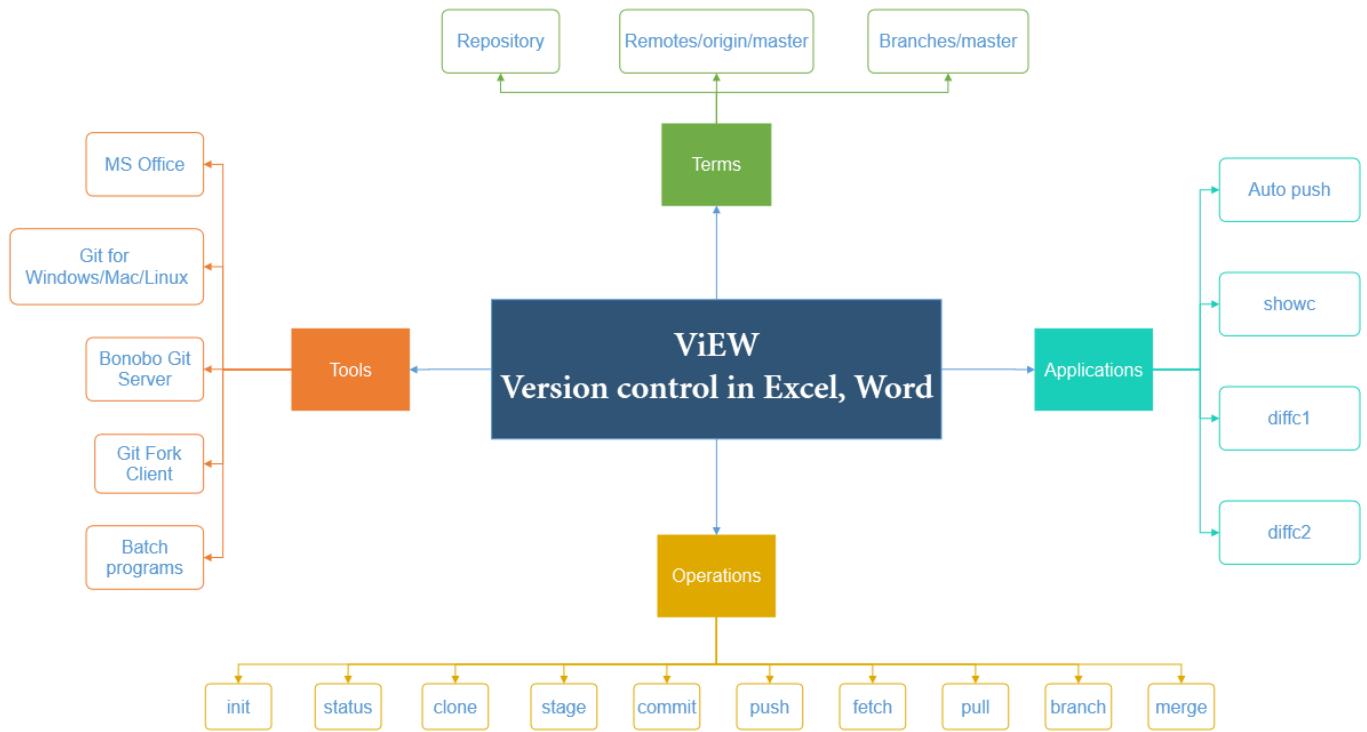


# ViEW (Version control system in Excel, Word)

## Version: 0.1

A software tool to use Git in Office | Excel, Word



## Tools Installation

### MS Excel 2013 Professional Plus

- MS Excel with `spreadsheet-compare` inside it, would help to compare 2 versions of a file side-by-side.  
The `spreadsheetcompare.exe` file is normally available (depends on MS Office version) in this directory - "`C:\Program Files (x86)\Microsoft Office\Office15\DCF`".

File Home Share View Manage Application Tools DCF

Search DCF

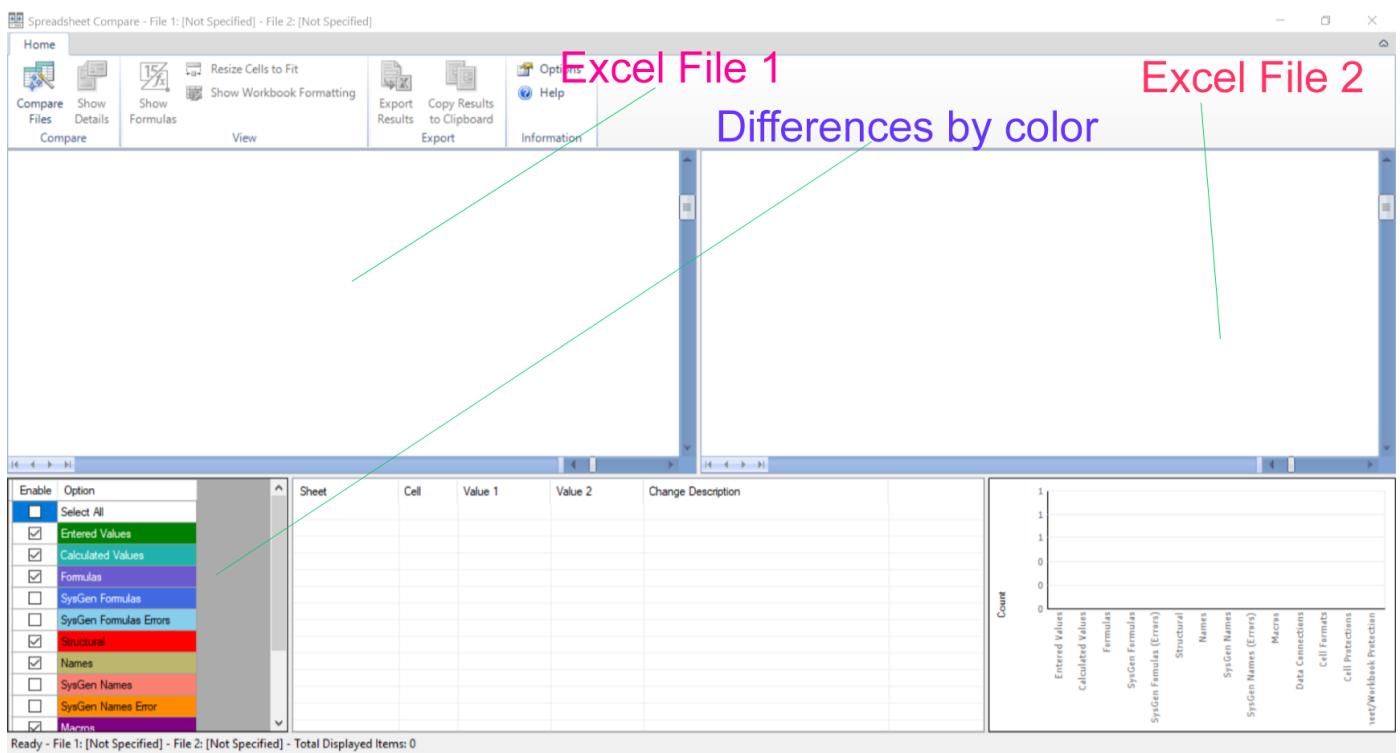
Directory

Name	Date modified	Type	Size
Infragistics2.WinForms.v11.1.dll	01-Oct-12 8:30 PM	Application extensi...	3,807 KB
Inquire.dll	01-Oct-12 8:39 PM	Application extensi...	14 KB
Microsoft.Office.Interop.Access.dao.dll	01-Oct-12 8:30 PM	Application extensi...	79 KB
Microsoft.Office.Interop.Access.dll	16-May-17 12:36 PM	Application extensi...	1,832 KB
Microsoft.Office.Interop.Excel.dll	16-May-17 12:36 PM	Application extensi...	1,600 KB
Microsoft.Vbe.Interop.dll	16-May-17 11:29 AM	Application extensi...	72 KB
MSVCR100.DLL	16-May-17 3:05 AM	Application extensi...	756 KB
NativeShim.dll	16-May-17 12:36 PM	Application extensi...	49 KB
NativeShim.Resources.dll	01-Oct-12 8:39 PM	Application extensi...	15 KB
Northwoods.Go.dll	01-Oct-12 8:30 PM	Application extensi...	619 KB
office.dll	16-May-17 12:36 PM	Application extensi...	456 KB
<b>SPREADSHEETCOMPARE</b>	<b>16-May-17 12:36 PM</b>	<b>Application</b>	<b>689 KB</b>
SPREADSHEETGEAR.DLL	16-May-17 12:36 PM	Application extensi...	0 KB
SpreadsheetIQ.Diagram.dll	01-Oct-12 8:39 PM	Application extensi...	61 KB
SpreadsheetIQ.ExcelAddIn.dll	16-May-17 12:36 PM	Application extensi...	2,136 KB
SpreadsheetIQ.ExcelServices.dll	01-Oct-12 8:39 PM	Application extensi...	267 KB
stdole.dll	01-Oct-12 8:30 PM	Application extensi...	23 KB
SyncFusion.Compression.Base.dll	01-Oct-12 8:39 PM	Application extensi...	67 KB
SyncFusion.Core.dll	01-Oct-12 8:39 PM	Application extensi...	123 KB
SyncFusion.Grid.Base.dll	01-Oct-12 8:39 PM	Application extensi...	23 KB
SyncFusion.Grid.Grouping.Base.dll	01-Oct-12 8:39 PM	Application extensi...	23 KB
SyncFusion.Grid.Grouping.Windows.dll	01-Oct-12 8:39 PM	Application extensi...	831 KB

76 items 1 item selected 688 KB

Spreadsheetcompare.exe

- It looks like this:



- Comparing 2 versions of a file in spreadsheetcompare:

The screenshot shows the Spreadsheet Compare application interface. The ribbon has tabs for Home, Compare, View, Export, Copy Results to Clipboard, and Information. The 'Compare' tab is selected. The main area shows two Excel sheets side-by-side. The left sheet has one row with 'abhijit'. The right sheet has multiple rows: 1 (abhijit), 2, 3, 4, 5, 6, 7, 8, 9 (Blockchain), and 10 (EOS). A green arrow labeled '1' points to the 'abhijit' entry in the first sheet. A green arrow labeled '2' points to the second sheet. A purple arrow labeled '3' points to the 'Blockchain' and 'EOS' entries in the second sheet. The left sidebar has sections for Enable, Option, and a list of items: Select All, Entered Values (highlighted in green), Calculated Values, Formulas, SysGen Formulas, and SysGen Formulas Errors. The right sidebar shows a count of items: Entered Values (2), Calculated Values, SysGen Formulas (highlighted in green), Structural, Names, SysGen Names, SysGen Names (Errors), Macros, Data Connections, Cell Formats, Cell Protections, and Worksheet Protection.

In the Image above,

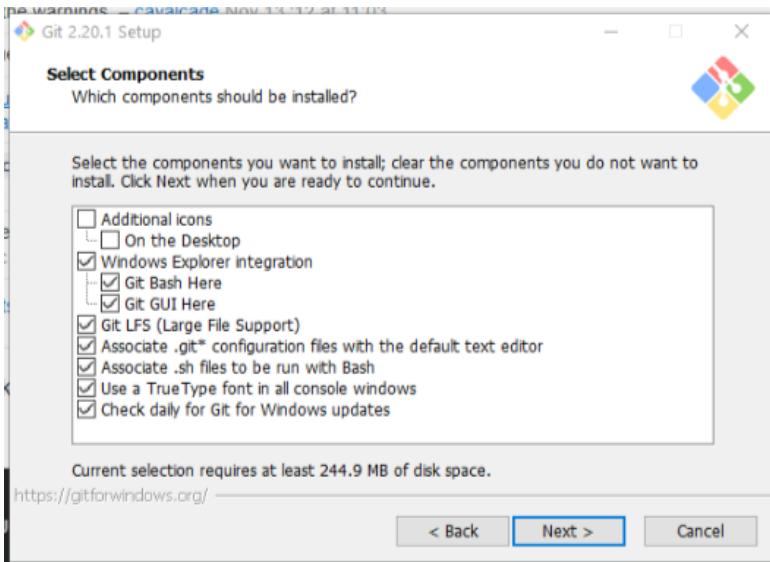
- 1 - A version (Old) of an Excel file (**Book1.xlsx**) on 22 Mar 2019 11:18:26
- 2 - Another (New) version of an Excel file (**Book1.xlsx**) on 24 Mar 2019 13:51:52
- 3 - Shown the differences by color. Entered values in green color,

## Git for Windows

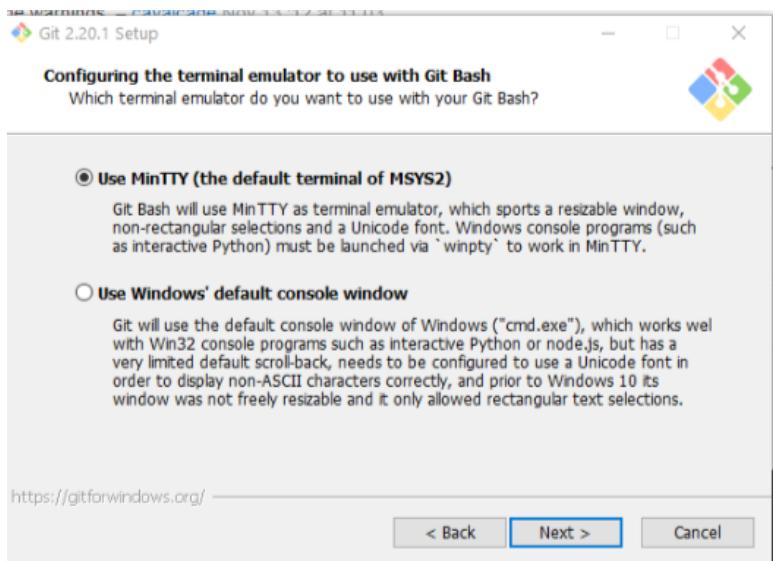
- Follow the Instructions as per the [setup file](#)

In order to work properly i.e. provide **Unix** features in **Windows**, tick/untick as per the images provided below.

