 Cloning into 'workspace00'...
8 maremote: Enumerating objects: 38, done.
9 $ remote: Counting objects: 100% (38/38), done.
10 remote: Compressing objects: 100% (17/17), done.
11 remote: Total 38 (delta 15), reused 35 (delta 12), pack-reused 0
12 Unpacking objects: 100% (38/38), done.
13 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
14 $ cd workspace00/
15 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
16 $ git tag
17 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
18 $ git log --oneline -2
19 b27671e (HEAD -> master, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS 02
20 77dae99 DOINEEDTHIS 01
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
22 $ git tag -a "R1.2" -m "comment for release 1.2"
```

```
1 MINGW64:/c/mine/CLASSROOM/Git/workspace00
ubremote: Enumerating objects: 38, done.
ssremote: Counting objects: 100% (38/38), done.
+2remote: Compressing objects: 100% (17/17), done.
t5remote: Total 38 (delta 15), reused 35 (delta 12), pack-reused 0
14Unpacking objects: 100% (38/38), done.
u
15ubmanavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ cd workspace00/
ma
2$ manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git tag
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline -2
23 b27671e (HEAD -> master, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS 02
77dae99 DOINEEDTHIS 01
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git tag -a "R1.2" -m "comment for release 1.2" b27671e
25 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline -2
26 b27671e (HEAD -> master, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS
02 I
27 77dae99 DOINEEDTHIS 01
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
ub
1 ss manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
2 +$ git log --oneline -2
3 t5 b27671e (HEAD -> master, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS
4 Mc02
5 u77dae99 DOINEEDTHIS 01
6 ub
7 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
8 ma$ git show R1.2
9 $ tag R1.2
10 Tagger: Adam M <scmlearningcentre@gmail.com>
11 Date: Fri May 8 19:47:50 2020 +0530
12 comment for release 1.2
13
14 commit b27671e76e3ba9fbf18c532ee2d0077ddde368f9 (HEAD -> master, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD)
15 Author: Adam M <scmlearningcentre@gmail.com>
16 Date: Wed May 6 20:50:07 2020 +0530
17
18 DOINEEDTHIS 02
19
20 diff --git a/DOINEEDTHIS2 b/DOINEEDTHIS2
21 new file mode 100644
22 index 000000..e69de29
23
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
25 $
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
File Date: Fri May 8 19:47:50 2020 +0530
18 comment for release 1.2
19 commit b27671e76e3ba9fbf18c532ee2d0077ddde368f9 (HEAD -> master, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD)
Author: Adam M <scmlearningcentre@gmail.com>
Date: Wed May 6 20:50:07 2020 +0530
21 DOINEEDTHIS 02
22 diff --git a/DOINEEDTHIS2 b/DOINEEDTHIS2
new file mode 100644
index 000000..e69de29
23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git tag -a "R1.3" -m "comment for release 1.3" b27671e
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git tag -a "R1.3" -m "comment for release 1.3" 77dae992~
fatal: Failed to resolve '77dae992~' as a valid ref.
25 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git tag -a "R1.3" -m "comment for release 1.3" 77dae992
fatal: Failed to resolve '77dae992' as a valid ref.
26 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git tag -a "R1.3" -m "comment for release 1.3" 77dae992
27 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ 
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace00
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git tag -a "R1.3" -m "comment for release 1.3" 77dae992
fatal: Failed to resolve '77dae992' as a valid ref.
19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline -2
b27671e (HEAD -> master, tag: R1.3, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) D
OINEEDTHIS 02
21 77dae99 DOINEEDTHIS 01
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git push --tags
fatal: HttpRequestException encountered.
An error occurred while sending the request.
Username for 'https://github.com': scmlearningcentre@gmail.com
23 Counting objects: 2, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
25 Writing objects: 100% (2/2), 205 bytes | 68.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/scmlearningcentre/may2020.git
 * [new tag]           R1.2 -> R1.2
 * [new tag]           R1.3 -> R1.3
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git
```

```
18 MINGW64:/c/mine/CLASSROOM/Git/workspace00
File Username for 'https://github.com': scmlearningcentre@gmail.com
Counting objects: 2, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
19 Writing objects: 100% (2/2), 205 bytes | 68.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/scmlearningcentre/may2020.git
 * [new tag]           R1.2 -> R1.2
21   * [new tag]           R1.3 -> R1.3

22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
23 $ git tag
R1.2
R1.3

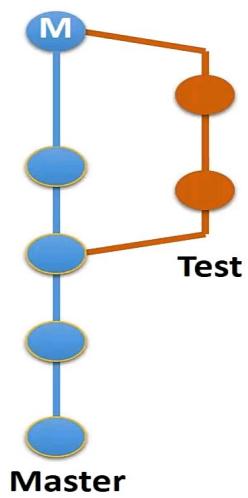
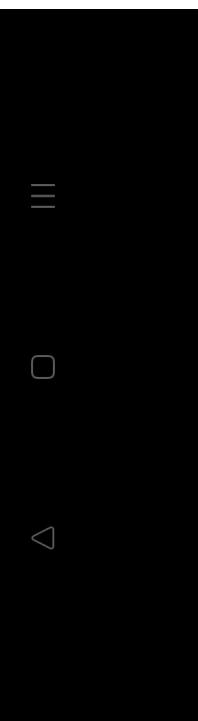
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
25 $ git tag -d R1.3
Deleted tag 'R1.3' (was e431ab9)

26 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
27 $ git log --oneline -2
b27671e (HEAD -> master, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS
02
77dae99 DOINEEDTHIS 01

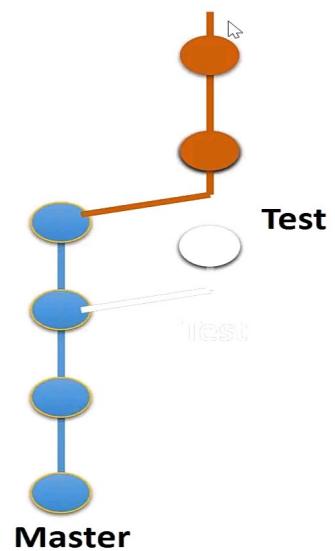
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$
```

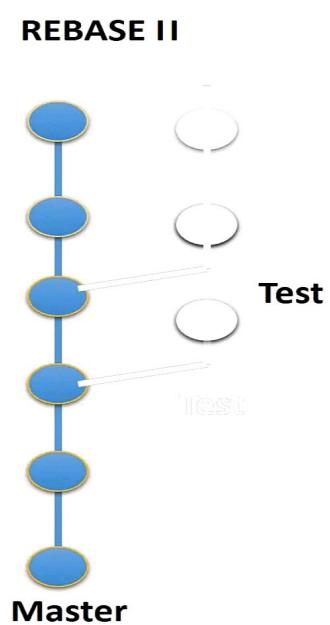
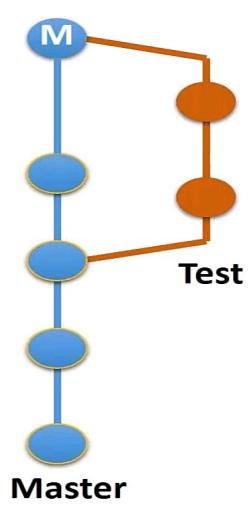


Merge vs Rebase



REBASE I





Step 1:

- ✓ Create test branch
- ✓ Create a commit ID on master
- ✓ Create 2 commit ID's on Test
- ✓ Rebase

I

\$ git checkout test

\$ git rebase master

Step 2: Rebase

\$ git checkout master

\$ git rebase test

```
File manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00  
18 $ git log --oneline  
19 b27671e (HEAD -> master, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS  
20 02  
21 77dae99 DOINEEDTHIS 01  
22 24ba075 adding  
23 6af8bd9 adding  
24 d32ad3a adding  
25 712d773 Merge  
26 =====  
27 8e0f9ed adding  
28 90042bc adding  
29 a57fdbd newfil  
30 adddf40 third  
31 c4534c1 second  
32 c4bcf92 first  
33  
34 manavarathan@I  
35 $  
36  
37  
38 Slide 24
```

Untitled - Notepad

File Edit Format View Help

```
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)  
19 $ git log --oneline  
20 b27671e (HEAD -> master, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS  
21 02  
22 77dae99 DOINEEDTHIS 01  
23 24ba075 adding  
24 6af8bd9 adding  
25 d32ad3a adding  
26 712d773 Merge  
27 =====  
28 8e0f9ed adding  
29 90042bc adding  
30 a57fdbd newfile  
31 adddf40 third  
32 c4534c1 second  
33 c4bcf92 first change for dummy release  
34  
35 manavarathan@I  
36 $  
37  
38
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace00
18 24ba075 adding after conflict resolution
   6af8bd9 adding IOS line
   d32ad3a adding MASTER line
   712d773 Merge branch 'IOS'
19 8e0f9ed adding newfile from MASTER branch
   90042bc adding newfile in IOS branch
   a57fdbb newfile 4.java
20 addddf40 third checkin
   c4534c1 second checkin with set of changes
   c4bcf92 first change for dummy release
21
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git branch test
23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ touch DUMMY1
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git add .
25 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git commit -m "dummy1"
[master cfeceaf] dummy1
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DUMMY1
26
27 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ clear
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace00
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
19 cfecceaf (HEAD -> master) dummy1 DOINEEDTHIS 02
20 b27671e (tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD, test) DOINEEDTHIS 01
21 77dae99 adding after conflict resolution
22 24ba075 adding IOS line
23 6af8bd9 adding MASTER line
24 d32ad3a adding IOS line
25 712d773 Merge branch 'IOS'
26 8e0f9ed adding newfile from MASTER branch
27 90042bc adding newfile in IOS branch
28 a57fdbd newfile 4.java
29 adddf40 third checkin
30 c4534c1 second checkin with set of changes
31 c4bcf92 first change for dummy release
32
33 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
34 $
```

Untitled - Notepad Untitled - Notepad k8s class notes - Notepad Untitled - Notepad Jenkins Master and Slave on EC... Untitled - Notepad

Type here to search 8:06 PM 5/8/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM
$ git log --oneline
cfeceaf (HEAD -> master) dummy1
b27671e (tag: R1.2, origin/master, origin/TESTR
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbd adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM
$
```

