Java Basics

Exercise 1: Using Git

SOFTWARE GUILD

Credits and Copyright

Copyright notices

Lesson 4: Git Quick Start

Java Cohort

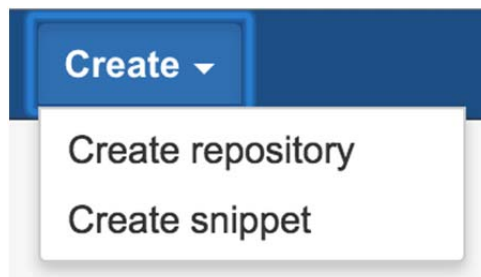## Exercise 1 – Using Git

Introduction

So, you're setup and ready to go. Where do you start?... In this section we will walk through a few of the basic commands and get you setup for the rest of the Pre-Work. This section can also be used for reference later as several of the commands will be demonstrated without any action required by you. Your action with them is to review them as you complete other pre-work assignments, as you will be asked to submit screenshots and certificates to the repository created within.

Creating a Repository for Pre-Work

In order to share the results of your Pre-Work with your instructor, we have decided to have you save everything to a git repository. This will both show you that not just code files can go into a repository and also give you some valuable practice with the tool and commands. This repository will use your Bitbucket account and you will need to share the URL of this repository with you instructor via the Moodle system you have already logged into. (if you have not seen Moodle, please review pre-work materials.)

Steps

1. Open a browser and navigate to https://bitbucket.org
2. Login to Bitbucket. If you do not have an account sign up for one by following the sign up option on the website.
3. Upon logging in click "Create" in the top toolbar and select "Create Repository" from the menu

4. On the next screen set the "Name" = "swcguild", provide a "Description" and make sure you have it set for a "Public" "Git" repository

Create a new repository

Name* [   ]

Description [   ]

Access level ☑ This is a private repository

Forking [Allow only private forks ▾]

Repository type ● Git
○ Mercurial

Project management ☐ Issue tracking
☐ Wiki

Language [Select language… ▾]

Repository integrations

HipChat ☐ Enable HipChat notifications

[**Create repository**] Cancel

5. Click "Create repository"

6. Once you have created your repository you will be presented with the repository page. The repository page will contain details for whether you are starting from scratch with a completely new repository or starting with an existing repository.

Repository setup

Your repository is empty — let's put some bits in your bucket.

Get code into Bitbucket fast using Atlassian SourceTree or the command line

SourceTree

> Get started using the SourceTree client

Command line

> I'm starting from scratch

> I have an existing project

Command line

∨ I'm starting from scratch

Set up your local directory

Set up Git on your machine if you haven't already.

```
$ mkdir /path/to/your/project
$ cd /path/to/your/project
$ git init
$ git remote add origin https://vjpudelski@bitbucket.org/vjpudelski/newrepo.git
```

Create your first file, commit, and push

```
$ echo "Victor Pudelski" >> contributors.txt
$ git add contributors.txt
$ git commit -m 'Initial commit with contributors'
$ git push -u origin master
```

Great job, now you're all set up! Get started coding or create a team and invite people to work with you.

Command line

> I'm starting from scratch

∨ I have an existing project

Already have a Git repository on your computer? Let's push it up to Bitbucket.

```
$ cd /path/to/my/repo
$ git remote add origin https://vjpudelski@bitbucket.org/vjpudelski/newrepo.git
$ git push -u origin --all # pushes up the repo and its refs for the first time
$ git push -u origin --tags # pushes up any tags
```

Want to grab a repo from another site? Try our importer!

Cloning a Bitbucket Repository

Anytime you want to work with a Bitbucket repository locally you will need to clone your repository.

Steps

1   Open a browser and navigate to https://bitbucket.org
2   Navigate to your repository that you wish to clone (ex. "swcguild")
3   Copy the URL of the repository. This can be found at the top of the page on the right hand side.

| ⤓ | HTTPS ▾ | https://vjpudelski@bitbucket.org/vjp| | ↗ Share | ◉ ▾ |

4   Open a command prompt \ terminal window
5   Type the git clone command for the repository
    `git clone https://<username>@bitbucket.org/<user>/swcguild.git`
    The URL starting with "https" can be pasted from step 3.
    Also note the command window will either need to be on the directory where you wish to clone the repository to or you will have to use commands to navigate to such a directory before executing this command.
    Ex. Navigate the command window to C:_repos and then execute git clone to place the repository within the _repos directory.

Once you have cloned the repository you are ready to begin the pre-work.