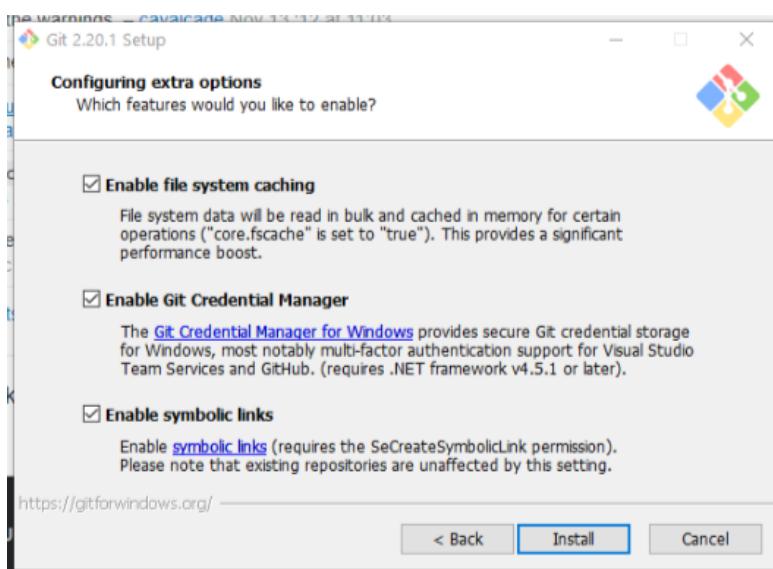
- **Components Installation**



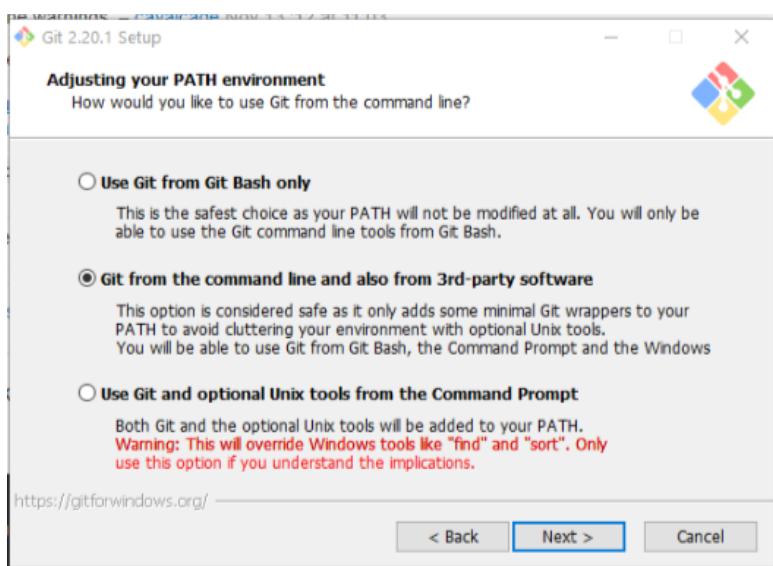
- **Config Terminal Emulator**



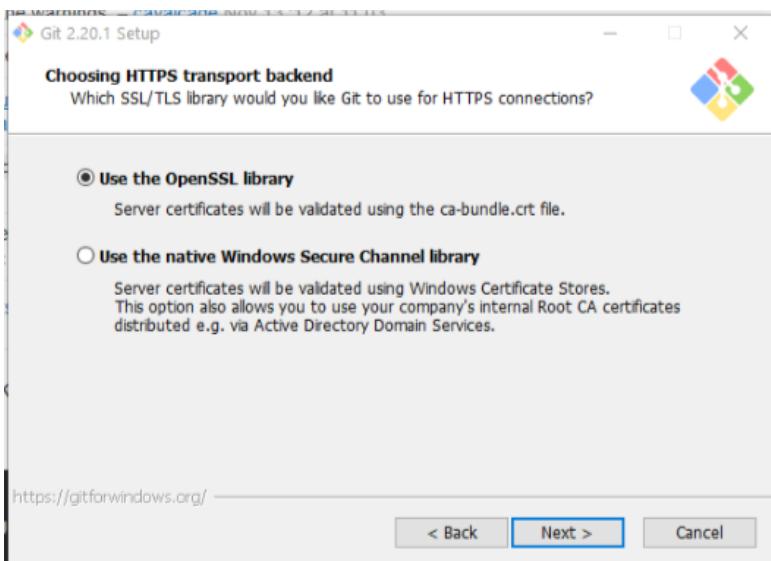
- Extra options



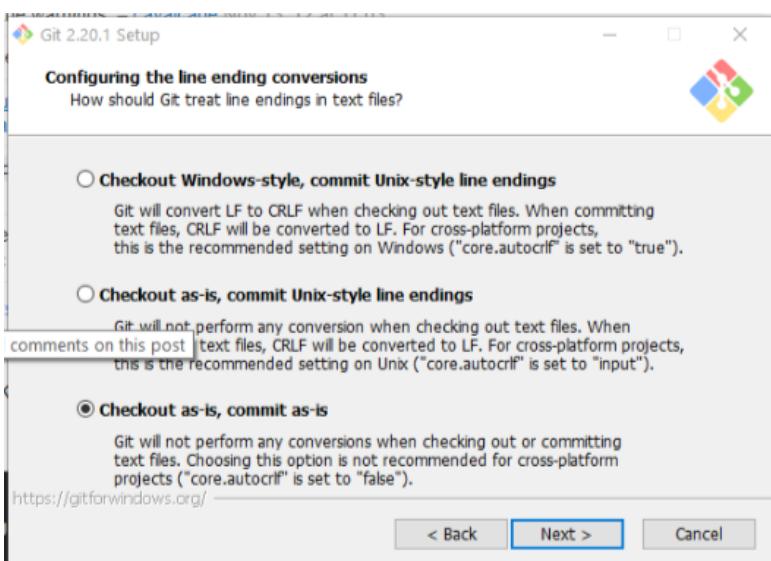
- Use Git from Command line



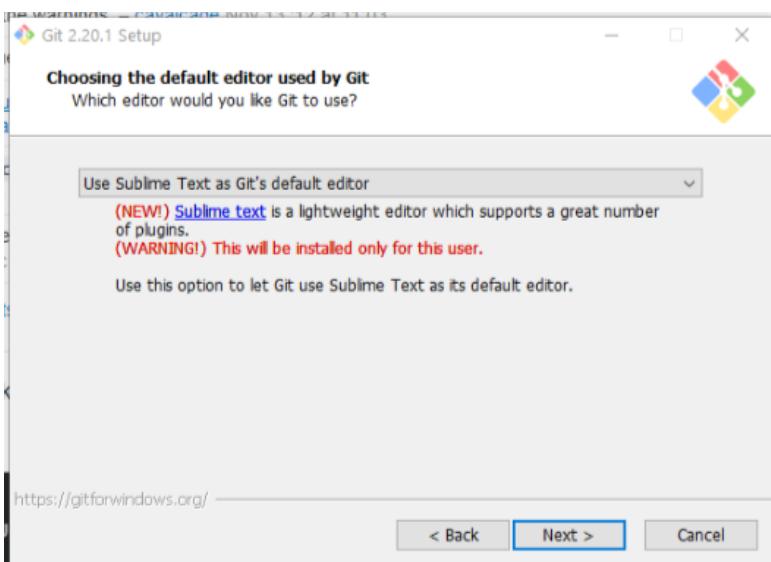
- Choosing HTTP Transport Backend



- Config line style



- Use Sublime Text 3 as editor



## Batch programs

- Mainly there are 3 batch files, which are to be used for Excel, Word file types:
  - showc : Show a Word/Excel file on a specific datetime.
  - diffc1 : Compare 2 versions (past & latest) of a Word/Excel file on 2 different datetime.

- diffc2 : Compare 2 versions (on 2 different dates) of a Word/Excel file on 2 different datetime.

## Set Environment PATH variable

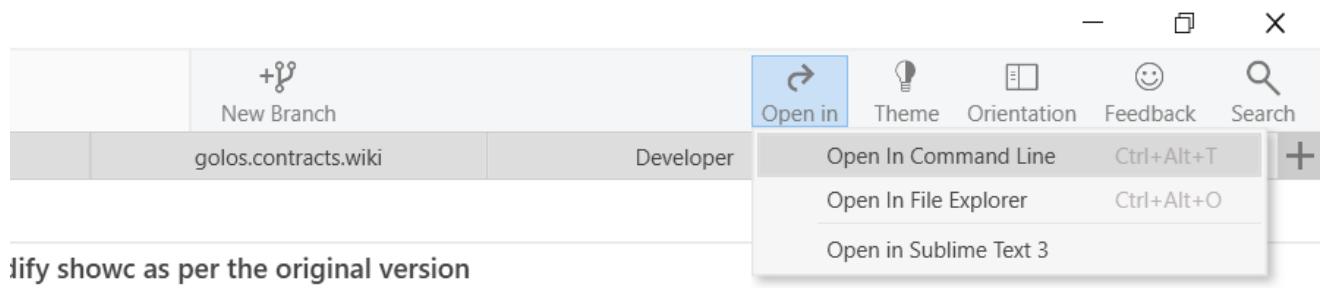
- Add location of **Developer folder** (e.g. "F:\Developer") to Environment PATH variable in Windows PC/Desktop.

**Folder structure:**

```
.
|--- .gitignore
|--- diffc1.bat
|--- diffc2.bat
|--- gitsetup.bat
|--- openinst3.bat
|--- showc.bat
```

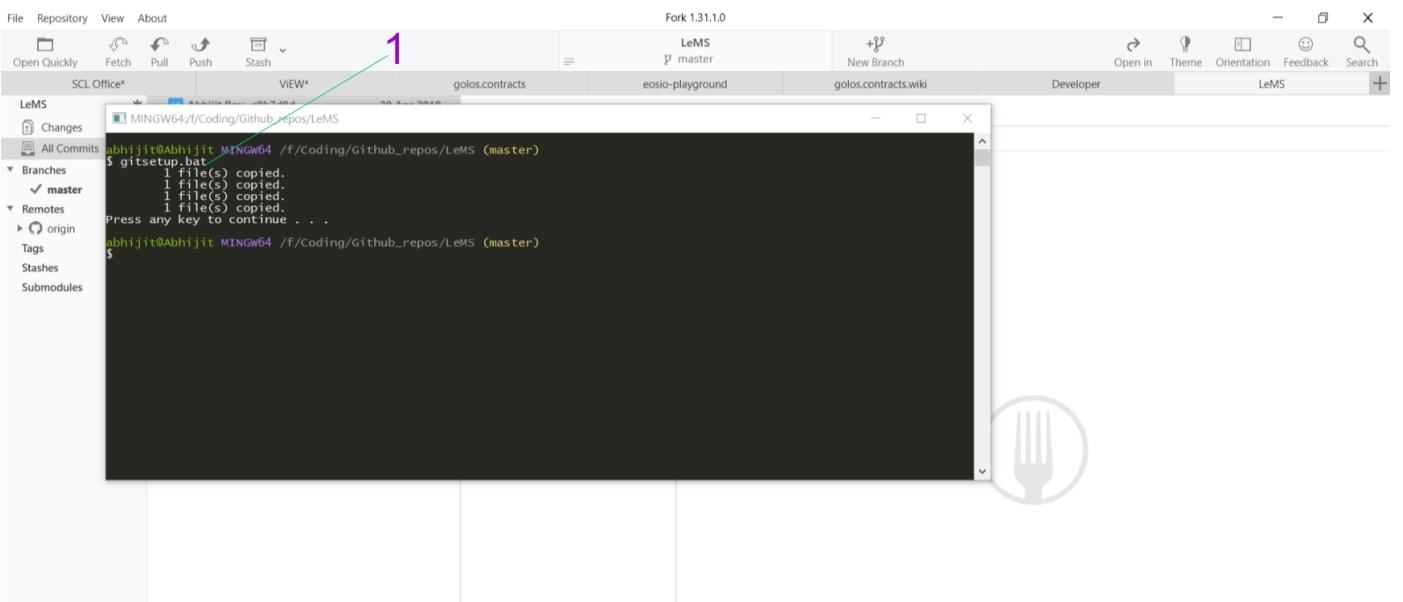
Here, execute in Command prompt.