Untitled - Notepad

```
MASTER
=====
cfeceaf (HEAD -> master) dummy1
b27671e | DOINEEDTHIS 02 I
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbd adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
18 8e0f9ed adding newfile from MASTER branch
18 90042bc adding newfile in IOS branch
18 a57fdbb newfile 4.java
18 adddf40 third checkin
19 c4534c1 second checkin with set of changes
19 c4bcf92 first change for dummy release

20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM
21 $ git checkout test
21 Switched to branch 'test'

22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM
22 $ git log --oneline
22 b27671e (HEAD -> test, tag: R1.2, origin/master)
23 * 77dae99 DOINEEDTHIS 01
23 24ba075 adding after conflict resolution
24 6af8bd9 adding IOS line
24 d32ad3a adding MASTER line
24 712d773 Merge branch 'IOS'
25 8e0f9ed adding newfile from MASTER branch
25 90042bc adding newfile in IOS branch
25 a57fdbb newfile 4.java
26 adddf40 third checkin
26 c4534c1 second checkin with set of changes
26 c4bcf92 first change for dummy release

27 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
28 $
```

Untitled - Notepad

File Edit Format View Help

MASTER

=====

```
cfeceaf (HEAD -> master) dummy1
b27671e DOINEEDTHIS 02
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbb newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace00
18 6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbb newfile 4.java
20 adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ touch DUMMY2
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ git add .
23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ git commit -m "DUMMY2"
[test 9cc2bd0] DUMMY2
25 1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DUMMY2
26 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 DUMMY2 FILEINIOS FILEINMASTER test/
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$
```

The screenshot shows a Windows desktop environment. In the top-left corner, there is a terminal window titled "MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)". The terminal output displays several git commit logs:

```
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ git commit -m "DUMMY2"
[test 9cc2bd0] DUMMY2
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 DUMMY2

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTH
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM
$ git log --oneline
9cc2bd0 (HEAD -> test) DUMMY2
b27671e (tag: R1.2, origin/master, origin/TESTR
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbd newfile 4.java
addff40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release

manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$
```

In the top-right corner, there is a Notepad window titled "Untitled - Notepad". The content of the Notepad window is as follows:

```
File Edit Format View Help
MASTER
=====
cfeceaf (HEAD -> master) dummy1
b27671e DOINEEDTHIS 02
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbd newfile 4.java
addff40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release
```

Untitled - Notepad

File Edit Format View Help

```
TEST
=====
9cc2bd0 (HEAD -> test) DUMMY2
b27671e (tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS 02
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbb newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy release|
```

<

28 manavarathan@IN-LI749 MINGW04 /C/mnt/e/CLASSROOM/GTC/workspace00 (test)

Type here to search

```
18 MINGW64:/c/mine/CLASSROOM/Git/workspace00
$ git rebase master
First, rewinding head to replay your work on top of it...
Applying: DUMMY2
19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ ls
1.java 4.java      DOINEEDTHIS2 DUMMY2      FILEINMASTER
2.java DOINEEDTHIS1 DUMMY1       FILEINIOS   test/
20
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ git log --oneline
022bb8f (HEAD -> test) DUMMY2
22 cfeceaf (master) dummy1
b27671e (tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS 02
23 77dae99 DOINEEDTHIS 01
24 24ba075 adding after conflict resolution
25 6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
26 8e0f9ed adding newfile from MASTER branch
90042bc adding newfile in IOS branch
a57fdbb newfile 4.java
addff40 third checkin
27
```

Untitled - Notepad second Untitled - Notepad with s k8s class notes - Notepad Untitled - Notepad Jenkins Master and Slave on ... Untitled - Notep... Untitled - Notep...

Type here to search 8:09 PM 5/8/2020

```
MINGW64:/c/mine/CLASSROOM/Git/workspace00
$ git rebase master
First, rewinding head to replay your work on top of it...
Applying: DUMMY2
manavarathan@IN-L1749 MINGW64
$ ls
1.java 4.java      DOINEED
2.java DOINEEDTHIS1 DUMMY1
manavarathan@IN-L1749 MINGW64
$ git log --oneline
022bb8f (HEAD -> test) DUMMY2
cfeceaf (master) dummy1
b27671e (tag: R1.2, origin)
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
MASTER
=====
cfeceaf (HEAD -> master) dummy1
b27671e DOINEEDTHIS 02
77dae99 DOINEEDTHIS 01
24ba075 adding after conflict resolution
6af8bd9 adding IOS line
d32ad3a adding MASTER line
712d773 Merge branch 'IOS'
8e0f9ed adding newfile from
90042bc adding newfile in IOS
a57fdbb newfile 4.java
adddf40 third checkin
c4534c1 second checkin with set of changes
c4bcf92 first change for dummy
manavarathan@IN-L1749 MINGW64
$
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace00
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (test)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 1 commit.
 (use "git push" to publish your local commits)
20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 DUMMY1 FILEINIOS FILEINMASTER test/
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git rebase test
First, rewinding head to replay your work on top of it...
Fast-forwarded master to test.
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace00 (master)
$ git log --oneline
25
26
27
28
```

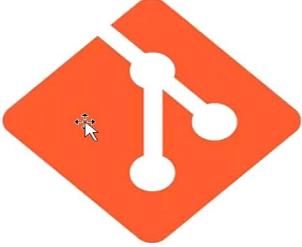
Slide 24 of 28 13 Notes Comments 8:12 PM 5/8/2020 1

File Home Insert Design Transitions Animations Slide Show Review View PDFescape Desktop Creator Tell me what you want to do... M Anavarathan Share

18
19
20
21
22
23
24
25 Push/Pull Other Central Repos
26
27
28 Click to add notes

Slide 25 of 28

**Push/Pull
to [REDACTED]
Other Central
Repos**



Type here to search

8:14 PM 5/8/2020

Push/Pull changes other than Central Repo

List the remote reference

```
$ git remote -v
```

Add a new Remote reference

```
$ git remote add <ReferenceName> <NewRemoteURL>
```

Checkout the source repo branch to a non working branch

```
$ git checkout <branch>
```

Pull a Change:

```
$ git pull <ReferenceName> <Branch>
```

Push a Change:

```
$ git push <ReferenceName> <Branch>
```

```
18 MINGW64:/c/mine/CLASSROOM/Git
--separate-git-dir <gitdir>
           separate git dir from working tree
19 -c, --config <key=value>
           set config inside the new repository
20 -4, --ipv4
           use IPv4 addresses only
-6, --ipv6
           use IPv6 addresses only

21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ git clone https://github.com/scmlearningcentre/may2020.git workspace01
Cloning into 'workspace01'...
remote: Enumerating objects: 40, done.
remote: Counting objects: 100% (40/40), done.
remote: Compressing objects: 100% (18/18), done.
remote: Total 40 (delta 16), reused 37 (delta 13), pack-reused 0
Unpacking objects: 100% (40/40), done.

22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ git clone https://github.com/scmlearningcentre/may2020.git workspace02
Cloning into 'workspace02'...
remote: Enumerating objects: 40, done.
remote: Counting objects: 100% (40/40), done.
remote: Compressing objects: 100% (18/18), done.
remote: Total 40 (delta 16), reused 37 (delta 13), pack-reused 0
Unpacking objects: 100% (40/40), done.

23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace01
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git
$ cd workspace01
19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git log --oneline -2
b27671e (HEAD -> master, tag: R1.3, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) D
OINEEDTHIS 02
77dae99 DOINEEDTHIS 01
20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ touch DUMMYFILE
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git add .
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git commit -m "DUMMY FILE FOR DEMO"
[master 3eb46e2] DUMMY FILE FOR DEMO
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 DUMMYFILE
23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 DUMMYFILE FILEINIOS FILEINMASTER test/
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ 
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace01
$ touch DUMMYFILE

18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git add .

19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git commit -m "DUMMY FILE FOR DEMO"
[master 3eb46e2] DUMMY FILE FOR DEMO
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 DUMMYFILE

20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 DUMMYFILE FILEINIOS FILEINMASTER test/
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git log --oneline -2
3eb46e2 (HEAD -> master) DUMMY FILE FOR DEMO
b27671e (tag: R1.3, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS 02

22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git log --oneline -3
3eb46e2 (HEAD -> master) DUMMY FILE FOR DEMO
b27671e (tag: R1.3, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS 02
77dae99 DOINEEDTHIS 01

23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace02
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
18 $ git log --oneline -3
3eb46e2 (HEAD -> master) DUMMY FILE FOR DEMO
19 b27671e (tag: R1.3, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) DOINEEDTHIS 02
77dae99 DOINEEDTHIS 01
20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ cd ../workspace02
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git log --oneline -1
22 b27671e (HEAD -> master, tag: R1.3, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) D
OINEEDTHIS 02
23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote -v
origin https://github.com/scmlearningcentre/may2020.git (fetch)
origin https://github.com/scmlearningcentre/may2020.git (push)
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ 
25
26
27
28
```

