

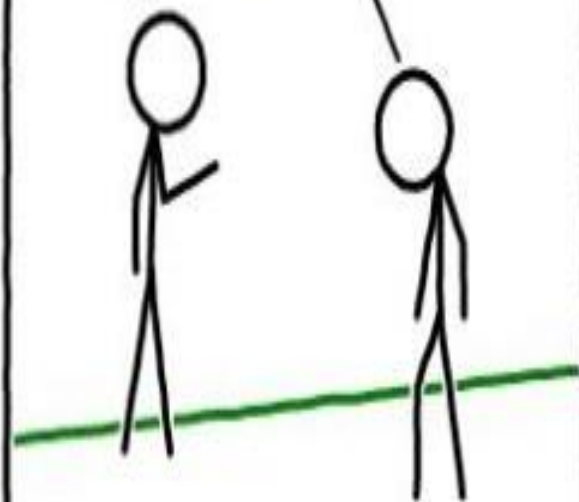
Bagian 1-Pengenalan Tools

NOT SO LONG AGO.
IN A GALAXY CLOSE BY...

HEY GEORGE

WHAT'S UP?

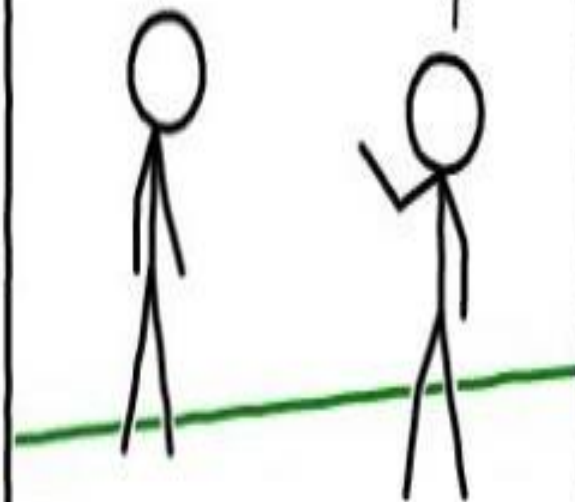
I ACCIDENTILY
DELETED ANOTHER
PAGE OF MY
MANUSCRIPT...



NOT THIS STUPID
'SUN BATTLE' THING
AGAIN...

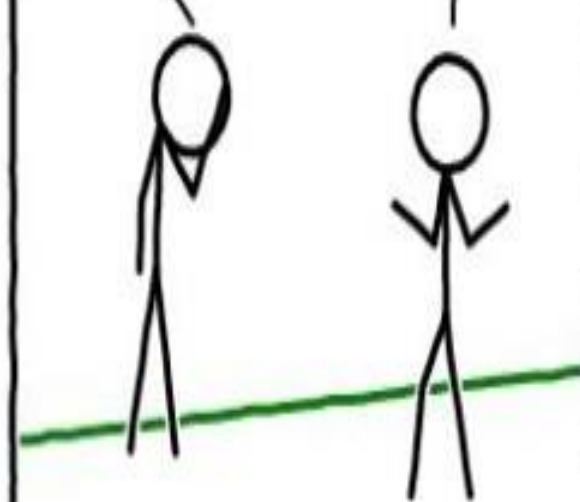
IT'S NOT STUPID!
- YOUR STUPID!

OH WELL...
YOU HAD IT ALL
UNDER VERSION
CONTROL RIGHT?



VERSION CON-WHAT?

UGH...