### Step 1: Open in Command Line



Right click on file and select **Open in Command Line** iffy showc as per the original version

### Step 2: Execute gitsetup.bat file



In the Image above, 1 - type `gitsetup.bat` and enter.

## Bonobo Git Server

### Installation

#### Prerequisites

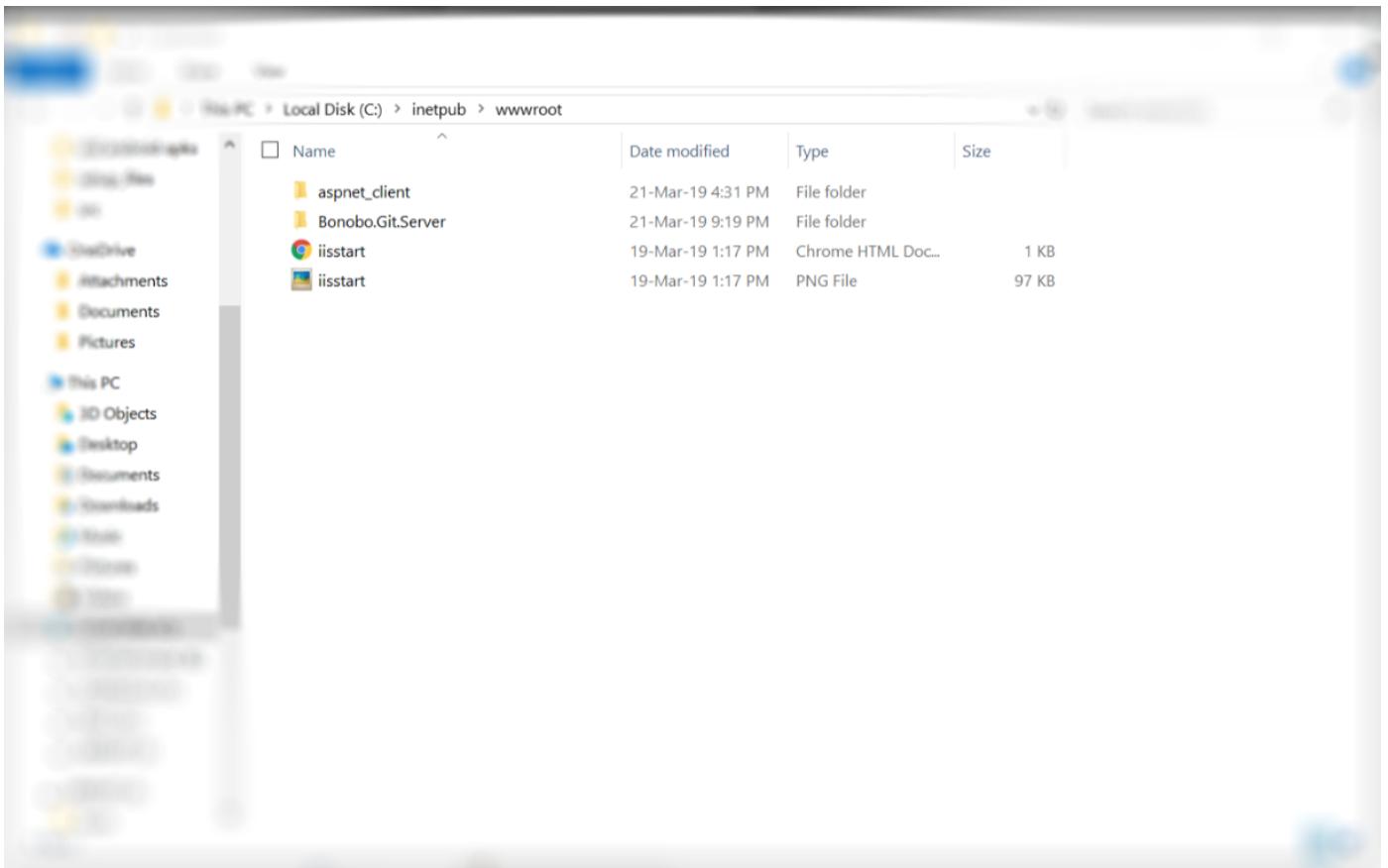
- Go to Control Panel - "Turn Windows Features On/Off"
- tick the "Internet Information Services" and Apply.
- Then, to install .NET Framework and ASP.NET support, follow this:
  - under "IIS -> World Wide Web Services -> Application Development Features"
  - Tick the followings and Apply.
    - .NET Extensibility 4.7
    - ASP.NET 4.7
    - ISAPI Extensions
    - ISAPI Filters
- Now, the prerequisites are installed.

[Bonobo Installation from Internet](#)

[Bonobo Installation from Local folder](#)

#### Follow the steps:

- Extract the Zip folder to "C:\inetpub\wwwroot" directory as shown in the image below -



- Set the permission (Modify, Write) for the App\_Data folder inside Bonobo.Git.Server.
- Open IIS Manager. Goto "Right Click" on Bonobo.Git.Server and Convert to Application.
- Click on Authentication of Bonobo.Git.Server and enable Anonymous Authentication.

Images folder

## Explore

- Admin page

Default credentials are username: *admin* password: *admin*

Sign In

Username  \*

Password  \*

Remember me?

[Forgot Password?](#)

## • Change Admin details

localhost/Bonobo.Git.Server/Account/Edit/3eb9995e-99e3-425a-b978-1409bdd61fb6

BONOBO GIT SERVER

Go to repository ▾ Repositories Users Teams Settings admin Sign Out

admin

Username	admin *
Name	admin *
Surname	
Email	
New Password	
Confirm Password	
Roles	<input checked="" type="checkbox"/> Administrator <input type="checkbox"/>
<a href="#">← Back</a> <a href="#" style="background-color: blue; color: white; padding: 5px;">Save</a>	

## • Manage Users

### Step 1:

localhost/Bonobo.Git.Server/Account/Index

BONOBO GIT SERVER

Go to repository ▾ Repositories Users Teams Settings admin Sign Out

Users

Username	Name	Surname	Email		
abhijit	abhijit	roy	abhijit@scl.gov.in	<a href="#"></a>	<a href="#"></a>
admin	admin			<a href="#"></a>	<a href="#"></a>

[Create new user](#)

1  
2  
3  
4

Bonobo Git Server (6.3.0.632) © 2015 Jakub Chodounský - Official Page - Github

In the Image above,

- [1] - Click on this to see the list of users
- [2] - Create new User
- [3] - A user created named - **Abhijit**
- [4] - Admin is also a user

### Step 2:

localhost/Bonobo.Git.Server/Account/Create

BONOBO GIT SERVER

Go to repository ▾ Repositories Users Teams Settings admin Sign Out

### Create New Account

Username	*
Name	*
Surname	*
Email	*
Password	*
Confirm Password	*

[← Back](#) [Create](#)

Bonobo Git Server (6.3.0.632) © 2015 Jakub Chodounský · Official Page · Github

In the Image above, fill all the user details (along with password) and then press [Create](#) button.

#### • List of Repositories

localhost/Bonobo.Git.Server/Repository/Index

BONOBO GIT SERVER

Go to repository ▾ Repositories Users Teams Settings admin Sign Out

### Repositories

Name	Description	Actions
demo.git (Missing)	Discovered in file system.	<a href="#"></a> <a href="#"></a>
demo1	demo1	<a href="#"></a> <a href="#"></a> <a href="#"></a>

[Search](#) [Create new repository](#) [Rescan directory](#)

Bonobo Git Server (6.3.0.632) © 2015 Jakub Chodounský · Official Page · Github

In the Image above,

- 1 - A missing repository (deleted from explorer)
- 2 - A existing repository
- 3 - Create New repository
- 4 - Repository's URL (e.g. "<http://localhost/Bonobo.Git.Server/demo1.git>")
- 5 - Edit repository details (add/delete users, repository details...)
- 6 - Delete the repository from Server side.

#### • Create New Repository

Create New Repository

Name	<input type="text"/>	*
Group	<input type="text"/>	
Description	<input type="text"/>	
Logo (36x36)	<input type="file"/> Choose File	No file chosen .png, jpg, jpeg, gif
Anonymous	<input type="checkbox"/> ⓘ	
Anonymous push	<input type="button" value="Global"/> ⓘ	
Use global linkify settings	<input checked="" type="checkbox"/>	
Link Regex	<input type="text"/>	
Link Url	<input type="text"/>	
Contributors	<input type="checkbox"/> abhijit roy ⓘ <input type="checkbox"/> admin	
Administrators	<input type="checkbox"/> abhijit roy ⓘ <input checked="" type="checkbox"/> admin	
Teams	No Records... ⓘ	

Bonobo Git Server (6.3.0.632) © 2015 Jakub Chodounský - Official Page - Github

Fill the repository details, add/delete contributors and then press  button.

#### • Team list

← → C ⓘ localhost/Bonobo.Git.Server/Team/Index

 BONOBO GIT SERVER Go to repository Repositories Users Teams Settings admin Sign Out

Teams

Name	Description

Bonobo Git Server (6.3.0.632) © 2015 Jakub Chodounský - Official Page - Github

In the Image above, there is no team created as yet.

#### • Create Team

Create New Team

Name:  \*

Description:

Members:

<input type="checkbox"/>	abhijit roy
<input type="checkbox"/>	admin

[Back](#) [Save](#)

Bonobo Git Server (6.3.0.632) © 2015 Jakub Chodounský · Official Page · Github

In the Image above, add users in your team. Give the details and then press the [Save](#) button.

## • Repository Browser

Click on a repository (say, demo1) in the **Repositories Page**. It will be shown as below:

demo1

Details Repository Browser Commits Tags Download Clone

master Home

Name	Message	Date
.gitattributes	modified .gitattributes	3/28/2019 1:24:54 PM
.gitignore	Ignore temp_files - temp_*	3/29/2019 12:17:33 PM
Book1.xlsx	modified files - Book1.xlsx - README.md	3/27/2019 9:07:33 PM
demo.txt	modified file demo.txt	3/27/2019 11:23:01 AM
diffc1.bat	edited the comments for 3 files - diffc1.bat - diffc2.bat -	4/3/2019 12:34:19 AM
diffc2.bat	edited the comments for 3 files - diffc1.bat - diffc2.bat -	4/3/2019 12:34:19 AM
README.md	modified README	3/27/2019 9:19:03 PM
showc.bat	edited the comments for 3 files - diffc1.bat - diffc2.bat -	4/3/2019 12:34:19 AM
todo	final version	4/2/2019 2:50:55 AM
Word1.docx	modified word file	3/24/2019 12:04:55 AM

VCS for Excel Windows Ink Workspace

## • Settings page

The screenshot shows the 'Settings' page of the Bonobo Git Server. The 'Repository Directory' is set to '\\wmfg\wfd file server\'. The 'Language' is set to 'en-US - English (United States)'. There are several checkboxes for repository management: 'Allow anonymous registration', 'Allow user repository creation' (unchecked), 'Allow push to create repositories' (checked), 'Allow push for anonymous repositories' (checked), and 'Show commit author avatar' (checked). Below these are fields for 'Link Regex' and 'Link Url'. At the bottom is a blue 'Save' button.