Slide 26 of 28 1/3 8:20 PM 5/8/2020 1

Push/Pull changes other than Central Repo

List the remote reference

```
$ git remote -v
```

Add a new Remote reference

```
$ git remote add <ReferenceName> <NewRemoteURL>
```

Checkout the source repo branch to a non working branch

```
$ git checkout <branch>
```

Pull a Change:

```
$ git pull <ReferenceName> <Branch>
```

Push a Change:

```
$ git push <ReferenceName> <Branch>
```

Click to add notes

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace02
$ cd ../workspace02

18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git log --oneline -1
19 b27671e (HEAD -> master, tag: R1.3, tag: R1.2, origin/master, origin/TESTRELEASE, origin/HEAD) D
OINEEDTHIS 02

20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote -v
21 origin https://github.com/scmlearningcentre/may2020.git (fetch)
origin https://github.com/scmlearningcentre/may2020.git (push)

22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote add demo /c/mine/CLASSROOM/Git/workspace01
23
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote -v
25 demo C:/mine/CLASSROOM/Git/workspace01 (fetch)
demo C:/mine/CLASSROOM/Git/workspace01 (push)
26 origin https://github.com/scmlearningcentre/may2020.git (fetch)
origin https://github.com/scmlearningcentre/may2020.git (push)

26 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ ls
27 1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 FILEINIOS FILEINMASTER test/
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$
```

```
File manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
18 $ git remote -v
demo    C:/mine/CLASSROOM/Git/workspace01 (fetch)
demo    C:/mine/CLASSROOM/Git/workspace01 (push)
origin  https://github.com/scmlearningcentre/may2020.git (fetch)
origin  https://github.com/scmlearningcentre/may2020.git (push)
19
20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ ls
1.java 2.java 4.java DOINEEDTHIS1 DOINEEDTHIS2 FILEINIOS FILEINMASTER test/
21
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git pull demo master
remote: Counting objects: 2, done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 2 (delta 1), reused 0 (delta 0)
Unpacking objects: 100% (2/2), done.
From C:/mine/CLASSROOM/Git/workspace01
 * branch            master      -> FETCH_HEAD
 * [new branch]      master      -> demo/master
Updating b27671e..3eb46e2
Fast-forward
DUMMYFILE | 0
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 DUMMYFILE
23
24
25
26
27
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$
```

Fetch vs Pull

Remove a Remote reference

```
$ git remote rm <ReferenceName> <NewRemoteURL>
```

Add a new Remote reference

```
$ git remote add <ReferenceName> <NewRemoteURL>
```

fetch a Change:

```
$ git fetch <ReferenceName> <Branch>
```

Pull a Change:

```
$ git pull <ReferenceName> <Branch>
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace02
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote -v
demo    C:/mine/CLASSROOM/Git/workspace01 (fetch)
demo    C:/mine/CLASSROOM/Git/workspace01 (push)
origin  https://github.com/scmlearningcentre/may2020.git (fetch)
origin  https://github.com/scmlearningcentre/may2020.git (push)
20
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote rm origin
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote -v
demo    C:/mine/CLASSROOM/Git/workspace01 (fetch)
demo    C:/mine/CLASSROOM/Git/workspace01 (push)
23
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote rm demo
25 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git remote -v
26 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ 
```

```
18 MINGW64:/c/mine/CLASSROOM/Git/workspace02
18 demo    C:/mine/CLASSROOM/Git/workspace01 (push)
18 origin  https://github.com/scmlearningcentre/may2020.git (fetch)
18 origin  https://github.com/scmlearningcentre/may2020.git (push)

19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
19 $ git remote rm origin

20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
20 $ git remote -v
21 demo    C:/mine/CLASSROOM/Git/workspace01 (fetch)
21 demo    C:/mine/CLASSROOM/Git/workspace01 (push)

22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
22 $ git remote rm demo

23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
23 $ git remote -v

24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
24 $ git remote add origin C:/mine/CLASSROOM/Git/workspace01

25 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
25 $ git remote -v
26 origin  C:/mine/CLASSROOM/Git/workspace01 (fetch)
26 origin  C:/mine/CLASSROOM/Git/workspace01 (push)

27 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
27 $
```

```
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
19 $ git remote add origin C:/mine/CLASSROOM/Git/workspace01
20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
21 $ git remote -v
22 origin C:/mine/CLASSROOM/Git/workspace01 (fetch)
23 origin C:/mine/CLASSROOM/Git/workspace01 (push)
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
25 $ touch DUMMYFILEAGAIN
26 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
27 $ ls
28 1.java 4.java      DOINEEDTHIS2  DUMMYFILEAGAIN  FILEINMASTER
   2.java DOINEEDTHIS1  DUMMYFILE    FILEINIOS      test/
29 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
30 $ git add .
31 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
32 $ git commit -m "DUMMYFILE AGAIN"
33 [master b8fd9cc] DUMMYFILE AGAIN
34 1 file changed, 0 insertions(+), 0 deletions(-)
35 create mode 100644 DUMMYFILEAGAIN
36 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
37 $ git log --oneline -3
```

```
18 MINGW64:/c/mine/CLASSROOM/Git/workspace02
origin  C:/mine/CLASSROOM/Git/workspace01 (fetch)
origin  C:/mine/CLASSROOM/Git/workspace01 (push)
19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ touch DUMMYFILEAGAIN
20 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ ls
1.java  4.java      DOINEEDTHIS2  DUMMYFILEAGAIN  FILEINMASTER
2.java  DOINEEDTHIS1  DUMMYFILE    FILEINIOS      test/
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git add .
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git commit -m "DUMMYFILE AGAIN"
[master b8fd9cc] DUMMYFILE AGAIN
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 DUMMYFILEAGAIN
23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git log --oneline -3
b8fd9cc (HEAD -> master) DUMMYFILE AGAIN
3eb46e2 DUMMY FILE FOR DEMO
b27671e (tag: R1.3, tag: R1.2) DOINEEDTHIS 02
24 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git push
25
26
27
28
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace02
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
19 $ git push origin master
20 Counting objects: 2, done.
21 Delta compression using up to 8 threads.
22 Compressing objects: 100% (2/2), done.
23 Writing objects: 100% (2/2), 250 bytes | 125.00 KiB/s, done.
24 Total 2 (delta 1), reused 0 (delta 0)
25 remote: error: refusing to update checked out branch: refs/heads/master
26 remote: error: By default, updating the current branch in a non-bare repository
27 remote: is denied, because it will make the index and work tree inconsistent
remote: with what you pushed, and will require 'git reset --hard' to match
remote: the work tree to HEAD.
remote: T
remote: You can set the 'receive.denyCurrentBranch' configuration variable
remote: to 'ignore' or 'warn' in the remote repository to allow pushing into
remote: its current branch; however, this is not recommended unless you
remote: arranged to update its work tree to match what you pushed in some
remote: other way.
remote:
remote: To squelch this message and still keep the default behaviour, set
remote: 'receive.denyCurrentBranch' configuration variable to 'refuse'.
To C:/mine/CLASSROOM/Git/workspace01
 ! [remote rejected] master -> master (branch is currently checked out)
error: failed to push some refs to 'C:/mine/CLASSROOM/Git/workspace01'
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
29 $
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace02
remote: 'receive.denyCurrentBranch' configuration variable to 'refuse'.
To C:/mine/CLASSROOM/Git/workspace01
 ! [remote rejected] master -> master (branch is currently checked out)
error: failed to push some refs to 'C:/mine/CLASSROOM/Git/workspace01'
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ cd ../workspace01
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git checkout IOS
Switched to a new branch 'IOS'
Branch 'IOS' set up to track remote branch 'IOS' from 'origin'.
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (IOS)
$ cd ../workspace02
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git push origin master
Counting objects: 2, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 250 bytes | 250.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
To C:/mine/CLASSROOM/Git/workspace01
 3eb46e2..b8fd9cc master -> master
manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace01
$ cd ../workspace02
18 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ git push origin master
19 Counting objects: 2, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
20 Writing objects: 100% (2/2), 250 bytes | 250.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
To C:/mine/CLASSROOM/Git/workspace01
  3eb46e2..b8fd9cc master -> master
21
22 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ cd ../workspace01
23
24 ★ manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (ios)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 2 commits.
  (use "git push" to publish your local commits)
25
26 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ ls
1.java 4.java DOINEEDTHIS2 DUMMYFILEAGAIN FILEINMASTER
2.java DOINEEDTHIS1 DUMMYFILE FILEINIOS test/
27
28 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$
```

File Home Insert Design Transitions Animations Slide Show Review View PDFescape Desktop Creator Tell me what you want to do... M Anavarathan Share

Pulling and Pushing

Good practice:

1. Add and Commit your changes to your local repo
2. Pull from remote repo to get most recent changes (fix conflicts if necessary, add and commit them to your local repo)
3. Push your changes to the remote repo

To fetch the most recent updates from the remote repo:

```
$ git pull origin master
```

To push your changes from your local repo to the remote repo:

```
$ git push origin master
```

Notes: `origin` = an alias for the URL you cloned from
`master` = the remote branch you are pulling from/pushing to,
(the local branch you are pulling to/pushing from is your current branch)

```
$ git push -u --all
```

To push all the local branches to the remote

```
$ git push -u origin central_branch
```

To push all the changes to a specific branch in the central repository

```
$ git remote -v
origin https://github.com/rea2000/santalist.git (fetch)
```

Slide 15 of 28

Type here to search

8:29 PM 5/8/2020

```
17 MINGW64:/c/mine/CLASSROOM/Git/workspace01
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 250 bytes | 250.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
To C:/mine/CLASSROOM/Git/workspace01
  3eb46e2..b8fd9cc master -> master
18
19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace02 (master)
$ cd ../workspace01
20
21 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (ios)
$ git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 2 commits.
 (use "git push" to publish your local commits)
22
23 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ ls
1.java 4.java DOINEEDTHIS2 DUMMYFILEAGAIN FILEINMASTER
2.java DOINEEDTHIS1 DUMMYFILE FILEINIOS test/
24
25 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git remote -v
origin https://github.com/scmlearningcentre/may2020.git (fetch)
origin https://github.com/scmlearningcentre/may2020.git (push)
26
27 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$
```

```
Untitled - Notepad
File Edit Format View Help
Share
LATEST - COMMITID
CURRENT - BRANCH
git bisect <good> <bad> <cmd|script>
c7 <- Fail
c6 <- Fail
c5 <- Fail
c4 <- Fail
c3 <- Pass
c2 <- Pass
c1 <- Pass
QA_date_epic
Rversion
R1.2
R1.3
R2.4
R2.2
Central repo (Bare) : Store & Share
Local repo (Non bare) : Modify, Store & Share
Notes Comments
Slide 5 of 28 8:31 PM 5/8/2020 75%
```

Aside: So what is github?

- GitHub.com is a site for online storage of Git repositories.
- Many open source projects use it, such as the Linux kernel.
- You can get free space for open source projects or you can pay for private projects.

Question: Do I have to use github to use Git?

Answer: No!

- you can use Git completely locally for your own purposes, or
- you or someone else could set up a server to share files, or
- you could share a repo with users on the same file system, such as we did for homework 9 (as long everyone has the needed file permissions).

Repositories

- bare repository
 - contains the version control information and no working files
 - by convention the name of a bare repository should end with the .git extension
`$ git init --bare`
- Non-bare repository
 - These are regular user repository which has the working files & .git dir
 - Creating a new local repository
`$ git clone <remote> <local>`

Add, Status and Diff

- To add changes to the staging area :

```
$ git add <file>
```

- To view the **status** of your files in the working directory and staging area:

```
$ git status      or
```

```
$ git status -s
```

(-s shows a short one line version similar to svn)

- To see what is modified but unstaged:

```
$ git diff
```

Git commands

command	description
<code>git clone <i>url</i> [<i>dir</i>]</code>	copy a git repository so you can add to it
<code>git add <i>files</i></code>	adds file contents to the staging area
<code>git commit</code>	records a snapshot of the staging area
<code>git status</code>	view the status of your files in the working directory and staging area
<code>git diff</code>	shows diff of what is staged and what is modified but <u>unstaged</u>
<code>git help [<i>command</i>]</code>	get help info about a particular command
<code>git pull</code>	fetch from a remote repo and try to merge into the current branch
<code>git push</code>	push your new branches and data to a remote repository
others: <code>init</code> , <code>reset</code> , <code>branch</code> , <code>checkout</code> , <code>merge</code> , <code>log</code> , <code>tag</code>	

Add, Status and Diff

- To add changes to the staging area :

```
$ git add <file>
```

- To view the **status** of your files in the working directory and staging area:

```
$ git status      or
```

```
$ git status -s
```

(-s shows a short one line version similar to svn)

- To see what is modified but unstaged:

```
$ git diff
```

Pulling and Pushing

Good practice:

1. Add and **Commit** your changes to your local repo
2. Pull from remote repo to get most recent changes (fix conflicts if necessary, add and commit them to your local repo)
3. Push your changes to the remote repo

To fetch the most recent updates from the remote repo:

```
$ git pull origin master
```

To push your changes from your local repo to the remote repo:

```
$ git push origin master
```

Notes: **origin** = an alias for the URL you cloned from

master = the remote branch you are pulling from/pushing to,
(the local branch you are pulling to/pushing from is your current branch)

```
$ git push -u --all
```

To push all the local branches to the remote

```
$ git push -u origin central_branch
```

To push all the changes to a specific branch in the central repository

Ignoring files & Viewing logs

Ignoring certain files and directories

- .gitignore
- Git never ignores files which are already tracked, so changes in the .gitignore file only affect new files
- Commit the .gitignore to the Git repository

File version

```
$ git log  
$ git log --oneline --grep "workspace"  
$ git log branchname  
$ git log -1
```

```
File MINGW64:/c/mine/CLASSROOM/Git/workspace01
9 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ echo "*.class" > .gitignore
10 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git status
on branch master
Your branch is ahead of 'origin/master' by 2 commits.
  (use "git push" to publish your local commits)
11 Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .gitignore
12 nothing added to commit but untracked files present (use "git add" to track)
13 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git add .
14 warning: LF will be replaced by CRLF in .gitignore.
The file will have its original line endings in your working directory.
15 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git status
16
17
18
19
```

```
MINGW64:/c/mine/CLASSROOM/Git/workspace01
$ touch unittest.log

9 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 3 commits.
  (use "git push" to publish your local commits)

11 Untracked files:
  (use "git add <file>..." to include in what will be committed)
    1.log
    unittest.log

14 nothing added to commit but untracked files present (use "git add" to track)

15 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git clean -n
Would remove 1.log
Would remove unittest.log

16 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$ git clean -f
Removing 1.log
Removing unittest.log

