

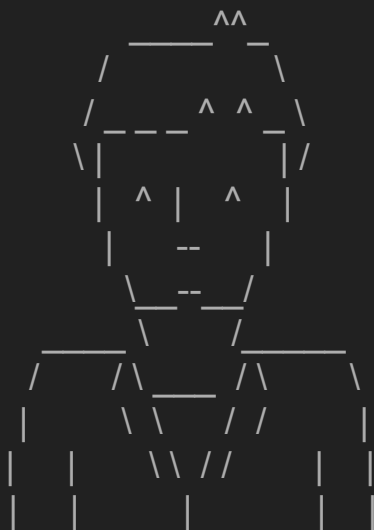
>Version Control for Game Development:

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>About me



←-NERD

>What is version control?

>Version control stores snapshots (**COMMITTS**) of your project in a storage system called a **REPOSITORY**

>It only saves changes you make, not whole project each time

>Allows you to go back to older versions

>Can merge together two versions of the project so that you can work with other people and not overwrite their changes

>There are **CENTRALIZED** and **DISTRIBUTED** version control systems

>What is git?

>**GIT** is a **DISTRIBUTED** version control system

>There is a **REPOSITORY** on your computer as well as one or more optional **REMOTE REPOSITORIES** that hold a copy of your project

>There are many **REMOTE REPOSITORY HOSTS** like **GITHUB** and **BITBUCKET**

>**GIT** allows you to **BRANCH** your project so you can work on a new feature without affecting your **MASTER BRANCH**

>Installing Git

>On your FLASHDRIVE find the relevant git install file for your OS

>Double click it to start installing

>Take all the default options in the installer

>When it gets to the part about git bash and windows command line pick the option that installs/uses the windows command line

>We are going to
use the command
line- the
ultimate text
adventure! :D

>Open your Command Line or Terminal

>>>WINDOWS:



>>>OSX:



dir

How to list out all the files and folders (directories) in WINDOWS

ls

How to list out all the files and folders (directories) on Mac/Linux

mkdir

How to create a new folder (directory)

cd

How to navigate into a folder (directory)

git init

How to create an empty repository

git status

Will show the status of git and your local repository

```
git add .
```

STAGES all the changes that you have made to your WORKING COPY

```
git commit -m  
"what you did"
```

Takes a snapshot of your project and saves a COMMIT MESSAGE

Time to copy our repository to a remote!

Except we don't have internet!
:0

..It's like we're on a train or something...

>Yes secretly I am
preparing you all for
Train Jam :D



>Let's make
your flashdrive
into a remote
repo!

>Open a second terminal window and navigate to your flashdrive

>>>WINDOWS<<<<

F:

mkdir repository.git

cd repository.git

git init --bare

>>>MAC<<<<

cd /Volumes/GIT4GAMEDEV

mkdir repository.git

cd repository.git

git init --bare

>Add the flashdrive repository as a remote

>>>WINDOWS<<<

```
git remote add usb F:/repository
```

>>>MAC<<<

```
git remote add usb  
/Volumes/GIT4GAMEDEV/repository
```

```
git push usb  
master
```

Copy all the commits in your local repository to your remote repository

>Open a new terminal window and CLONE your friend's repository

>>>WINDOWS

```
cd Documents
```

```
mkdir myfriendsrepo
```

```
cd myfriendsrepo
```

```
git clone F:/repository
```

```
cd repository
```

>>>MAC

```
cd Documens
```

```
mkdir myfriendsrepo
```

```
cd myfriendsrepo
```

```
git clone  
/Volumes/GIT4GAMEDEV/repository
```

```
cd repository
```

```
git pull usb  
master
```

FETCHs the commits from the **REMOTE REPOSITORY** and **COMMIT**s the changes to your local **REPO**

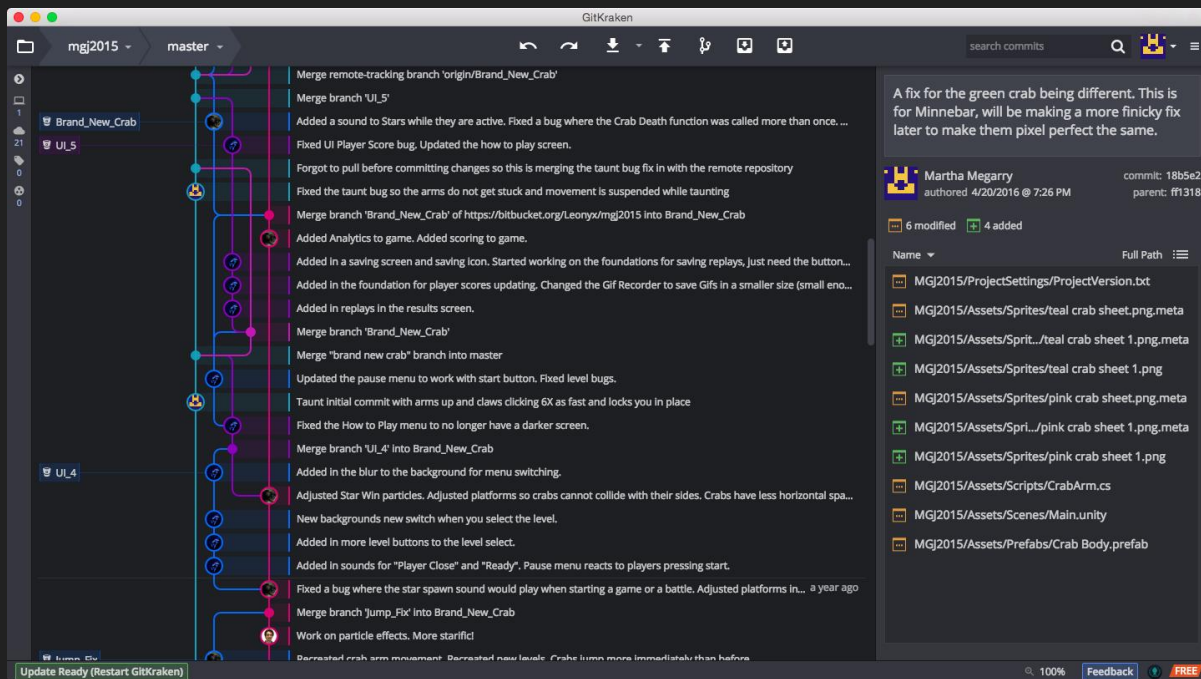
>GUIs for git

>You can see how the repository is structured visually!

>The buttons run git commands- and now you know more about what they are doing under the hood

>Different ones have different cool features- like GitKraken's UNDO button! :D

>I usually run commands on the command line and have the GUI open so I can see the visual tree



>.gitignore files

>Sometimes you don't want git to watch some of your files! Especially some Unity files and things your OS or code editor makes

>In these situations you want a .gitignore file that tells git which files to, well, ignore

>On your flashdrive you will find a sample .gitignore file for Unity projects. (find more sample ignores at <https://github.com/github/gitignore>)

>You can copy it and put it in the top folder of your Unity project (on the same level as /Library) before you make your first commit

Please take *60-seconds* and tell us about your experience in this session!



bit.ly/gc17survey

Thank you so much! Follow me on Twitter and ask your git questions! @MarthaMegarry