- change the default location to your choice
- Allow user repository creation
- Allow push to create repos
- Allow push for anonymous repos
- Show commit author avatar

## Fork Git Client

### Standard

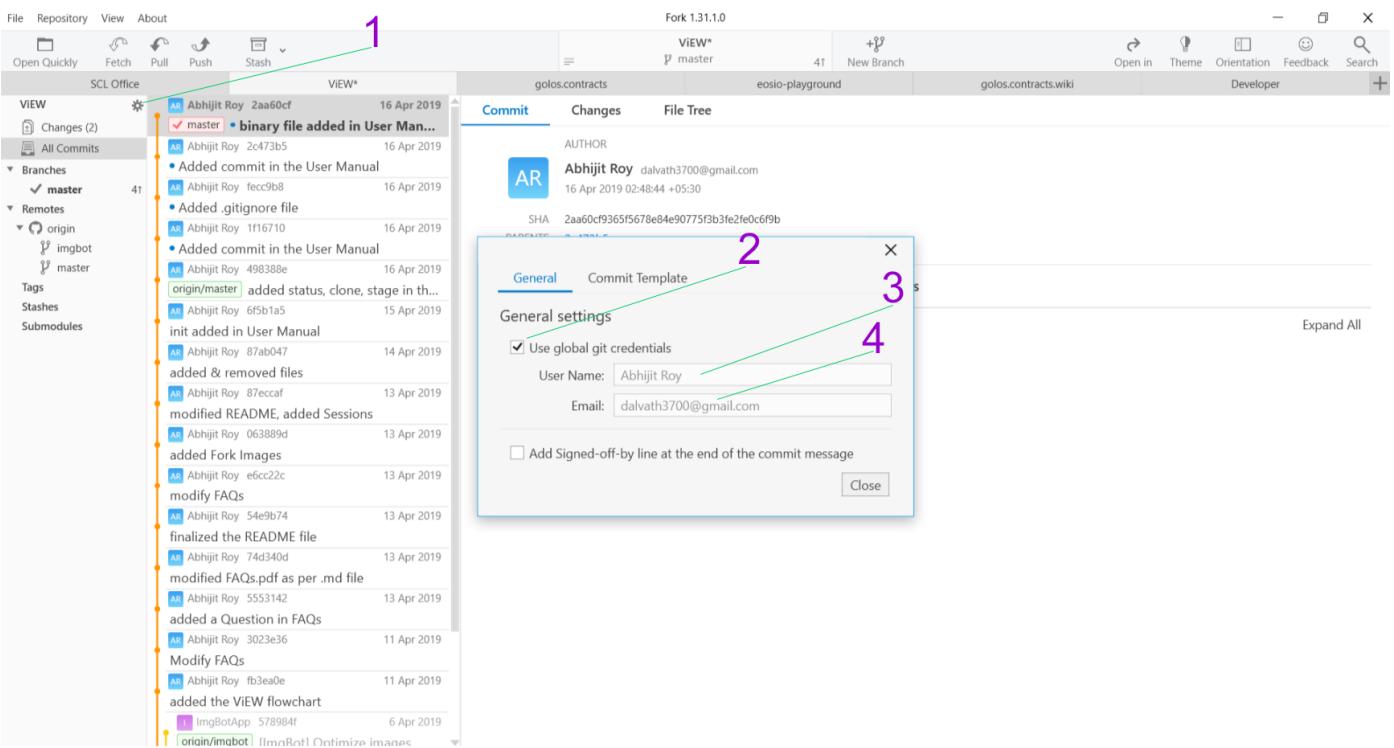
- Click the Setup file and install it as per instruction.

**NOTE:** No Administrator permission required.

- After Installation, it would ask for User details- `User Name` , `Email` . Give your full name and Office's email address. This would help in recording the author details when making any file changes.

**NOTE:** Although in the beginning, user details are taken, but for each repository there is an option to use different user details as well.

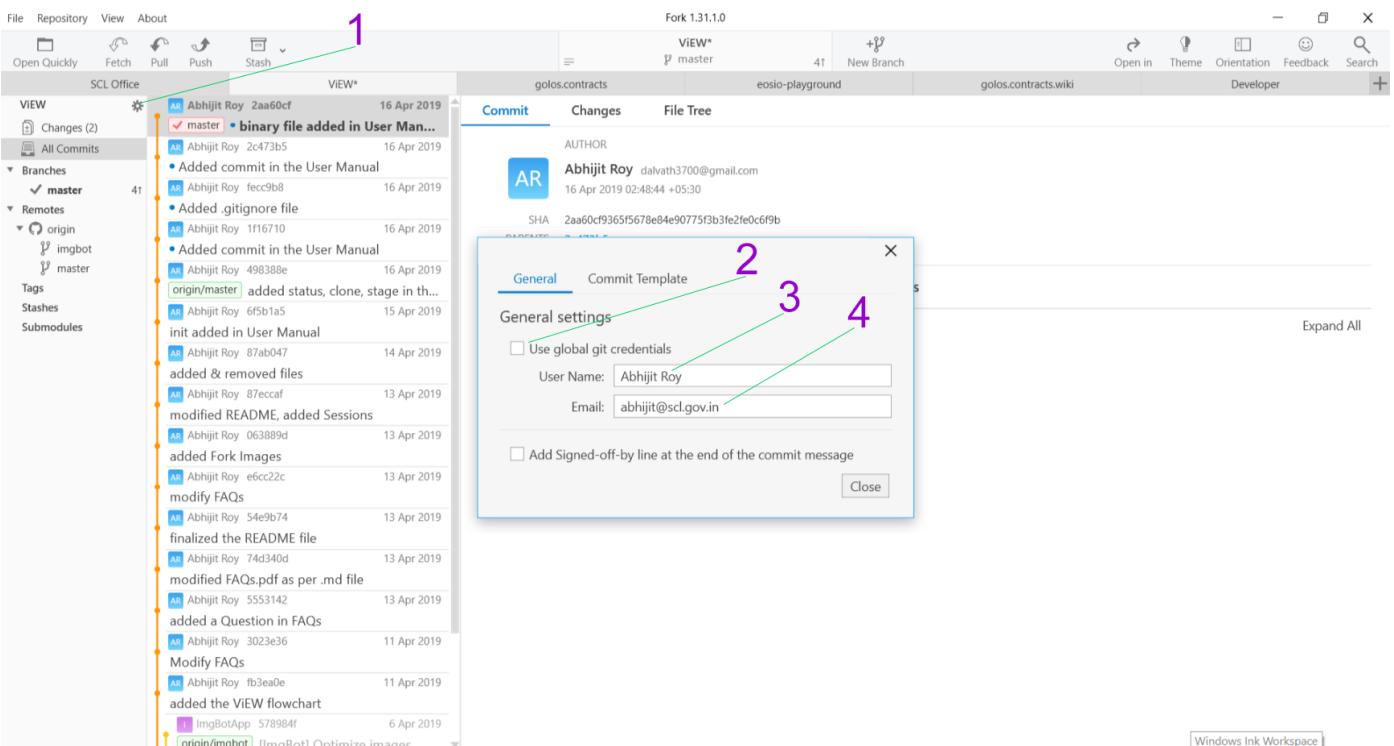
**Global User credentials:** Can be used for all repository



In the Image above,

- 1 - Click the Repository Settings to bring the dialog.
- 2 - Tick to use the global user credentials for this repository.
- 3 - Full name (of global) for this repository. Asked during Installation.
- 4 - Email address (of global) for this repository. Asked during Installation.

### Local User credentials: Can be used for a repository



In the Image above,

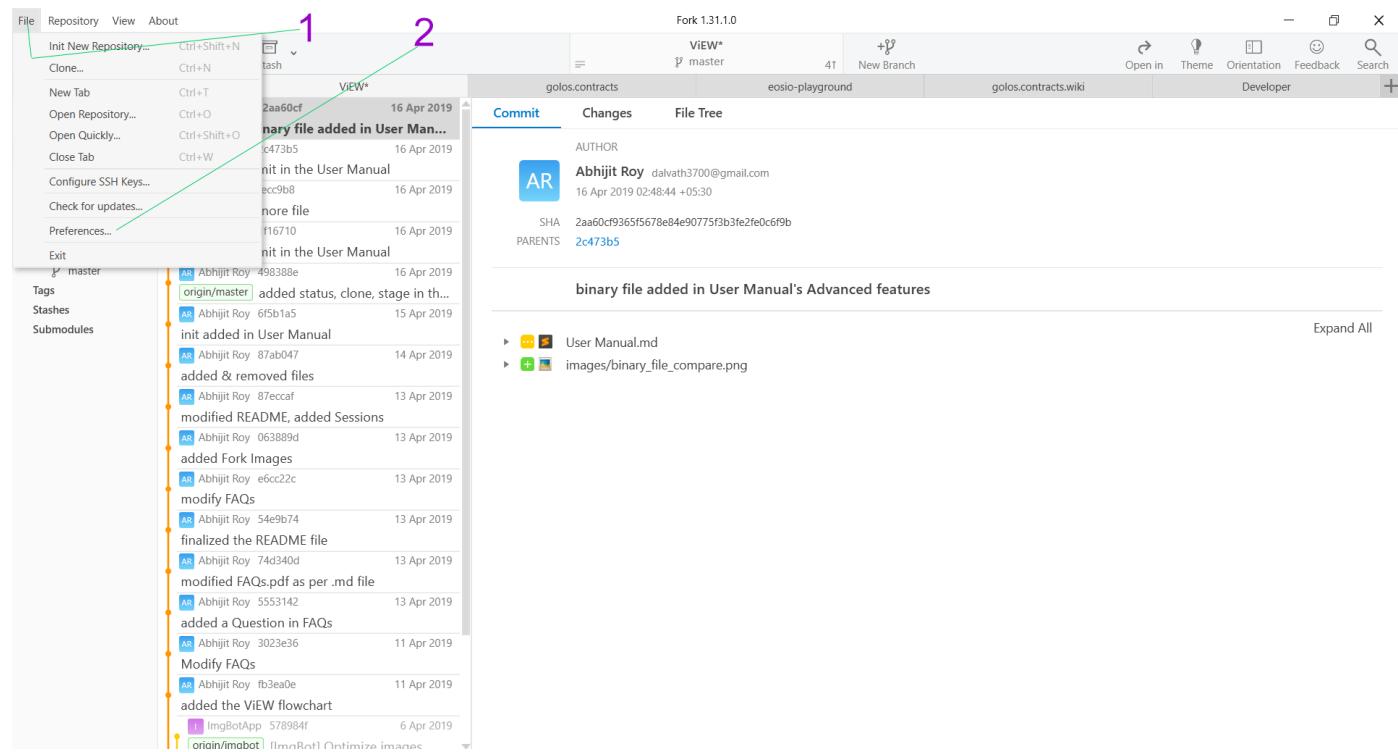
- 1 - Click the Repository Settings to bring the dialog.
- 2 - Untick to use different user credentials (other than global) for this repository.
- 3 - Full name for this repository.
- 4 - Email address for this repository.

## Advanced

- Open in Sublime Text 3 If am Universal Editor is needed, **Sublime Text 3** can be used in that case.

Also, it can be merged with the Fork Client.

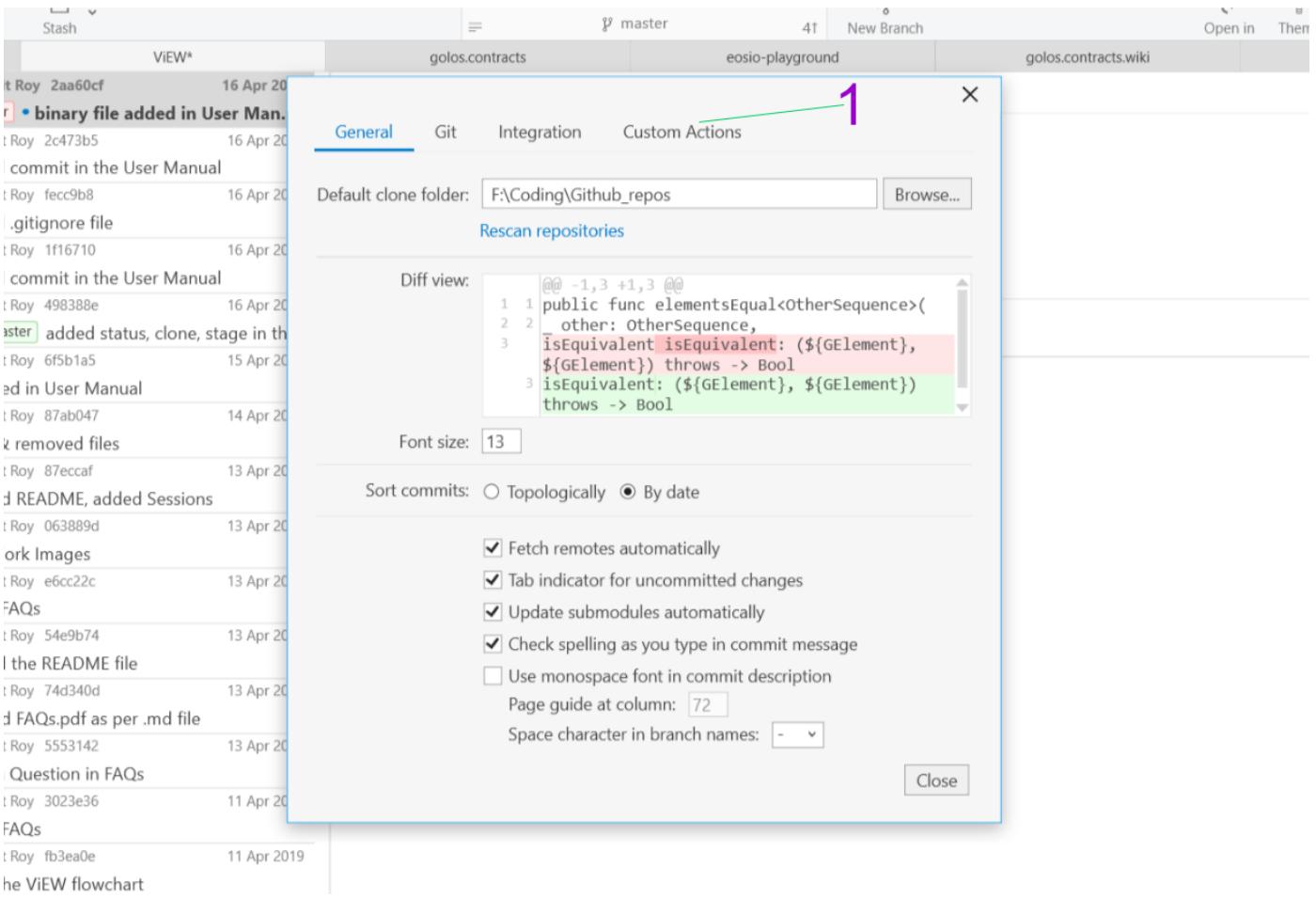
### Step 1:



In the Image above,

- 1 - Click **File** menu option
- 2 - Click **Preferences..**

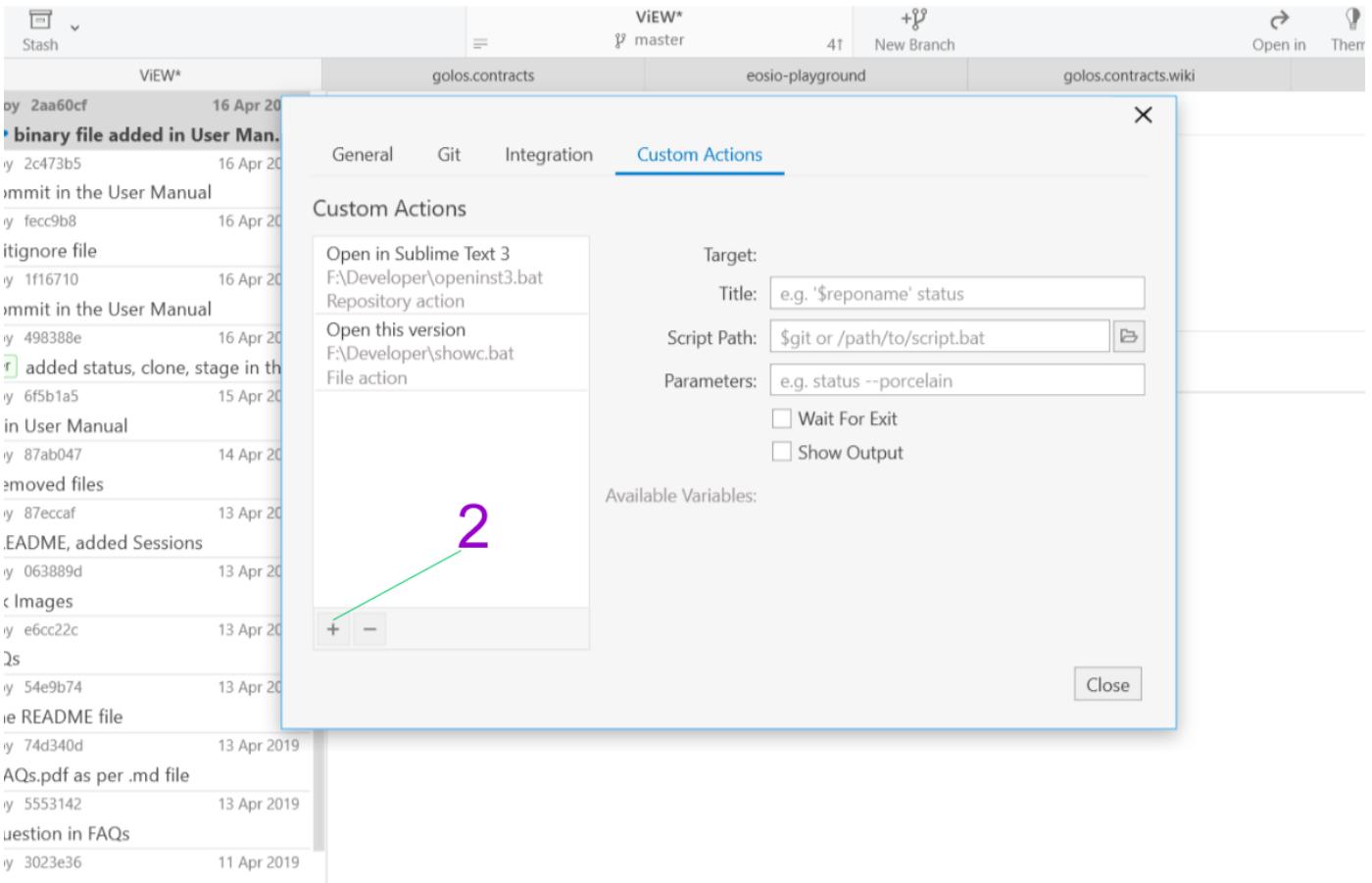
### Step 2:



In the Image above,

**[1] - Now, click the Custom Actions**

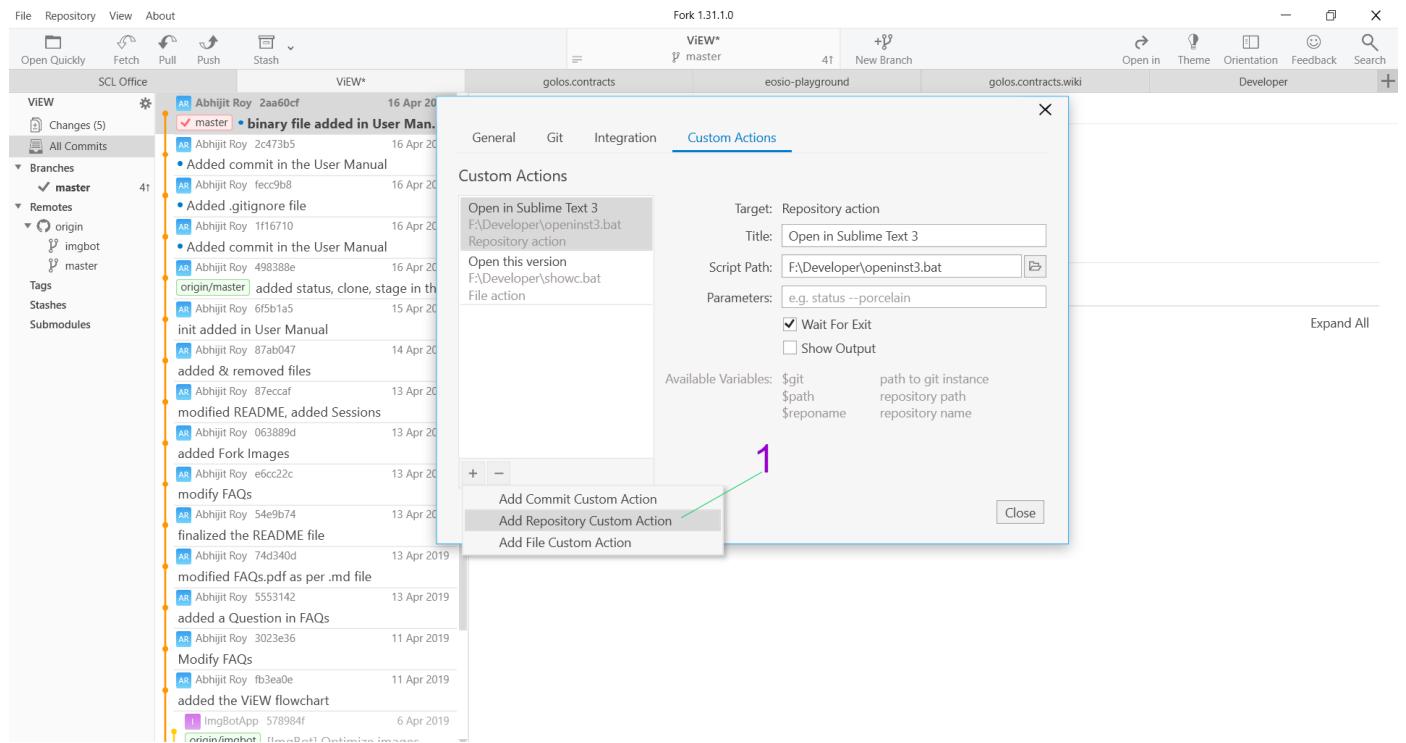
### Step 3:



In the Image above,

- 2 - Click the + symbol to create the custom action.

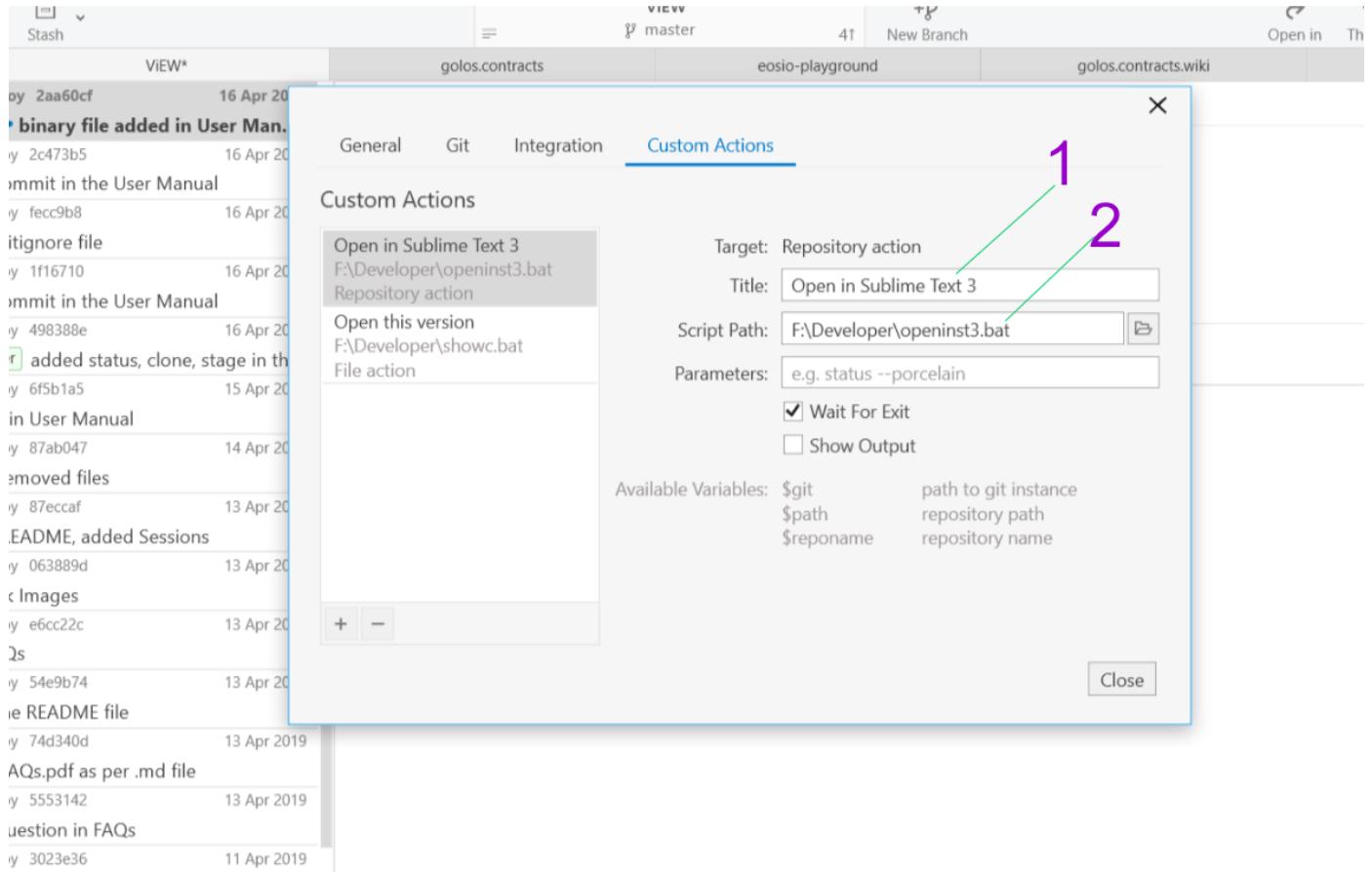
#### Step 4:



In the Image above,

- 1 - Click this to show the custom action dialog.