19 manavarathan@IN-L1749 MINGW64 /c/mine/CLASSROOM/Git/workspace01 (master)
$
```

SVN vs. Git



- SVN:

- central repository approach – the main repository is the only “true” source, only the main repository has the complete file history
- Users check out local copies of the current version

- Git:

- **Distributed repository approach** – every checkout of the repository is a full fledged repository, complete with history
- Greater redundancy and speed
- Branching and merging repositories is more heavily used as a result

Continuous Development

- Release Planning
- Agile-Scrum-Sprint Planning
- Setup Distributed Version Control System
- Branching Strategy
- Define developer workflow policies
- Dockerize the components/product



Tools: Git – Github – Gitlab – JIRA – Dockerfile - JBOSS

ADAM
9739110917

Release Planning:

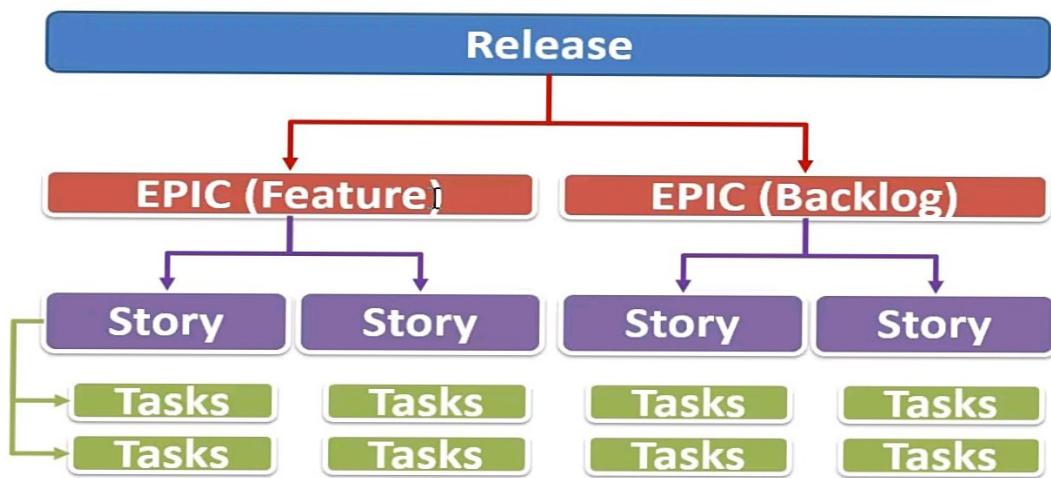
- list all the requirements (new functionality, enhancement, bug fix)
 - bug tracking tool: **JIRA**, Bugzilla
 - User story / Unique ID
 - priority (Highest, High, Medium, Low)
 - timeline / owner
 - tasks (unique ID)



Agile:

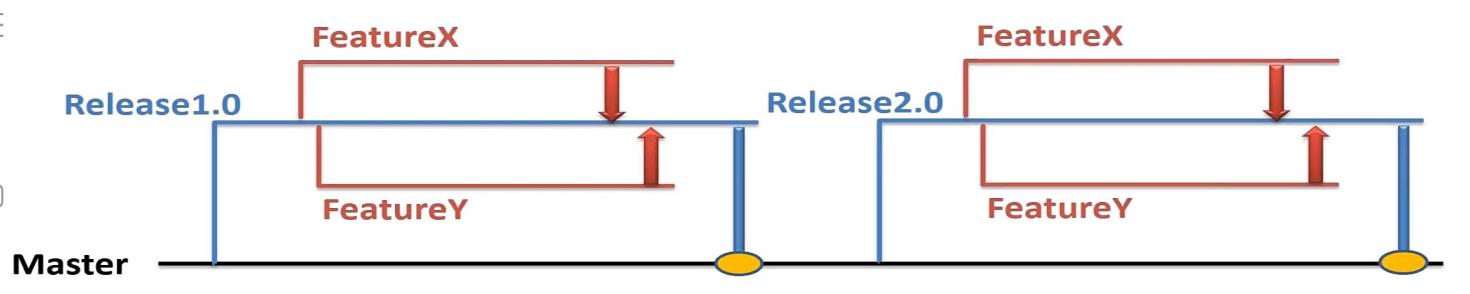
- Split into module/components
 - **Sprints**
 - module by module development - coding & testing
 - **Scrum:** Dev/QA team
 - **Kanban:** Operations team





Branching Strategy (Feature branching model)

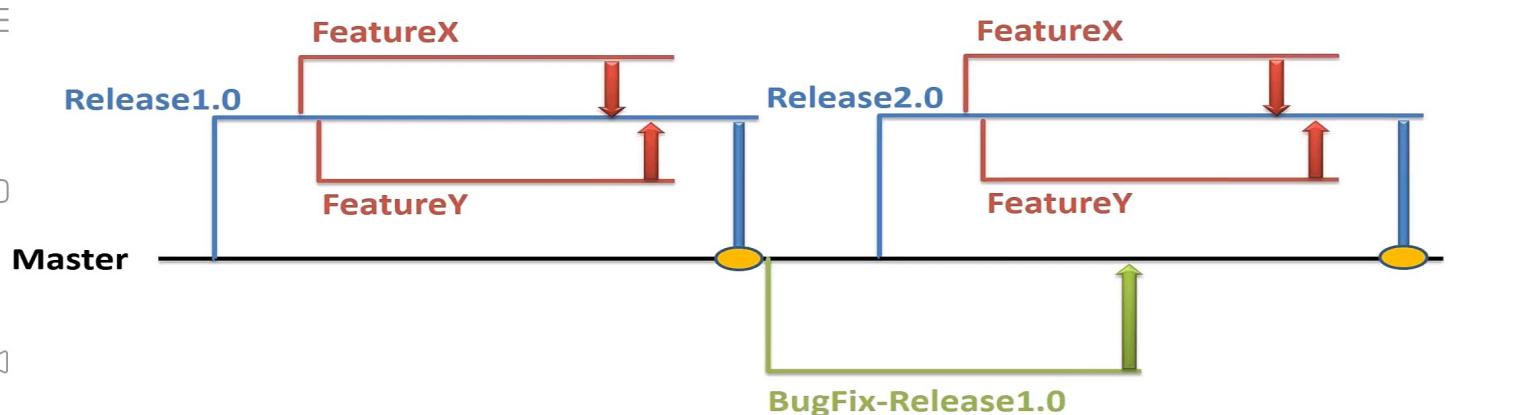
Wezva Technologies



ADAM
9739110917

Branching Strategy (Feature branching model)

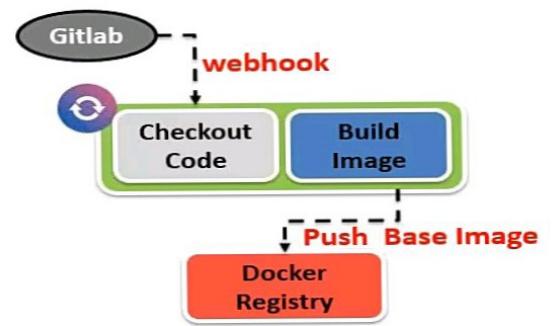
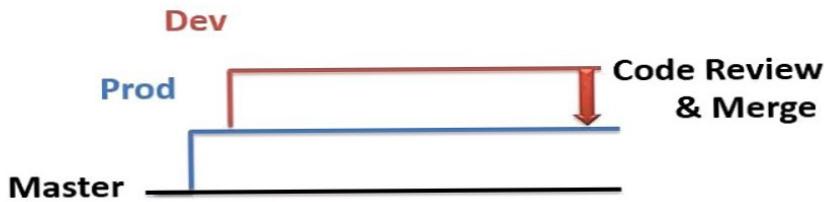
Wezva Technologies



ADAM
9739110917

Branching Strategy (Ops)

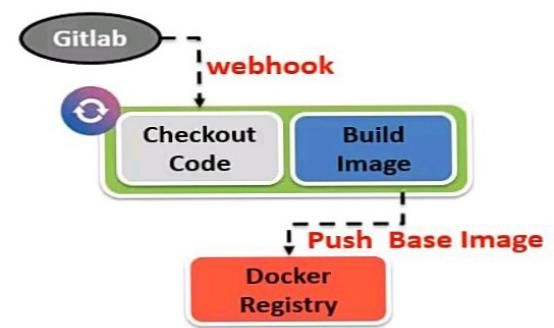
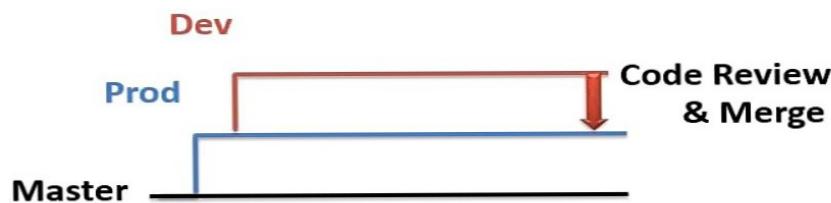
Wezva Technologies



ADAM
9739110917

Branching Strategy (Ops)

Wezva Technologies



ADAM
9739110917



Wezva Technologies

GitLab

- Create account in Gitlab.com (cloud)
- Add an Public SSH key (~/.ssh/id_rsa.pub)
- Create a Project (central repository)
- Import a Project
- Add Members
- Give Project level permissions
- Create Branches
- Protect Branches
- Backup & Restore (https://docs.gitlab.com/ee/raketasks/backup_restore.html)
\$ sudo gitlab-rake gitlab:backup:create

ADAM
9739110917

Projects - Dashboard - GitLab

gitlab.com

GitLab Projects Groups More

Search or jump to... Filter by name... Last updated

New project

Projects

Your projects 9 Starred projects 0 Explore projects

All Personal

	Project Name	Maintainer	Stars	Forks	Issues	Commits	Updated
K	Adam Wezva / kubernetes-EFK	Maintainer	0	0	0	0	Updated 2 hours ago
D	Adam Wezva / deployments	Maintainer	This repo contains files for doing a product deployment	0	0	0	Updated 2 hours ago
C	shashi k / CalculatorProduct	Developer	To develop a sample Calculator project	0	0	0	Updated 1 week ago
W	Adam Wezva / WEZVACICD	Maintainer	0	0	0	0	Updated 1 week ago
A	bharath bandaru / April2020	Maintainer	0	0	0	0	Updated 3 weeks ago

Waiting for gitlab.com...

DEVOPS PROCESS - PowerPoint

M Anavarathan

Your OpenSSH Public Key

Found a public key in: `~/ssh/id_rsa.pub`

