## Git and Git Kraken

Notes from GitKraken Webinar: Using GitHub with GitKraken (<a href="https://www.youtube.com/watch?v=f0y\_xCeM1Rk&feature=youtu.be">https://www.youtube.com/watch?v=f0y\_xCeM1Rk&feature=youtu.be</a>)

- GIT = Open source distributed version control system designed for speed and efficiency. Work locally, view file history, view diffs, commit changes, etc.
- GIT=/= GitHub.
- Repository is a central location where data is stored and managed.
- Files in repository on GitHub are stored in cloud, and can be cloned to create a local copy which can then be managed by a program like GitKraken.
- Changes that are made locally will show up in GitKraken. To update the repository, these files must be staged (where you can view your changes) and then you can commit the changes (adding a message with a description of the commit.) The updated files on the local repository then need to be pushed to update the remote repository on GitHub.
- If a change has been made to the repository on GitHub, you must perform a pull to update the local repository through GitKraken.
- GitKraken has icons that appear when changes are made in your repository. Next to the branch you are working with, the computer icon shows that the changes have been made on the local repository, but not yet to the GitHub (octocat icon.) When both repositories are in sync, the icons will be next to each other. The same is true If a change has been made to the remote repository on GitHub, and not yet updated on the local repository, The octocat icon will be separated from computer icon until both repositories are synced.
- GitKraken auto fetches every 60 seconds to display any changes made to the repository files (you can then push or pull to update whichever repository.)
- If you make a mistake in GitKraken and commit something you didn't want to, or notice an error in, you can press the undo button, to remove the commit. This only works with commits made on the working copy (local repository) if the error has been pushed to the remote, the undo button will not affect it.

- branches can be made to allow you to work on a copy of the master (default branch), and work out any details with the changes before committing the changes to the master. Allows others to continue using the master while changes to the branch are being made.
- Branches can be created on GitKraken by right clicking and selecting "create branch here"
- When branches are in sync they will show up next to each other.
- In GitHub, you can select which branch of the repository to view.
- When the changes in the branch are ready to merge into the master branch, you must perform a pull request. In GitKraken you can drag the branch you want to merge and drop it on the branch you want to marge into. it will bring up the option to start a pull request. (when you drag and drop it auto-populates the form for pull request.)
- Pull request icon looks like branch
- The owner of the repository can view the pull request on GitHub, and add any comments about additional changes, additions, etc. When all changes look good, owner can confirm merge request, updating the master with changes made in the branch. The branch can then be deleted.