#### Step 5:

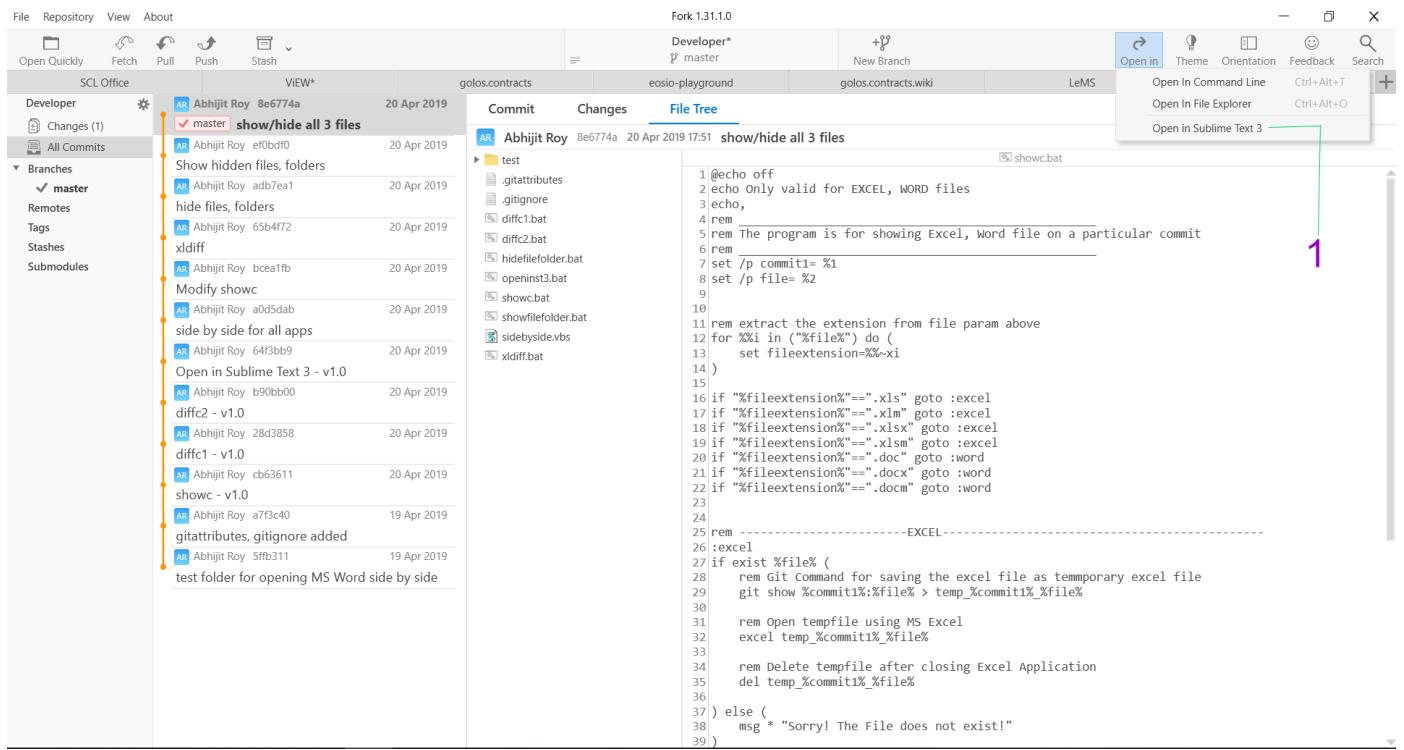


In the Image above,

- 1 - Write the title for custom action

- 2 - Link the .bat or .exe file (from Developer folder, explained above) to open **Sublime Text 3** in current repository path.

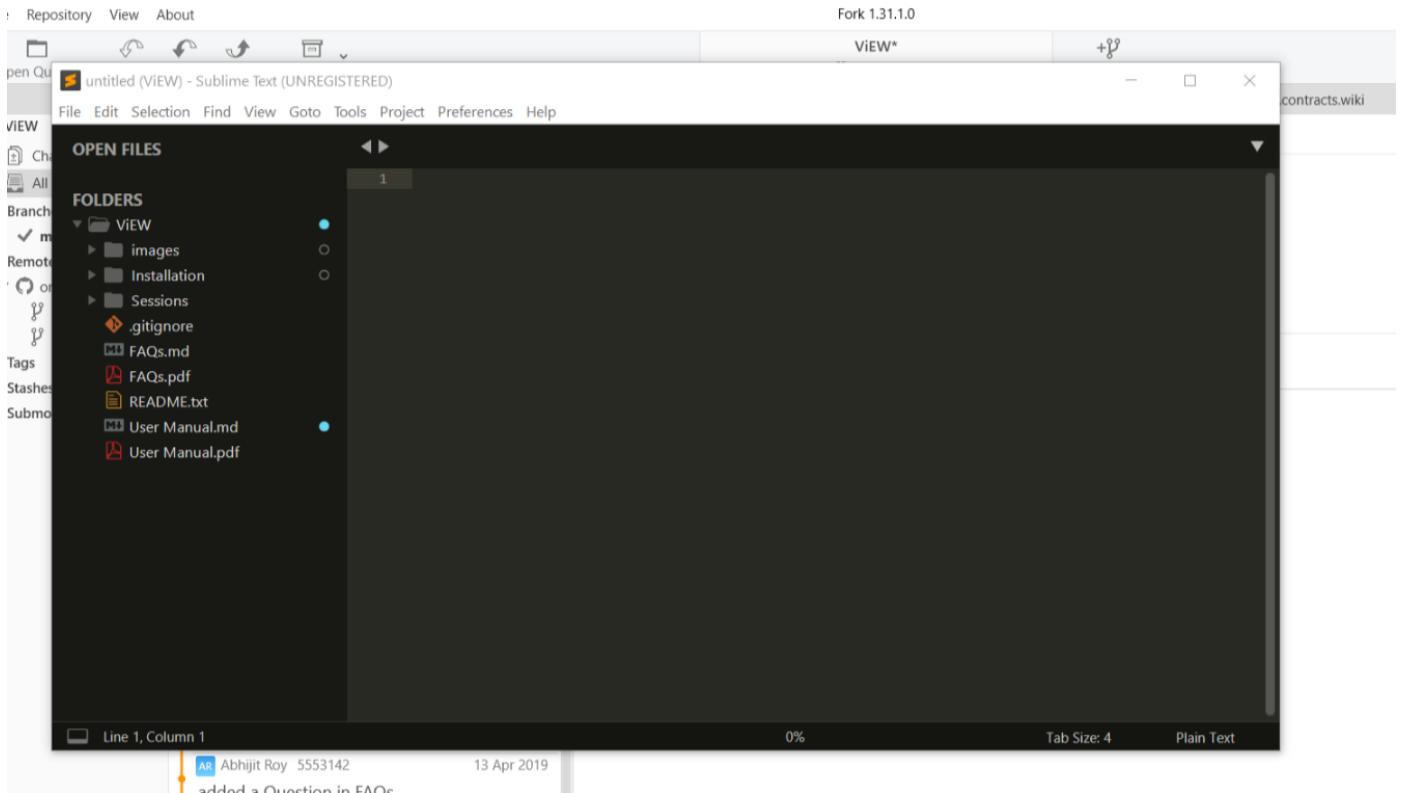
## Step 6:



In the Image above,

- 1 - Finally, this opens **Sublime Text 3** for current repository.

## Step 7:



In the Image above,

- 1 - This is how the repository looks like in **Sublime Text 3**.

**NOTE:** Now, this can be used especially, if someone is maintaining project directory with version control, this **Sublime Text 3** is really going to be helpful while coding practice (with too many custom themes with modern colors.)

# Terms

## 1. Repository

**Repository** is termed as any folder with files (any format), sub-folders inside it.



## 2. remotes/origin/master

It refers to the **master** (or main) branch of the repository kept at remote server.

The screenshot shows the Fork 1.31.1.0 application interface. On the left, the sidebar has sections for 'File', 'Repository', 'View', and 'About'. Under 'Repository', there are buttons for 'Open Quickly', 'Fetch', 'Pull', 'Push', 'Stash', and a dropdown menu. Below these are 'VIEW' and 'Changes' buttons. Under 'Branches', there is a 'master' branch. Under 'Remotes', there is an 'origin' section containing 'imgbot' and 'master'. Other sections include 'Tags', 'Stashes', and 'Submodules'. The main area shows a commit history for the 'demo1' repository. A commit by 'Abhijit Roy' on 'origin/master' is highlighted with a red box and labeled 'added & remov...'. Another commit by 'Abhijit Roy' on 'master' is also highlighted with a red box. Two numbered arrows point to these highlights: orange arrow [2] points to the 'origin/master' entry in the sidebar, and green arrow [1] points to the 'master' entry in the commit history list. The commit history details the following changes:

- modified README, added Sessions
- added Fork Images
- modify FAQs
- finalized the README file
- modified FAQs.pdf as per .md file
- added a Question in FAQs
- Modify FAQs
- added the VIEW flowchart
- [ImgBotApp] Optimize images
- Installation, User Manual, FAQs
- Initial commit

The right pane shows the commit details for the highlighted commit on 'origin/master':  
Author: Abhijit Roy dalvath3700@gmail.com  
Date: 14 Apr 2019 12:22:48 +05:30  
SHA: 87ab047d70b45d479458322e0756cf686df46a7a  
Parents: 87eccaf

Below the commit details is a section titled 'added & removed files' which lists several files and their status (e.g., modified, deleted).

In the image above,

[1] - shows the `origin/master`, basically the master (or main) branch of repository (named - ViEW) kept at remote location.

## 3. branch/master

It refers to the **master** (or main) branch of the repository (named - ViEW) kept at local storage (like PC, desktop).

In the image above,

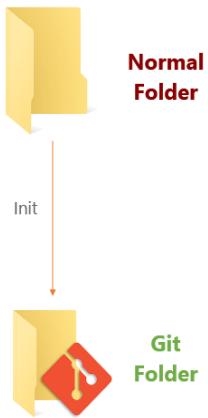
[2] - shows the `branches/master`, basically the master (or main) branch of folder kept at local location.

NOTE: Both the masters (at remote & local) are in sync.

# Operations

## 1. init

It refers to initializing a non-git (or normal) folder to git repository.



Example:

**Normal repository:**

Name	Date modified	Type	Size
images	14-Apr-19 12:35 PM	File folder	
Installation	14-Apr-19 11:37 AM	File folder	
Sessions	14-Apr-19 11:46 AM	File folder	
FAQs	14-Apr-19 11:31 AM	MD File	4 KB
FAQs	14-Apr-19 11:32 AM	Adobe Acrobat Doc...	332 KB
README	13-Apr-19 2:43 PM	Text Document	2 KB
User Manual	14-Apr-19 12:41 PM	MD File	2 KB
User Manual	14-Apr-19 11:35 AM	Adobe Acrobat Doc...	147 KB