```
ssh-rsa AAAAB3NzaC1yc2EAAQADAOQABAAAQcJGiqxBU712e1umCoyhO
Tq6my7h59hei/2CP6f06QnaIn80qKTTjs0AjYav+ckMvF7CmK6eoJZd+oib
ODNCAMKhLoe0i+3g0jyPhyvuHP5Jlu+N90plS80KCX16t2rnGggH8zzUatA
dSo83BoIufuzlItCzEURBYL04WISzPXD1Urc/yf6CazN+RIRsiXjy/cJrl8UpG
FLKW35R3AB+BbSiBjb9J0adpf5ly6deqkquXypZhb6XvGBC8QoeCenb7
Ao3ilu17/8CKSOOXktI3ZWdl5gjPvzBc7cqMF2Rcl6oPo62GC/a3Bk2pk0L3h
mdtJml3j manavarthan@IN-L1749
```

Copy To Clipboard

Close

issions

Create Branches

Protect Branches

Backup & Restore (https://docs.gitlab.com/ee/raketasks/backup_restore.html)
\$ sudo gitlab-rake gitlab:backup:create

Wezva Technologies

.com (cloud)

`~/ssh/id_rsa.pub`

repository

ADAM
9739110917

Click to add notes

Projects - Dashboard - GitLab

gitlab.com

GitLab Projects Groups More Search or jump to... Filter by name...

Projects

Your projects 9 Starred projects 0 Explore projects

All Personal

	Project Name	Maintainer	Stars	Issues	Commits	Pull Requests	Last Updated	
K	Adam Wezva / kubernetes-EFK	Maintainer	★ 0	Y 0	I 1 0	D 0	Updated 2 hours ago	
D	Adam Wezva / deployments	Maintainer	This repo contains files for doing a product deployment	★ 0	Y 0	I 1 0	D 0	Updated 1 week ago
C	shashi k / CalculatorProduct	Developer	To develop a sample Calculator project	★ 0	Y 0	I 1 0	D 0	Updated 1 week ago
W	Adam Wezva / WEZVACICD	Maintainer	★ 0	Y 0	I 1 0	D 0	Updated 1 week ago	
A	bharath bandaru / April2020	Maintainer	★ 0	Y 0	I 1 0	D 0	Updated 3 weeks ago	

https://gitlab.com/profile

Adam Wezva
@scmlearningcentre

Set status

Profile

Start a Gold trial

Settings

Sign out

User Settings - GitLab

gitlab.com/profile

GitLab

Profile

Account

Billing

Applications

Chat

Access Tokens

Emails

Password

Notifications

SSH Keys

GPG Keys

Collapsible sidebar

User Settings > Edit Profile

Public Avatar

You can change your avatar here or remove the current avatar to revert to gravatar.com



Upload new avatar

Choose file... No file chosen

The maximum file size allowed is 200KB.

Remove avatar

Current status

This emoji and message will appear on your profile and throughout the interface.

Your status

What's your status?

Main settings

This information will appear on your profile

Full name

Adam Wezva

User ID

4532848

Email

Screenshot of the GitLab User Settings - SSH Keys page.

The URL in the browser is `gitlab.com/profile/keys`.

The sidebar on the left shows the following navigation items:

- Profile
- Account
- Billing
- Applications
- Chat
- Access Tokens
- Emails
- Password
- Notifications
- SSH Keys** (selected)

The main content area displays the "SSH Keys" section. It includes a brief description: "SSH keys allow you to establish a secure connection between your computer and GitLab." Below this is a "Add an SSH key" section with instructions: "To add an SSH key you need to generate one or use an existing key." A "Key" input field is provided with the placeholder text: "Typically starts with 'ssh-ed25519 ...' or 'ssh-rsa ...'".

Below the input field are fields for "Title" (e.g. My MacBook key) and "Expires at" (mm/dd/yyyy). A note says: "Give your individual key a title". At the bottom is a "Add key" button.

SSH Keys · User Settings · GitLab

gitlab.com/profile/keys

GitLab Projects Groups More Search or jump to...

User Settings

Profile Account Billing Applications Chat Access Tokens Emails Password Notifications SSH Keys

SSH keys allow you to establish a secure connection between your computer and GitLab.

To add an SSH key you need to generate one or use an existing key.

Key

Paste your public SSH key, which is usually contained in the file '~/.ssh/id_ed25519.pub' or '~/.ssh/id_rsa.pub' and begins with 'ssh-ed25519' or 'ssh-rsa'. Don't use your private SSH key.

```
ssh-rsa  
AAAAB3NzaC1yc2EAAAQABAAQCiGiqxBU712e1umCoyhOTq6my7h59hei/2CP6f06QnaJnJ  
80qK/Ttis0AjyaV+ckMvF7CTmK6e0Zd+oibQDNcAMKhLoe0i+3g0/yPfyuuJHP5Ju+N90pLS80KCX  
116t2mGggH8zzUatAdSo83BoifuuZiltCzEURBYLz04WISzPXDIUrc/fy6FCcizN+RliRsilxCij/cJri8UpGFL  
KWj35Rj3AB+BbsiBjb9ij0adpf5Jy6deqKauXxvpZHxb6XvGBC8QOeCenb7Ao3iLlu7/8CKSOQXkTl3Z  
Wdl5gjPvz8c7cqMF2RcL6oPo62GC/a3Bk2pk0L3hmdtJml3j manavarathan@IN-L1749
```

Title manavarathan@IN-L1749 **Expires at** mm/dd/yyyy

Give your individual key a title

Add key

Your SSH keys (2)

« Collapse sidebar

New Project - GitLab

gitlab.com/projects/new

GitLab Projects Groups More Search or jump to... New project

Your projects 9 Starred projects 0 Explore projects Filter by name... Last updated

All Personal

	Project Name	Maintainer	Stars	Forks	Issues	UpdatedAt
K	Adam Wezva / kubernetes-EFK	Maintainer	0	0	0	Updated 2 hours ago
D	Adam Wezva / deployments	Maintainer	0	0	0	Updated 2 hours ago
C	shashi k / CalculatorProduct	Developer	0	0	0	Updated 1 week ago
W	Adam Wezva / WEZVACID	Maintainer	0	0	0	Updated 1 week ago
A	bharath bandaru / April2020	Maintainer	0	0	0	Updated 3 weeks ago

Processing request...

New Project · GitLab

gitlab.com/projects/new

GitLab Projects Groups More

other things.

All features are enabled for blank projects, from templates, or when importing, but you can disable them afterward in the project settings.

To only use CI/CD features for an external repository, choose **CI/CD for external repo**.

Information about additional Pages templates and how to install them can be found in our Pages getting started guide.

Tip: You can also create a project from the command line. Show command

May2020

Project URL: https://gitlab.com/ scmlearningcentre

Project slug: may2020

Want to house several dependent projects under the same namespace? Create a group.

Project description (optional)

Description format

Visibility Level ?

 Private
Project access must be granted explicitly to each user. If this project is part of a group, access will be granted to members of the group.

 Public
The project can be accessed without any authentication.

Initialize repository with a README
Allows you to immediately clone this project's repository. Skip this if you plan to push up an existing repository.

Create project

Cancel

Projects · Dashboard · GitLab

gitlab.com

GitLab Projects Groups More

Search or jump to... Filter by name... Last updated

New project

Projects

Your projects 10 Starred projects 0 Explore projects

All Personal

	Project Name	Maintainer	Stars	Forks	Issues	Commits	Last updated
M	Adam Wezva / May2020	Maintainer	0	0	0	0	Updated 2 minutes ago
K	Adam Wezva / kubernetes-EFK	Maintainer	0	0	0	0	Updated 2 hours ago
D	Adam Wezva / deployments	Maintainer	0	0	0	0	Updated 2 hours ago
C	shashi k / CalculatorProduct	Developer	0	0	0	0	Updated 1 week ago
W	Adam Wezva / WEZVACICD	Maintainer	0	0	0	0	Updated 1 week ago

```
Adam Wezva / May2020 - GitLab v
Untitled - Notepad
File Edit Format View Help
https://gitlab.com/scmlearningcentre/may2020.git
Project:
- Maintainer
- Developer
- Visitor
=====
Central repo: https://github.com/scmlearningcentre/may2020.git

$ git config --global user.name "Adam M"
$ git config --global user.email "scmlearningcentre@gmail.com"
$ git config --global push.default "simple"

