



Merchant Venturers School of Engineering
Outreach Programme

What Is Git?

And how do I use it?

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Notes to the reader

- This workshop is intended to last 1 hour.
- This workshop is intended for people with no prior knowledge of Git, GitHub or GitKraken. You don't need to be able to use the command line for this tutorial (or to use Git!).
- This workshop aims to teach the skills needed for working on small Outreach projects (i.e. other workshops). As such, we will ignore many of the features of Git that you would need in industry. This is a good starting point though.
- The content is intended to be learnt through self-directed individual learning by following the worksheet and practicing actions repeatedly until you remember how to do them.
- The learning platform is Git for Windows or Linux and GitHub. For both platforms, we will use the GitKraken user interface (sorry, but command line people can probably already figure out how to use Git on their own).
- This workshop probably works on Mac but is untested (unless anyone fancies donating a Mac to me? :) #worthatry)
- There are many versions of Git, all of which should be compatible with this workshop (but might not be - if you follow this guide, you'll end up with the right one installed.)
- You should already be comfortable using your platform of choice including: installing programs, opening programs, managing files and folders, signing up for stuff via email and accessing the internet (which is presumably how you got this worksheet in the first place?)
- This workshop teaches the following skills:
 - Creating an account and repository on Github
 - Cloning a new/empty repository
 - Configuring a new/empty repository
 - Installing a git client
 - Configuring a git client
 - Adding (/creating) files inside your project
 - Pushing and pulling files
 - Viewing the commit history
 - Correcting a mistake in a file
 - Discarding some or all changes to a file
 - Viewing, creating and commenting-on issues on GitHub

1 Introduction

Hi! In this short workshop we're going to try to introduce you to Git - industry's (pretty-much) standard tool for version control and what we use in the MVSE Outreach programme for managing files. Don't worry if you have no idea what "Version Control" is just yet - we're going to start from the ground up.

Let's get started. Each section is made up of four parts:

Actions Stuff for you to do. They are highlighted in blue.

Notes Notes about important stuff you need to be aware of (and possibly remember!). They are highlighted in red.

Questions Questions you should try to answer. Sometimes you'll need to write things down; other times you'll need to build something in the game. They are highlighted in yellow.

Ask a helper or the teacher to check your answers.

Goals Stuff you should have completed at the end of each section. They are highlighted in green.

We'll also write some information between parts and include plenty of screenshots to help you out.

1.1 What is version control?

TODO

1.2 Why do we need version control software?

TODO

1.3 So what is Git?

TODO

1.4 I've heard a lot about the command line...

TODO

1.5 What is a repository (a.k.a. repo)?

TODO

1.6 So what is GitHub?

TODO

1.7 Remote vs. local versions

TODO

1.8 And what about GitKraken?

TODO

2 Setup GitHub

2.1 Creating an account

TODO

2.2 Joining the MVSE Outreach group

TODO

2.3 Creating a repository

TODO

Licenses

TODO

2.4 Configuring a repository

TODO

Read-Mes

3 Setup GitKraken

3.1 Re-cap: What is GitKraken?

TODO

3.2 Installing GitKraken

TODO

3.3 Configuring GitKraken

TODO

4 Use GitKraken

4.1 Cloning a repository

TODO

4.2 Initialising a repository

TODO

Git Ignore: .gitignore

TODO

4.3 Staging files

TODO

4.4 Committing files

TODO

4.5 Pushing commits(/changes)

TODO

4.6 Viewing the commit history

TODO

4.7 Reverting changes

TODO

4.8 Discarding changes before committing

TODO

4.9 Amending commits

TODO

5 Use GitHub

5.1 Viewing your repository

TODO

5.2 Viewing the commit history

TODO

5.3 Viewing issues (Part 1)

TODO

5.4 Creating an issue

TODO

5.5 Viewing issues (Part 2)

TODO

5.6 Commenting on an issue

TODO

5.7 Closing an issue

TODO

6 Wrap-up

We hope you enjoyed this workshop! If you have any questions or run into problems, just ask one of the other outreach people - I'm sure they'll be happy to help.

Goals

Hmmm...

- TODO

7 Extra Resources

Here's a few extra resources to help you along with this worksheet and some stuff to try later.

- Google is your friend : <http://www.google.com>