Git Version Control Workflow

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Contents

1 Git Setup

1. Open Git Bash
2. type

   ```
   git config --gloabl user.name ''UserNameHere''
   ```

3. type

   ```
   git config --gloabl user.email ''Your@email.com''
   ```

2 Common Commands

1. `cd`
   change directory
2. `ls`
   list items
3. `ls -al`
   list all items including hidden
4. `cp <file> <newfile>`
   create copy of file with the new name newfile
5. `mv <file> <anyfilepath>`
   moves a file to new directory
6. `rm <file>`
   deletes a file forever, no option to undo, use this carefully
7. `pwd`
   print working directory, see where you are.
8. `git status`
   check the status of your repository
9. `git add <item>`
   adds and item to be committed
10. `git add --all`
    adds all changed files to be committed
11. `git commit -m <''your message here''>`

3 Cloning a Repository

A clone is a complete copy of the code that lives on bitbucket.

1. Go to bitbucket.com and login to your account.
2. Select the repository you want clone to your computer.
3. Get the https URL from the little window, select it, and ctrl-C (copy)
4. Open git bash.
5. cd into the directory where you want to create the clone, create a dedicated folder if there is not one already.
6. type

   ```
   git clone <theUrl>
   ```

7. You now have a copy of the master.

4 Creating a branch

A branch is used to test new code and functionality be screwing with the master copy.

1. cd into your repository.
2. type

   ```
   git checkout -b <nameOfYourBranch>
   ```

3. type

   ```
   git push --set-upstream origin <nameOfYourBranch>
   ```

5 Switching branches

1. cd into your repository.
2. type

   ```
   git checkout <nameOfYourBranch>
   ```

6 Committing and Pushing

A commit is like a save point on your local machine. A push is like a milestone and updates the remote.

1. cd into your repository.
2. type

   ```
   git status
   ```

   to check the status
3. type

   ```
   git add --all
   ```

to add the untracked files to be commited.

4. type

   ```
   git commit -m <''Your Descriptive message of the the work you have done''>
   ```

   to add the untracked files to be committed.

5. when you are ready to push a change to the remote, type

   ```
   git push
   ```

7 Merging a branch back into the master

A merge is performed when a branch has been completed.

1. cd into your repository.
2. type

   ```
    make sure you have run a commit/push and your branch is up-to-date (use git status)
   ```

3. type

   ```
   git checkout master
   ```

4. type

   ```
   git pull
   ```

   To make sure your master is up-to-date

5. type

   ```
   git merge <nameOfYourBranch>
   ```

6. type

   ```
   git push
   ```