User/Developer Workflow
=====
$ git clone <source-centralrepo> <dest-localrepo>
$ git status
$ git add <file> or git add .
$ git commit -m "first change for dummy release"
$ git log -num --oneline
$ git show <commitId>
$ git push
$ git pull
<< Collapse sidebar
```



Adam Wezva / May2020 · GitLab

gitlab.com/scmlearningcentre/may2020

GitLab Projects Groups More

Search or jump to...

Releases

Repository Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets Settings

Adam Wezva > May2020 > Details

May2020 Project ID: 18693110

1 Commit 1 Branch 0 Tags 133 KB Files 133 KB Storage

General

Members may2020 / History Find file Web IDE Clone

Integrations Members

Webhooks

Repository

CI / CD

Operations

Pages

Audit Events

Last commit: README.md Initial commit Last update: 3 minutes ago

6586dd6d

Add LICENSE Add CHANGELOG Add CONTRIBUTING Enable Auto DevOps Add Kubernetes cluster

Collaboration sidebar https://gitlab.com/scmlearningcentre/may2020/-/project-members

Members · Adam Wezva / May2020 X +

gitlab.com/scmlearningcentre/may2020/-/project_members

GitLab Projects Groups More

Search or jump to...

M May2020

Project overview Repository Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets

Adam Wezva > May2020 > Members

Project members

You can invite a new member to **May2020** or invite another group.

Invite member Invite group

GitLab member or Email address: Rathan M

Choose a role permission: Reporter (selected)

Guest
Guest
Reporter
Developer
Maintainer
Expiration date

Invite Import

Existing members and groups

Members - Adam Wezva / May2020 X +

gitlab.com/scmlearningcentre/may2020/-/project_members

GitLab Projects Groups More

Search or jump to...

M May2020

Project overview Repository Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets

Adam Wezva > May2020 > Members

Users were successfully added.

ers member to **May2020** or invite another group.

Invite member

Email address

Invite group

Guest

Read more about role permissions

Access expiration date

Expiration date

Waiting for gitlab.com...

Scanned by Scanner Go

Adam Wezva / May2020 · GitLab

gitlab.com/scmlearningcentre/may2020/-/tree/master

GitLab Projects Groups More

Search or jump to...

M May2020

Project overview Repository Files Commits Branches Tags Contributors Graph Compare Issues Merge Requests

Collapsible sidebar Waiting for gitlab.com...

Adam Wezva > May2020 > Repository

master / may2020 / + History Find file Web IDE Clone

Initial commit Adam Wezva authored 13 minutes ago 6586dd6d

Name	Last commit	Last update
README.md	Initial commit	13 minutes ago

README.md

May2020

New Branch - Adam Wezva / May

gitlab.com/scmlearningcentre/may2020/-/branches/new

GitLab Projects Groups More Search or jump to...

M May2020 Adam Wezva > May2020 > New Branch

Project overview Repository

Files Commits Branches Tags Contributors Graph Compare

Issues 0 Merge Requests 0

New Branch

Branch name: Release1.0

Create from: master

Existing branch name, tag, or commit SHA

Create branch Cancel

Waiting for gitlab.com...

Scanned by Scanner Go

The screenshot shows the GitLab interface for creating a new branch. The URL in the browser is `gitlab.com/scmlearningcentre/may2020/-/branches/new#`. The sidebar on the left is for the project 'May2020' and includes sections for Project overview, Repository (Files, Commits, Branches, Tags, Contributors, Graph, Compare), Issues (0), Merge Requests (0), and a 'Collapse sidebar' button. The main content area is titled 'New Branch'. It has two input fields: 'Branch name' containing 'featureX' and 'Create from' containing 'Release1.0'. Below these is a placeholder 'Existing branch name, tag, or commit SHA'. At the bottom are 'Create branch' and 'Cancel' buttons.

A screenshot of a GitLab repository page. The URL in the address bar is `gitlab.com/scmlearningcentre/may2020/-/tree/featureX`. The sidebar on the left is titled "May2020" and contains links for Project overview, Repository (selected), Files, Commits, Branches, Tags, Contributors, Graph, Compare, Issues (0), Merge Requests (0), and a "Collapse sidebar" button. The main content area shows a message "You pushed to **featureX** right now". Below it is a "Switch branch/tag" dialog box with a search bar "Search branches and tags" and a list of branches: master, featureX (which is checked), and Release1.0. To the right of the dialog are buttons for History, Find file, Web IDE, and Clone, along with a commit hash "6586dd6d" and a "Last update" timestamp "15 minutes ago".

General - Settings · Adam Wezva

gitlab.com/scmlearningcentre/may2020/edit

GitLab Projects Groups More

Contributors Graph Compare Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets Settings

Adam Wezva > May2020 > Repository

You pushed to **featureX** 3 minutes ago

Create merge request

master may2020 / +

History Find file Web IDE Clone

General Members Integrations Webhooks Repository CI / CD Operations Pages Audit Events

commit Wezva authored 18 minutes ago 6586dd6d

Last commit Initial commit Last update 18 minutes ago

20

Waiting for gitlab.com...

The screenshot shows a GitLab repository page for 'May2020'. The left sidebar includes links for General, Settings, and various project management tools like Issues, Merge Requests, and CI / CD. The main area displays a commit history with one entry from 'Wezva' 18 minutes ago. A modal window is open over the commit list, showing options like General, Members, Integrations, etc. The URL in the browser is 'gitlab.com/scmlearningcentre/may2020/edit'.

Repository - Adam Wezva / May2020

gitlab.com/scmlearningcentre/may2020/-/settings/repository

GitLab Projects Groups More

Wiki Snippets Settings General Members Integrations Webhooks Repository CI / CD Operations Pages Audit Events

Adam Wezva > May2020 > Repository Settings

Default Branch

Select the branch you want to set as the default for this project. All merge requests and commits will automatically be made against this branch unless you specify a different one.

Mirroring repositories

Set up your project to automatically push and/or pull changes to/from another repository. Branches, tags, and commits will be synced automatically. [Read more](#)

Protected Branches

Keep stable branches secure and force developers to use merge requests.

Protected Tags

Limit access to creating and updating tags.

Deploy Tokens

Deploy tokens allow access to your repository and registry images.

Expand Expand Expand Expand

Collapse sidebar

https://gitlab.com/scmlearningcentre/may2020/-/settings/repository

Search or jump to...     

Adam Wezva > May2020 > Repository Settings

Default Branch Expand

Select the branch you want to set as the default for this project. All merge requests and commits will automatically be made against this branch unless you specify a different one.

Mirroring repositories Expand

Set up your project to automatically push and/or pull changes to/from another repository. Branches, tags, and commits will be synced automatically. [Read more](#)

Protected Branches Expand

Keep stable branches secure and force developers to use merge requests.

Protected Tags Expand