git



Git-Github

- Git
 - version control system
 - SVN,StarTeam
- Github
 - repository site

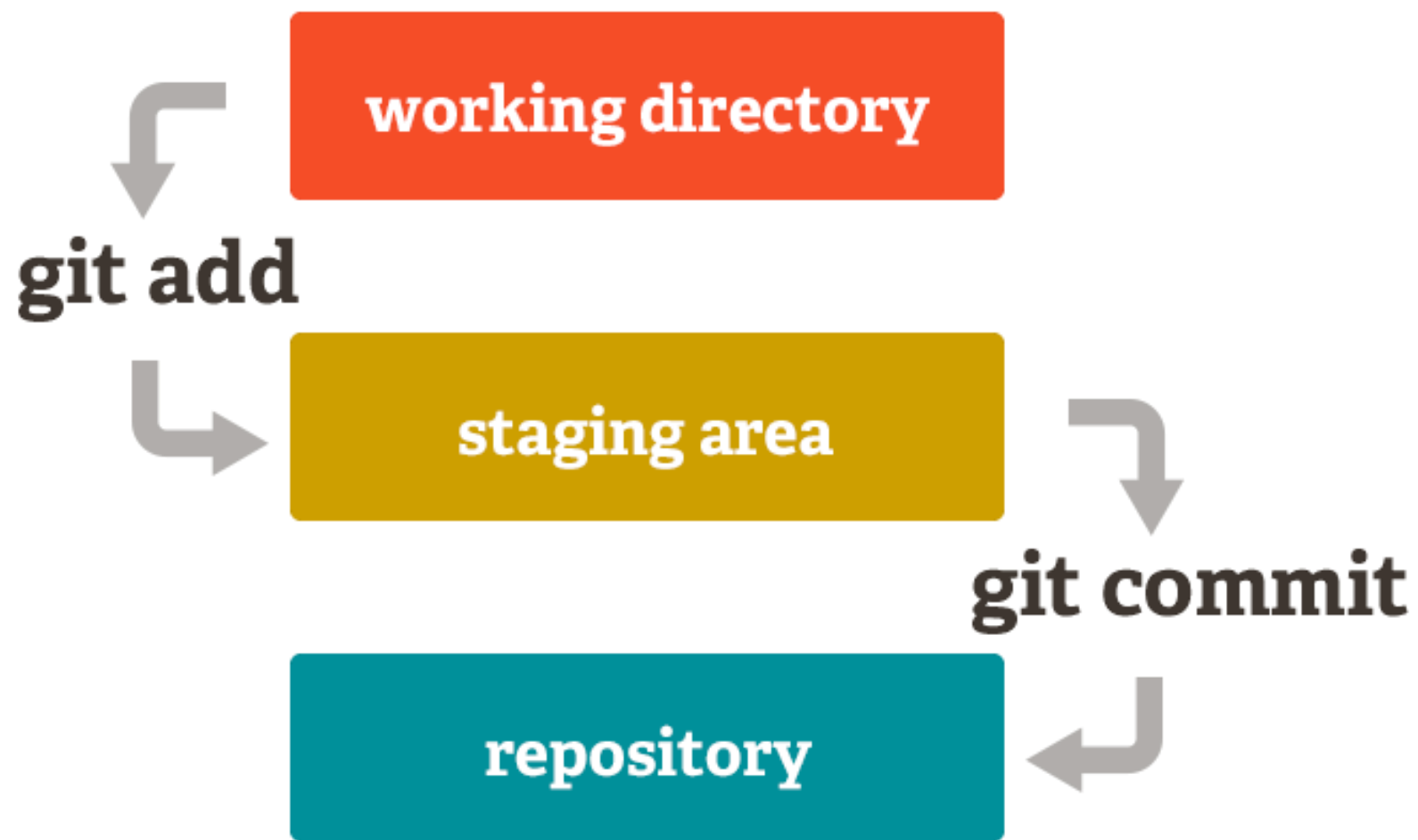
- <https://git-scm.com/book/en/v2/Getting-Started-Installing-Git>
- <https://git-scm.com/download/win>
- Let's define ourselves first
 - `git config --global user.email "you@example.com"`
 - `git config --global user.name "Your Name"`