**Git repository:**

Initialized with git protocol

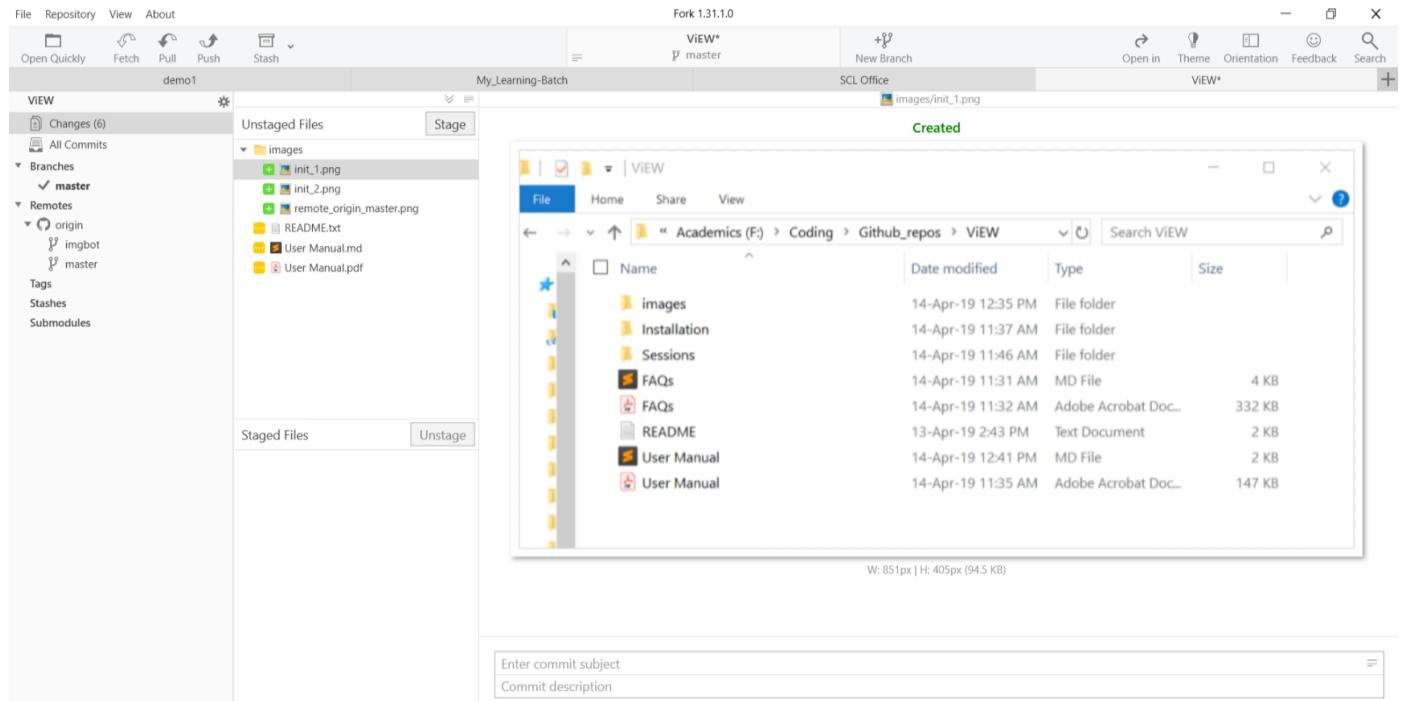
Name	Date modified	Type	Size
.git	14-Apr-19 12:35 PM	File folder	
images	14-Apr-19 12:43 PM	File folder	
Installation	14-Apr-19 11:37 AM	File folder	
Sessions	14-Apr-19 11:46 AM	File folder	
FAQs	14-Apr-19 11:31 AM	MD File	4 KB
FAQs	14-Apr-19 11:32 AM	Adobe Acrobat Doc...	332 KB
README	13-Apr-19 2:43 PM	Text Document	2 KB
User Manual	14-Apr-19 12:51 PM	MD File	3 KB
User Manual	14-Apr-19 11:35 AM	Adobe Acrobat Doc...	147 KB

NOTE: From now onwards, **Git repository** will be called as **repository** (in short).

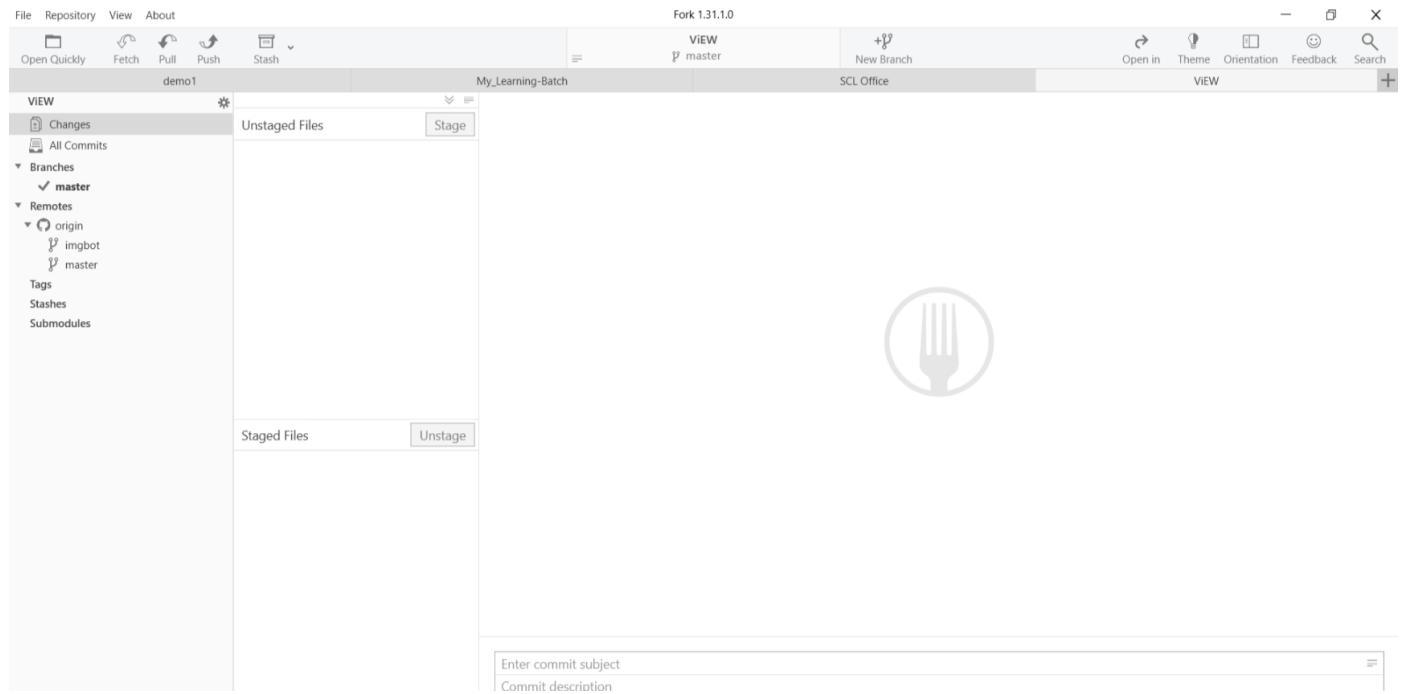
## 2. status

It shows the status of the files (inside repository) changed. To see the changes (if any), click "Changes" on the left pane of Fork Application.

### Example 1: Status showing file changes

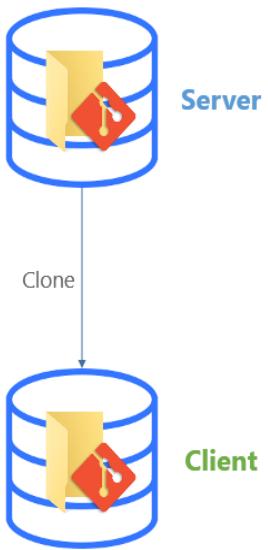


### Example 2: Status showing NO file changes

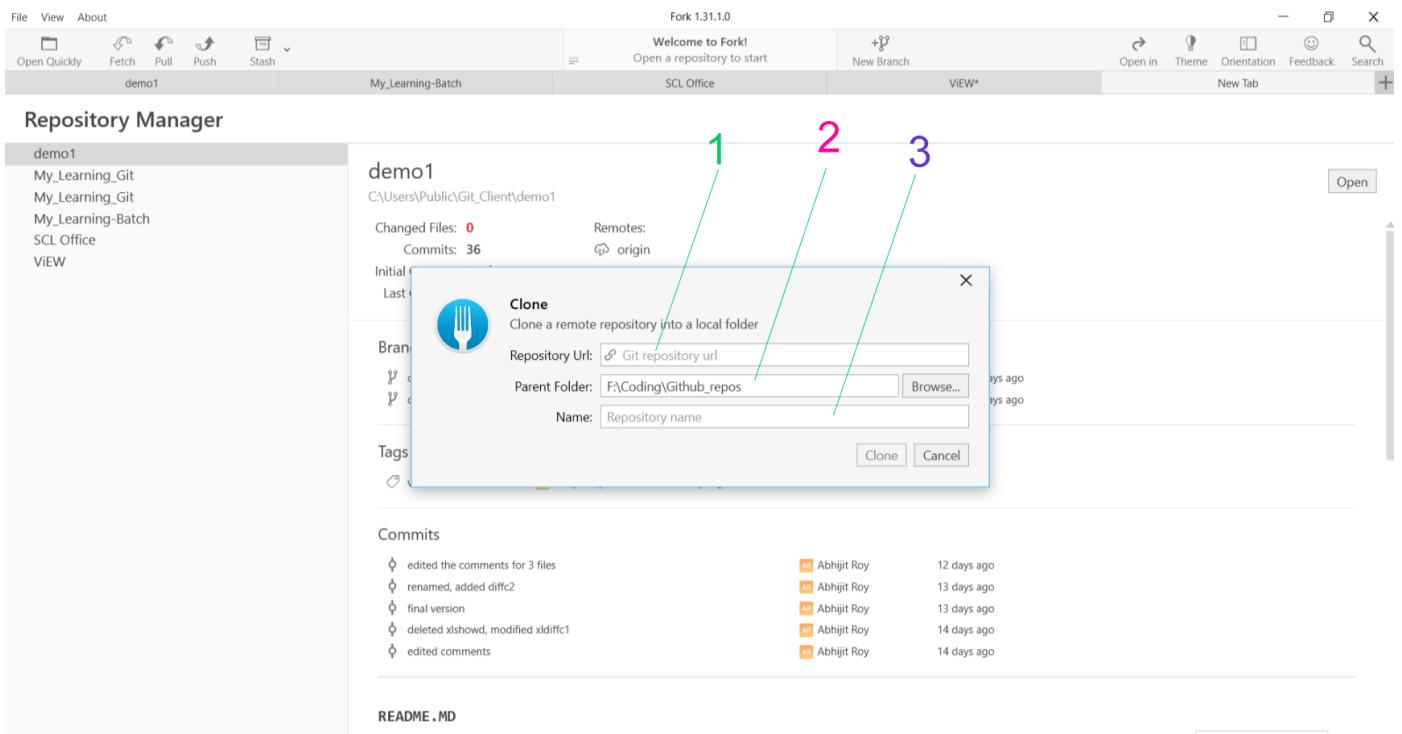


## 3. clone

This is to clone/download the repository (from remote location) to a desired directory in the local PC/Desktop.



### Example: Clone a repository



In the Image above,

- [1] - Remote URL of the repository. E.g.: "http://localhost/Bonobo.Git.Server/demo1.git"
- [2] - Local directory where the repository is to be cloned.
- [3] - Custom Name for the cloned repository.

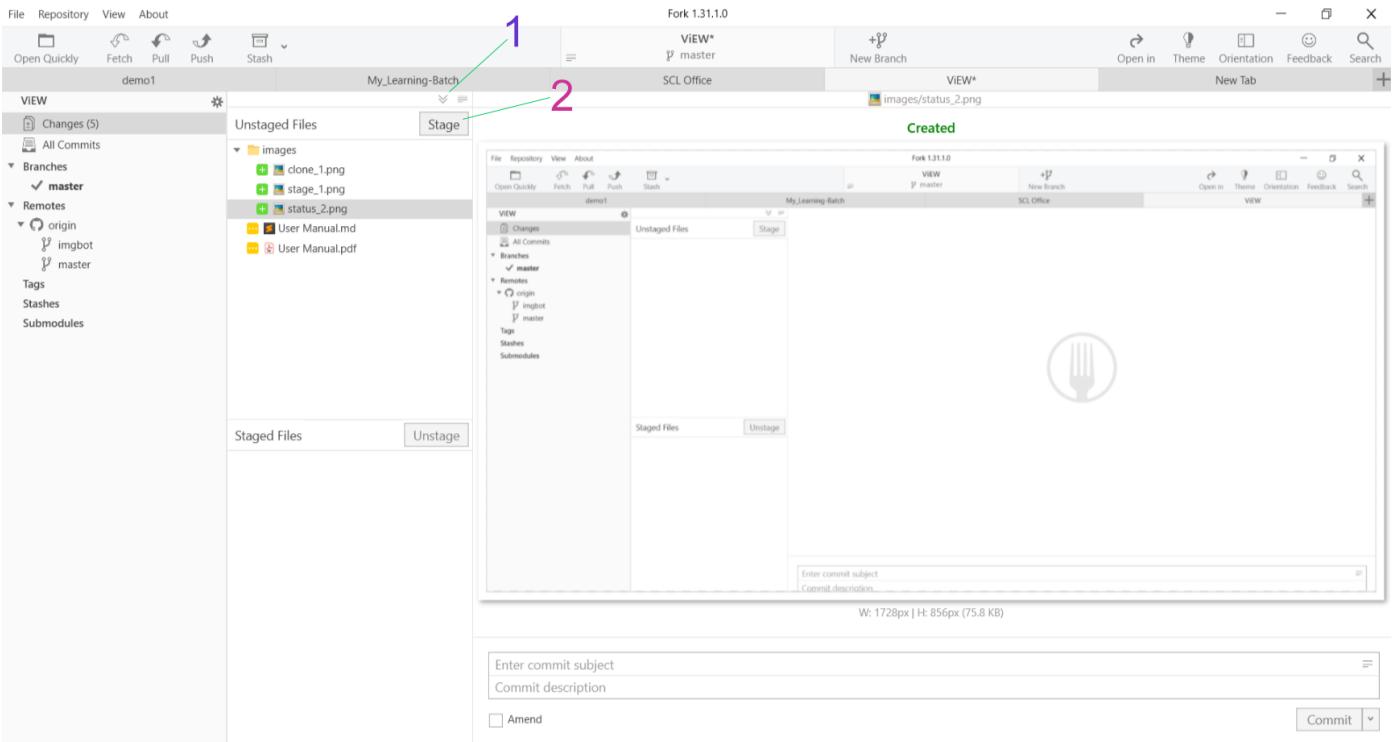
#### 4. stage

Add file(s) to the Staging area. It's like adding/registering files for recording changes (in the repository).



