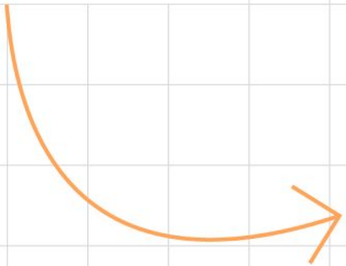
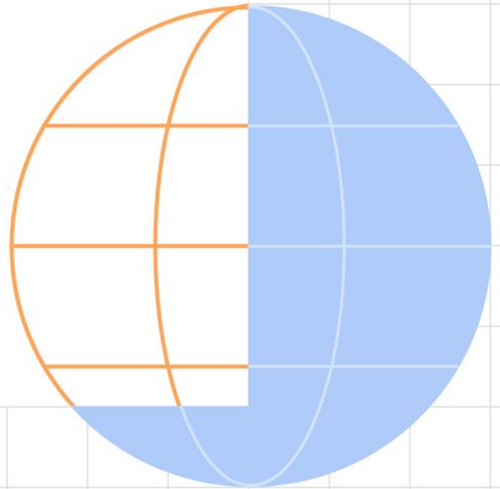
Forward School



# Let’s get started with Git!

Dafuallah Esameldien
Data Engineer

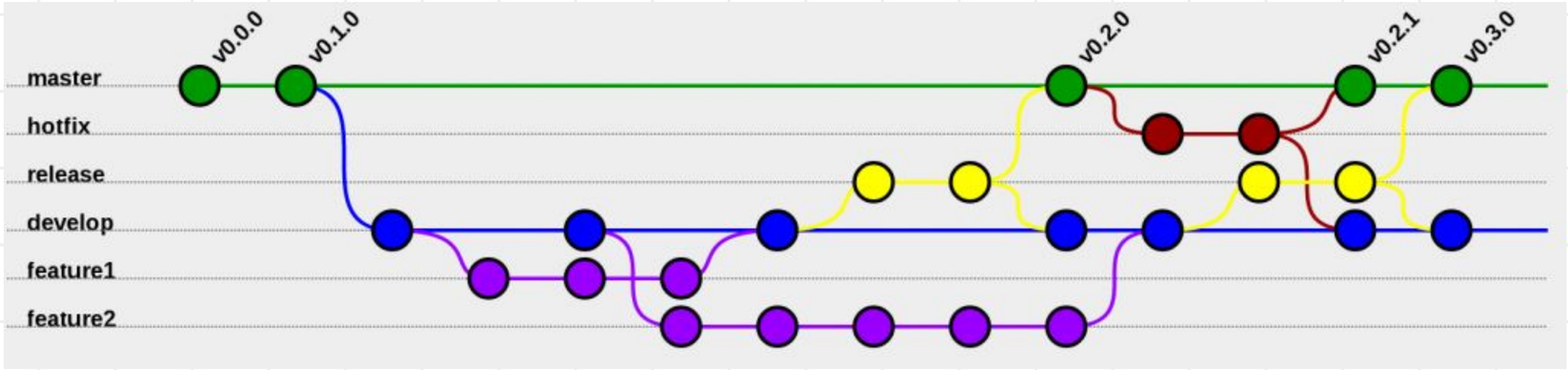


# What is source control?

Source control (or version control) is the practice of tracking and managing changes to code.

# What is Git?

1. Git is a free and open source distributed **Version Control System(VCS)** designed to handle everything from small to very large projects with speed and efficiency.
2. Git tracks the changes you make to files, so you have a record of what has been done, and you can revert to specific versions should you ever need to.
3. Git also makes collaboration easier, allowing changes by multiple people to all be merged into one source
4. Git itself is open source and there are many web-based Git repository hosting service such as GitHub, Gitlab, Bitbucket, SourceForge, Git Kraken and many more.




1. Master branch: The branch that syncs to production server
2. Staging branch: The branch that syncs to a test server with same configurations as production server
3. Develop branch: The branch for all developers to sync to remote and locally
4. Feature branches: You should create and work in new branches named after the feature you are working on and merge them to develop branch after you have tested them.

# Pre-requisites

1. Create a Github account at https://www.github.com
2. Create SSH key
   - SSH Key is your unique identifier key for your PC.
   - SSH Key is used to connect with other machines via SSH Connection
   - Also used to identify and authenticate your PC seamlessly with online services such as Git Hub.
   - For Windows (Extra steps)
     - Open the Settings panel, then click Apps.
     - Under the Apps and Features heading, click Optional Features.
     - Scroll down the list to see if OpenSSH Client is listed
     - If it's not, click the plus-sign next to Add a feature.
     - Scroll through the list to find and select OpenSSH Client.
     - Finally, click Install.

Forward School

# Pre-requisites

- For Windows/Linux/Mac
  - Open up the Command Prompt as Administrator(For Windows) and Terminal (For Linux/Mac)
  - Type in the following command: `ssh-keygen -t rsa`
  - Next, you will have to type in the location of the file where you would like to save the private key.

```
Enter file in which to save the key (/home/youruser/.ssh/id_rsa):
```

  - The public key will be saved in the same location, under the same file name, but with the .pub extension. Type in nothing to use the default location, which is /home/youruser/.ssh/id_rsa.
  - Finally, you will have to type in a password. This will be the password required to load the private key and use it to connect via SSH later on:

```
Enter passphrase (empty for no passphrase):
```

4. Add SSH key to Github account
   - Settings > SSH and GPG Keys > New SSH key
   - Title = Name of your PC
   - Key = Content of *rsa_pub*

Forward School

# TLDR;

1. git checkout -b select_booking_date *// Create and switch to new feature branch*

*<make your changes to the files>*

2. git add . *// Add all files*
3. git commit -m "Added select booking date feature for for booking step “
4. git checkout staging *// Switch to staging branch / or main/master branch*
5. git pull *// Always pull first. Pull any recent changes by other developers before you merge.*
6. git merge select_booking_date --no-ff *// --no-ff flag is to keep the commit messages in the dev branch*
7. git push
8. git branch -d select_booking_date *// Delete branch after merging*

Forward School

For all other Git related commands, can refer to this Cheat Sheet:

**https://training.github.com/downloads/github-git-cheat-sheet.pdf**

Forward School