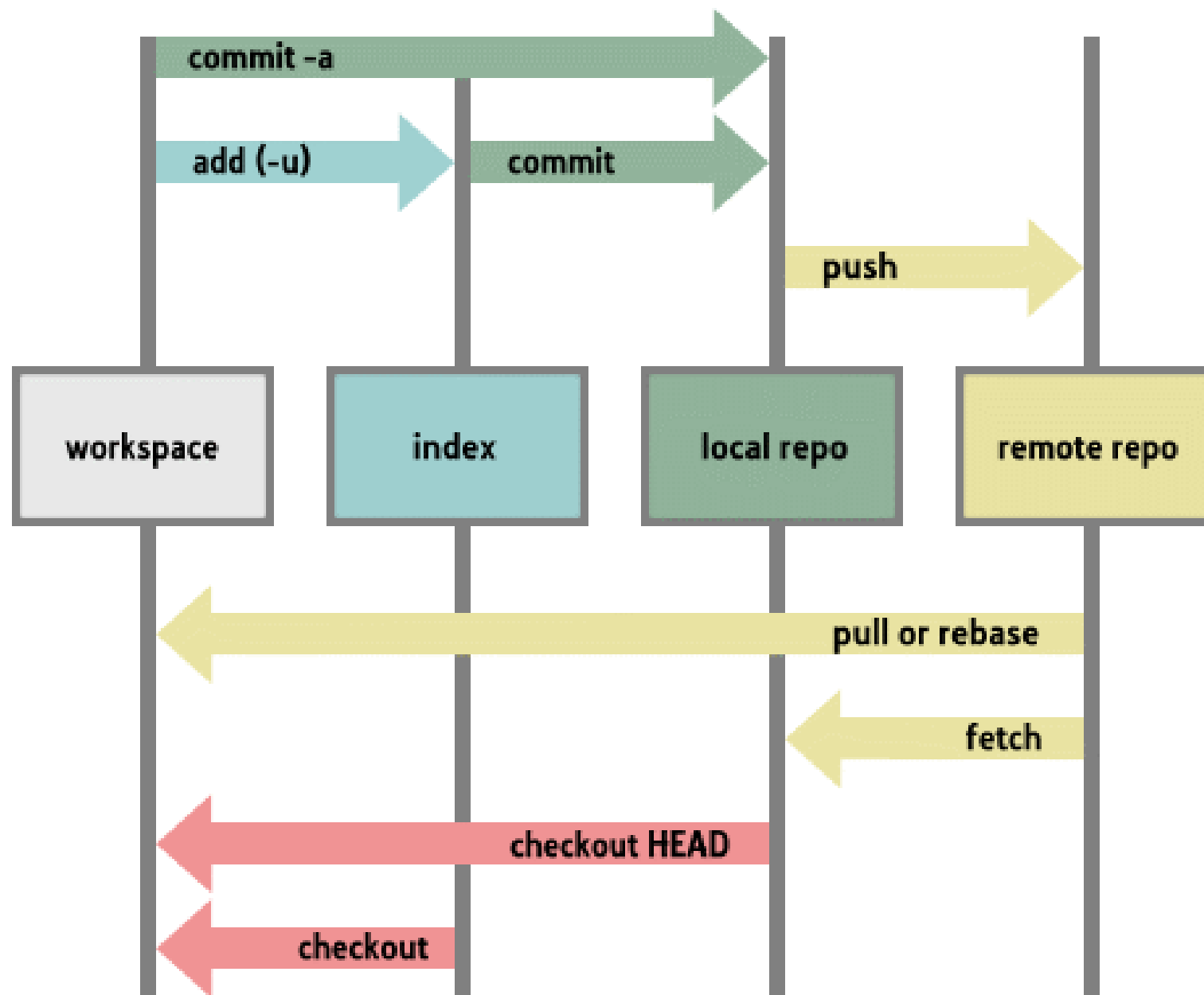
Local first

- first lets make a git folder in our computer
 - `git init`
- add a file to the folder
 - `git add newfile.file`
 - `git commit -m "new file added" newfile.file`
 - If you don't provide file after the comment, everything you have done will be committed.

Ignore?

- Create a file called `.gitignore`
 - Write the file names that should be ignored by git
 - Commit the file





GitHub



Pulling a repository/editing

- lets pull a repository from github
 - git pull <https://github.com/cosai/test>
 - git remote add origin <https://github.com/cosai/test>
 - I defined the link as origin. No need to write this link every time.
- Edit the file a.txt
- git commit -am 'something added'
- git push origin

Remove a file

- `git rm somefile.txt`
- `git commit -m 'removed'`
- `git push origin`

Conflict

- `git commit -am 'Conflicts resolved'`

SmartGit

Mary Kate Trost

July 8, 2011

Where to get it?