In the image above, user has to stage the file(s) to **Staging area** before recording changes.

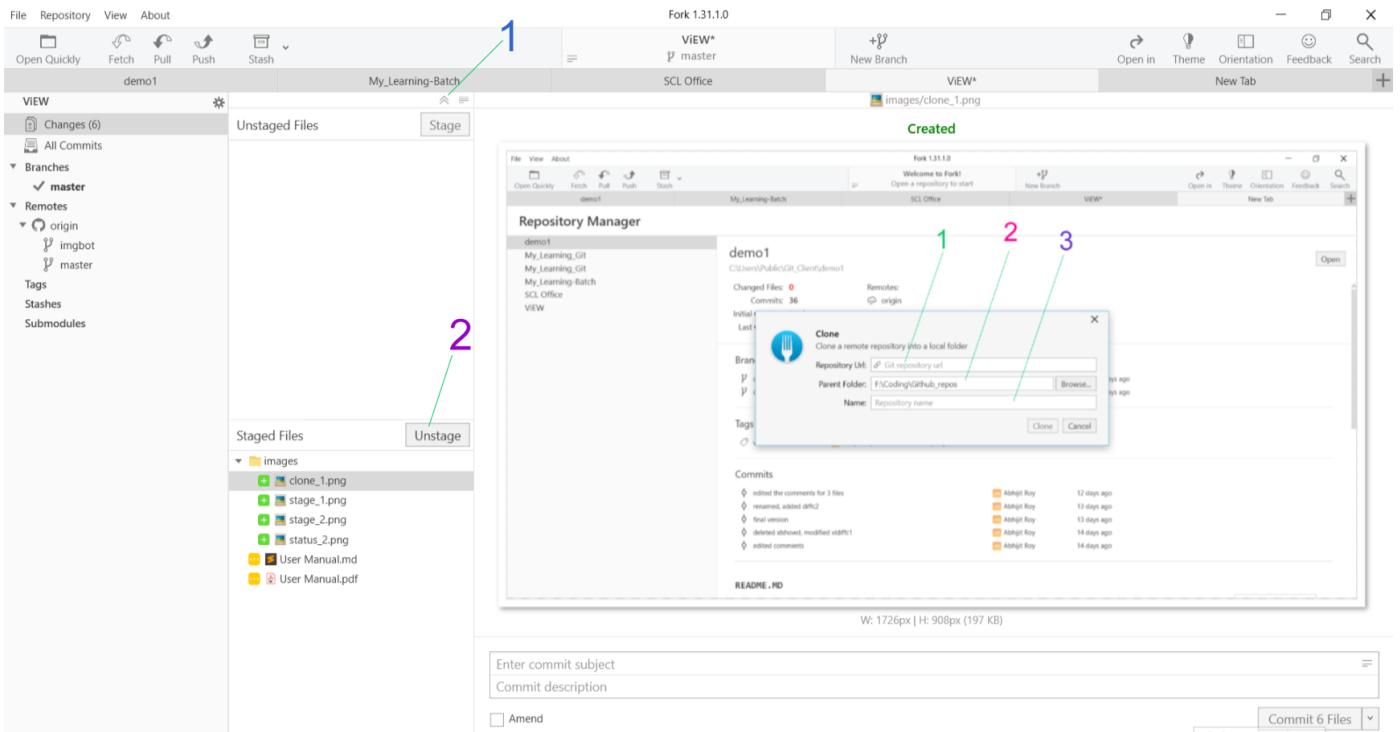
#### Example: Unstaged Files



In the Image above,

- 1 - Stage all file(s)
- 2 - Stage selected file(s)

#### Example: Staged Files

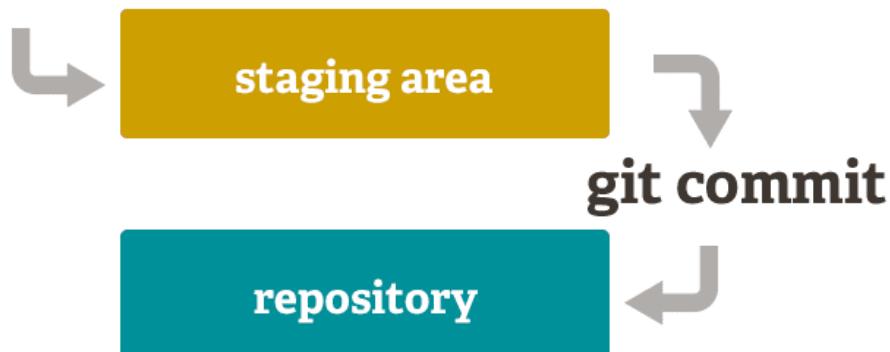


In the Image above,

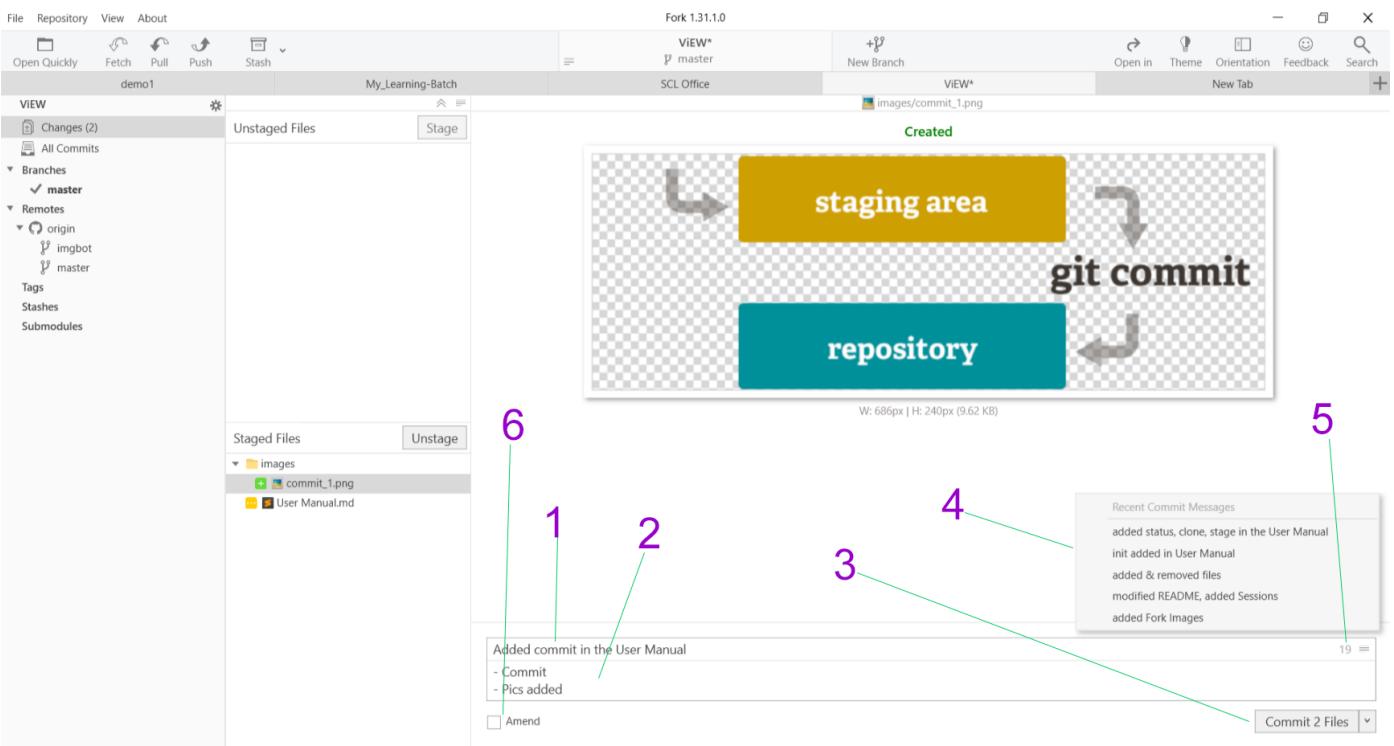
- [1] - Unstage all file(s)
- [2] - Unstage selected file(s)

## 5. commit

This is to record file changes and add it to the chain history. Here, **commit** means assigning a random unique no. (called as Cryptographic Hash) to a change.



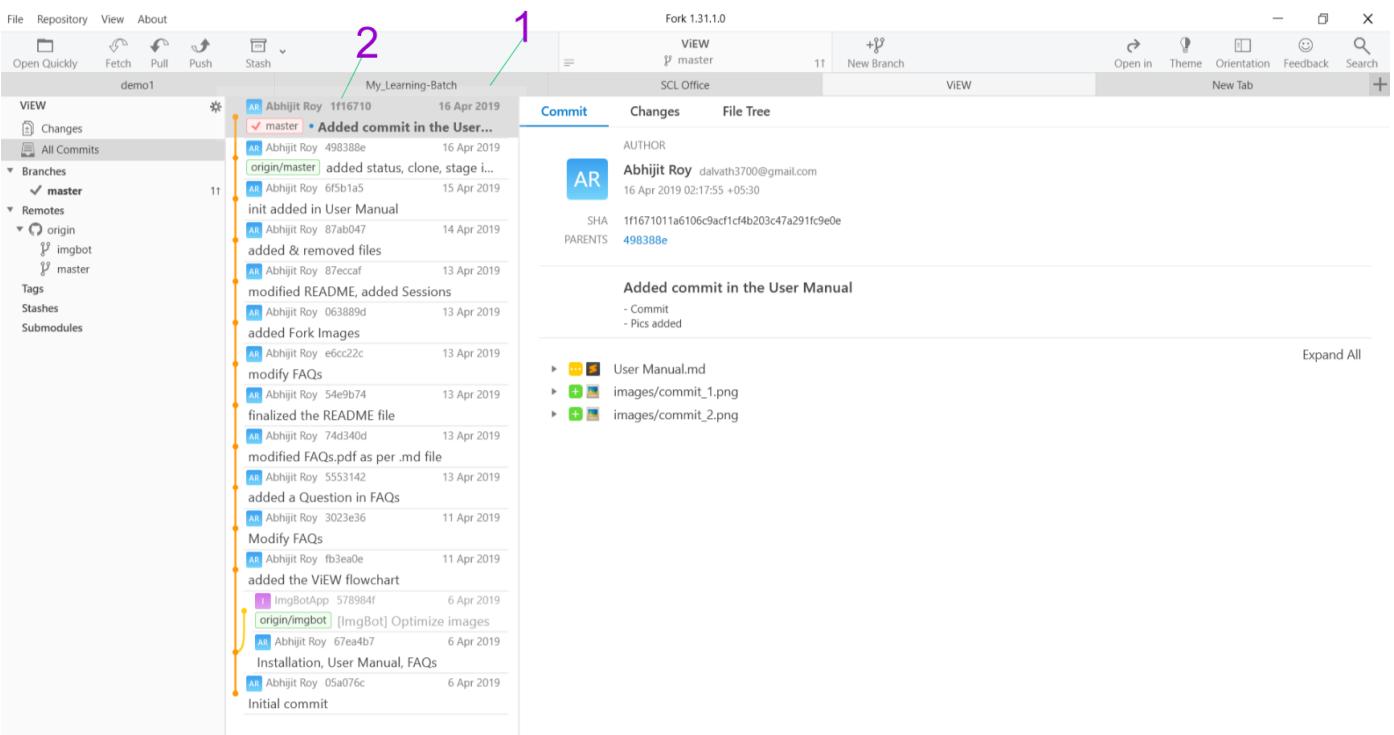
**Example: Commit the Staged files**



In the Image above,

- 1 - Commit Message Title
- 2 - Commit Message Description
- 3 - Commit button (when clicked => committed/recording)
- 4 - Old Commit Message Titles. Can be used when repetitive title required.
- 5 - Show Old commit message titles
- 6 - Amend button i.e. when clicked, automatically uses last message title and description

#### Example: Commit added to the Chain history



In the Image above,

- 1 - Latest block (with files changes) added
- 2 - commit Hash (unique Cryptographic Hash using SHA1 Algorithm)

6. push

7. `fetch`

8. `pull`

## Utility

---

- `showc`
- `diffc1`
- `diffc2`
- `autopush`
- `allsync`

## Advanced Features

---

- Binary File - TODO
- Ignore/Allow specified files - TODO
- File change security - TODO
- Old Block security - TODO