Limit access to creating and updating tags.

11:27



GitLab Projects Groups More Search or jump to... Projects Groups More Help

Read more about protected branches and project permissions.

Protect a branch

Branch: Select branch or create wildcard
Wildcards such as `*-stable` or `production/*` are supported

Allowed to merge: Select

Allowed to push: Select

Protect

Branch	Allowed to merge	Allowed to push
master <small>default</small>	Maintainers	Maintainers

Unprotect

Protected Tags

Type here to search

8:58 PM 5/10/2020

Expand

11:27



GitLab Projects Groups More Search or jump to... Projects Groups More Help

Read more about protected branches and project permissions.

Protect a branch

Branch: **Release1.0** Wildcards such as `*-stable` or `production/*` are supported

Allowed to merge: Maintainers

Allowed to push: No one

Protect

Branch	Allowed to merge	Allowed to push
master default	Maintainers	Maintainers

Unprotect

Protected Tags

Type here to search

Expand

8:58 PM 5/10/2020

Merge Requests · Adam Wezva

https://gitlab.com/scmlearningcentre/may2020/-/merge_requests

Adam Wezva > May2020 > Repository

The file has been successfully created.

You pushed to **featureX** just now

Create merge request

featureX may2020 / 1.java

Add new file Rathan M authored just now 4e0399d7

1.java 19 Bytes

This is a test file

Edit Web IDE Replace Delete

Files

- Commits
- Branches
- Tags
- Contributors
- Graph
- Compare

Issues 0

Merge Requests 0

CI / CD

Operations

Collage sidebar Waiting for assets.gitlab-static.net...

Type here to search

9:00 PM 5/10/2020

New Merge Request · Adam W · [New](#)

[https://gitlab.com/scmlearningcentre/may2020/-/merge_requests/new?merge_request\[source_branch\]=featureX&merge_request\[target_branch\]=master](https://gitlab.com/scmlearningcentre/may2020/-/merge_requests/new?merge_request[source_branch]=featureX&merge_request[target_branch]=master)

GitLab Projects Groups More Search or jump to... [Help](#) [Logout](#)

M May2020 Adam Wezva > May2020 > Merge Requests > New

New Merge Request

From `featureX` into `master` Change branches

Title Add new file

Start the title with `WIP:` to prevent a `Work In Progress` merge request from being merged before it's ready.
Add `description templates` to help your contributors communicate effectively!

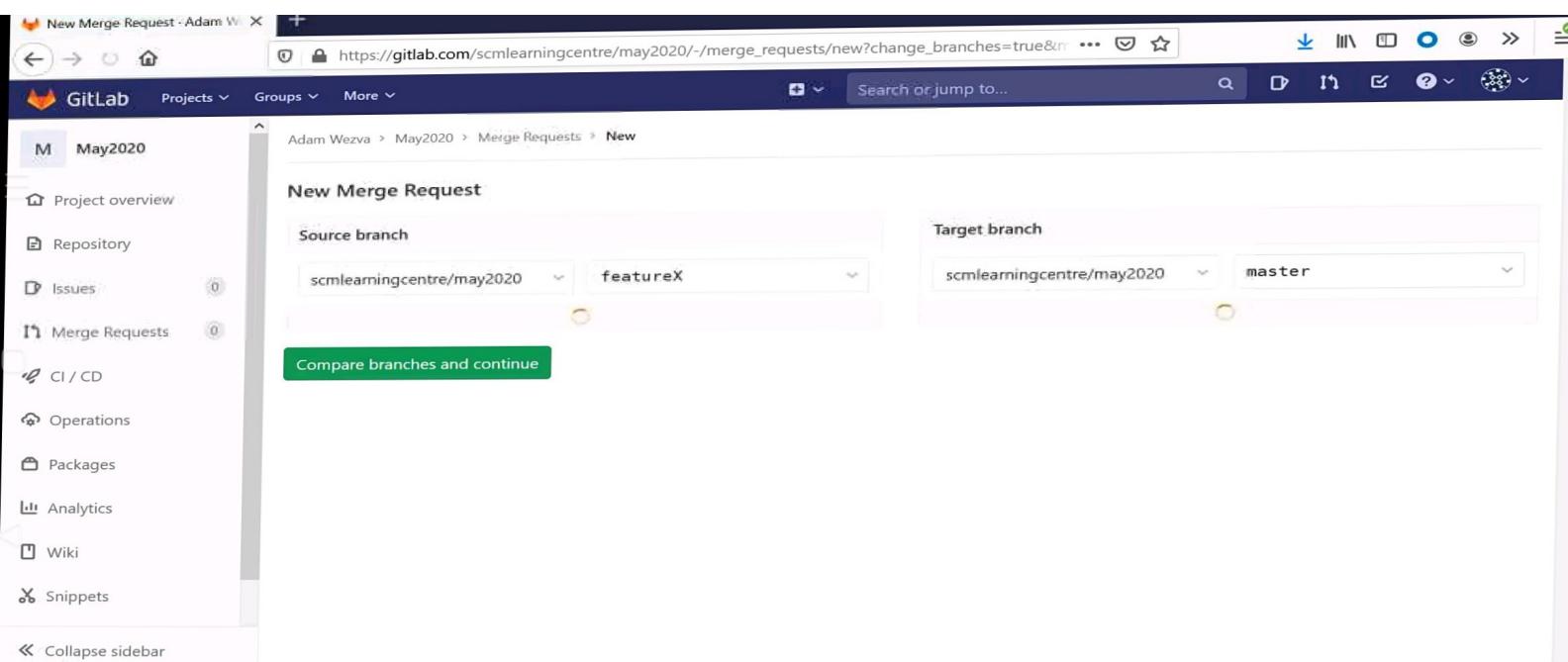
Description Write Preview

Describe the goal of the changes and what reviewers should be aware of.

Markdown and quick actions are supported [Attach a file](#)

Project overview Repository Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets

Collapse sidebar



New Merge Request Adam ... https://gitlab.com/scmlearningcentre/may2020/-/merge_requests/new?merge_request[source_branch]=featureX&target_branch=master

GitLab Projects Groups More Adam Wezva > May2020 > Merge Requests > New

New Merge Request

From `featureX` into `master` [Change branches](#)

Title Demo Merge

Start the title with **WIP:** to prevent a **Work In Progress** merge request from being merged before it's ready.
Add **description templates** to help your contributors communicate effectively!

Description

Write Preview

Describe the goal of the changes and what reviewers should be aware of.

Markdown and quick actions are supported

Attach a file

Project overview Repository Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets

Collapse sidebar

New Merge Request · Audit

https://gitlab.com/scmlearningcentre/may2020/-/merge_requests/new?change_branches=true&in...

GitLab Projects Groups More

May2020 Adam Wezva > May2020 > Merge Requests > New

Project overview Repository Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets

Source branch scmlearningcentre/may2020 featureX 4e0399d7

Add new file Rathan M authored 1 minute ago

Target branch scmlearningcentre/may2020 Release1.0 6586dd6d

Initial commit Adam Wezva authored 23 minutes ago

Compare branches and continue

« Collapse sidebar

Demo Merge (!1) - Merge Request X https://gitlab.com/scmlearningcentre/may2020/-/merge_requests/1

GitLab Projects Groups More Adam Wezva > May2020 > Merge Requests > !1

Open Opened just now by Rathan M Edit Close merge request

Demo Merge

Overview 0 Commits 1 Changes 1

Request to merge featureX into Release1.0

Merge Ready to be merged automatically. Ask someone with write access to this repository to merge this request

Oldest first Show all activity

Write Preview Write a comment or drag your files here...

To Do Add a To Do

0 Assignees None - assign yourself

Milestone None

Time tracking No estimate or time spent

Labels None

Lock merge request Unlocked

1 participant

Notifications

This screenshot shows a GitLab Merge Request page for a project named 'May2020'. The merge request is titled 'Demo Merge' and is ready to be merged automatically. The 'Merge' button is highlighted with a green checkmark. The page includes sections for Overview, Commits, and Changes. On the left, a sidebar provides navigation through the project's features such as CI/CD, Analytics, and Snippets. The top right corner displays standard browser controls.

Merge requests · Adam Wezva /

gitlab.com/scmlearningcentre/may2020/-/merge_requests

GitLab Projects Groups More

Search or jump to...

May2020 Adam Wezva > May2020 > Merge Requests

Open 1 Merged 0 Closed 0 All 1

Edit merge requests New merge request

Recent search Rathan M @selva4ever

Demo Merge !1 · opened just now by Rathan M → Release1.0

May 10, 2020 9:03pm GMT+0530

Created date 0 updated just now

Email a new merge request to this project

Project overview Repository Issues Merge Requests CI / CD Operations Packages Analytics Wiki Snippets

Collaborate sidebar Waiting for gitlab.com

Scanned by Scanner Go

GitLab Projects Groups More Adam Wezva > May2020 > Merge Requests > !1

May2020 Project overview Repository Issues Merge Requests 1 / CD Operations Packages Analytics Wiki Snippets Alliance sidebar

Open Opened 1 minute ago by  Nathan M

Demo Merge

Overview 0 Commits 1 Changes 1

Request to merge **featurex** into **Release1.0**

Merge Delete source branch

> 1 commit and 1 merge commit will be added to **Release1.0**. Modify merge commit

You can merge this merge request manually using the command line

Oldest first Show all activity

 Write Preview

To Do Add a To Do

0 Assignees None - assign yourself

Milestone None

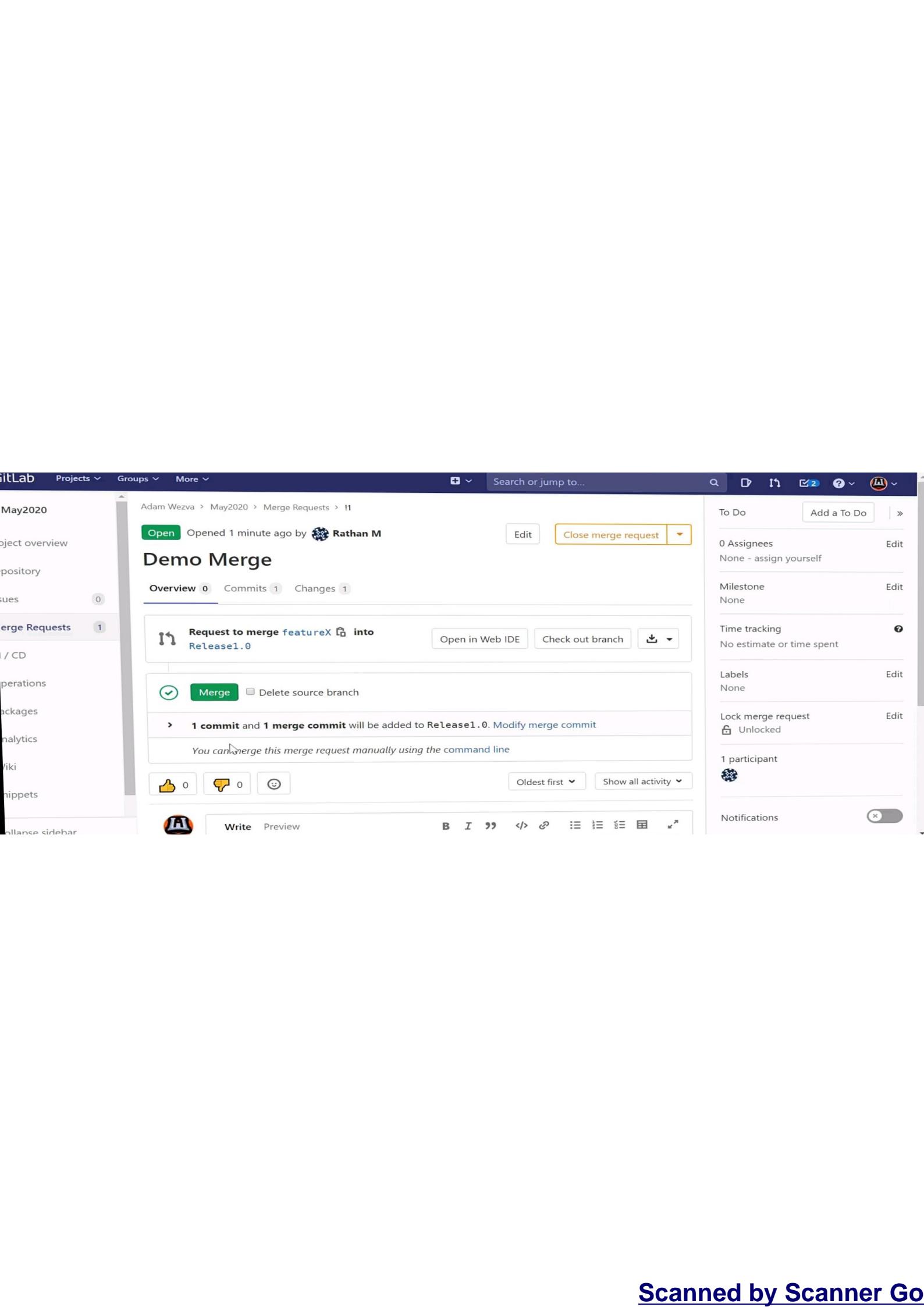
Time tracking No estimate or time spent

Labels None

Lock merge request Unlocked

1 participant 

Notifications



GitLab Projects Groups More Adam Wezva > May2020 > Merge Requests > !1

May2020 Opened 1 minute ago by  Rathan M Edit Close merge request

Demo Merge

Overview 0 Commits 1 Changes 1

Request to merge **featurex** into **Release1.0**

Merge Delete source branch

> 1 commit and 1 merge commit will be added to **Release1.0**. Modify merge commit

You can merge this merge request manually using the command line

1 0 0 Oldest first Show all activity

To Do Add a To Do

0 Assignees None - assign yourself

Milestone None

Time tracking No estimate or time spent

Labels None

Lock merge request Unlocked

1 participant 

Notifications