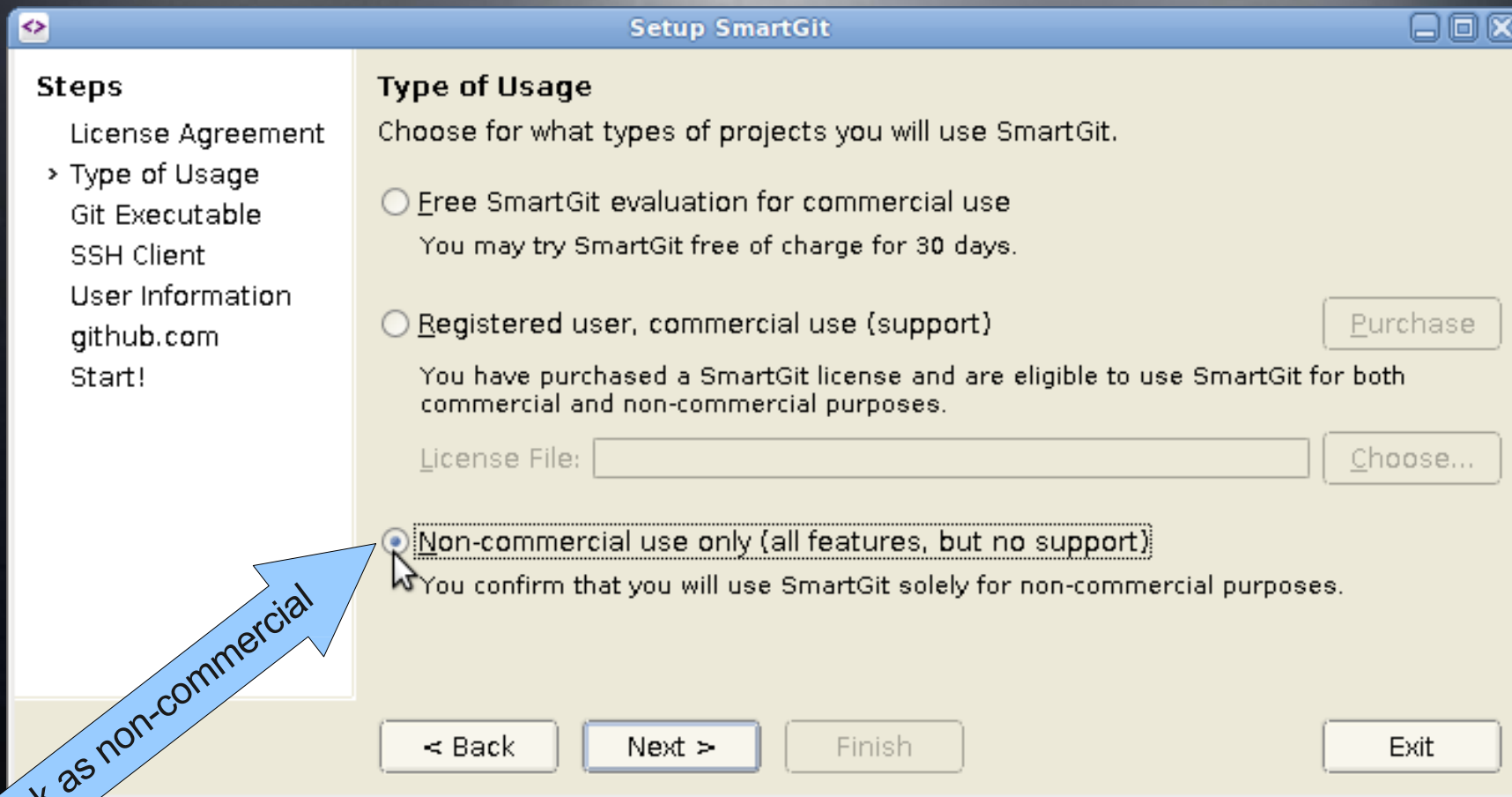
- <http://www.syntevo.com/smartgit/download.html>
- Free for non-commercial use
- Already downloaded and available for non-commercial use if you are running on our cluster machines
 - Version 1.0.3
 - Latest version is 2.0.5

Setup SmartGit 1.0.3



Accept the license

Setup SmartGit 1.0.3



The screenshot shows the 'Setup SmartGit' window with the 'Type of Usage' step selected in the left sidebar. The main area displays three radio button options for project usage. The third option, 'Non-commercial use only (all features, but no support)', is selected and highlighted with a blue arrow pointing to it from the bottom left. The arrow is labeled 'Mark as non-commercial'. Below the selected option is a confirmation text: 'You confirm that you will use SmartGit solely for non-commercial purposes.' At the bottom of the window are four buttons: '< Back', 'Next >', 'Finish', and 'Exit'.

Steps

- License Agreement
- > Type of Usage
- Git Executable
- SSH Client
- User Information
- github.com
- Start!

Type of Usage

Choose for what types of projects you will use SmartGit.

☐ Free SmartGit evaluation for commercial use
You may try SmartGit free of charge for 30 days.

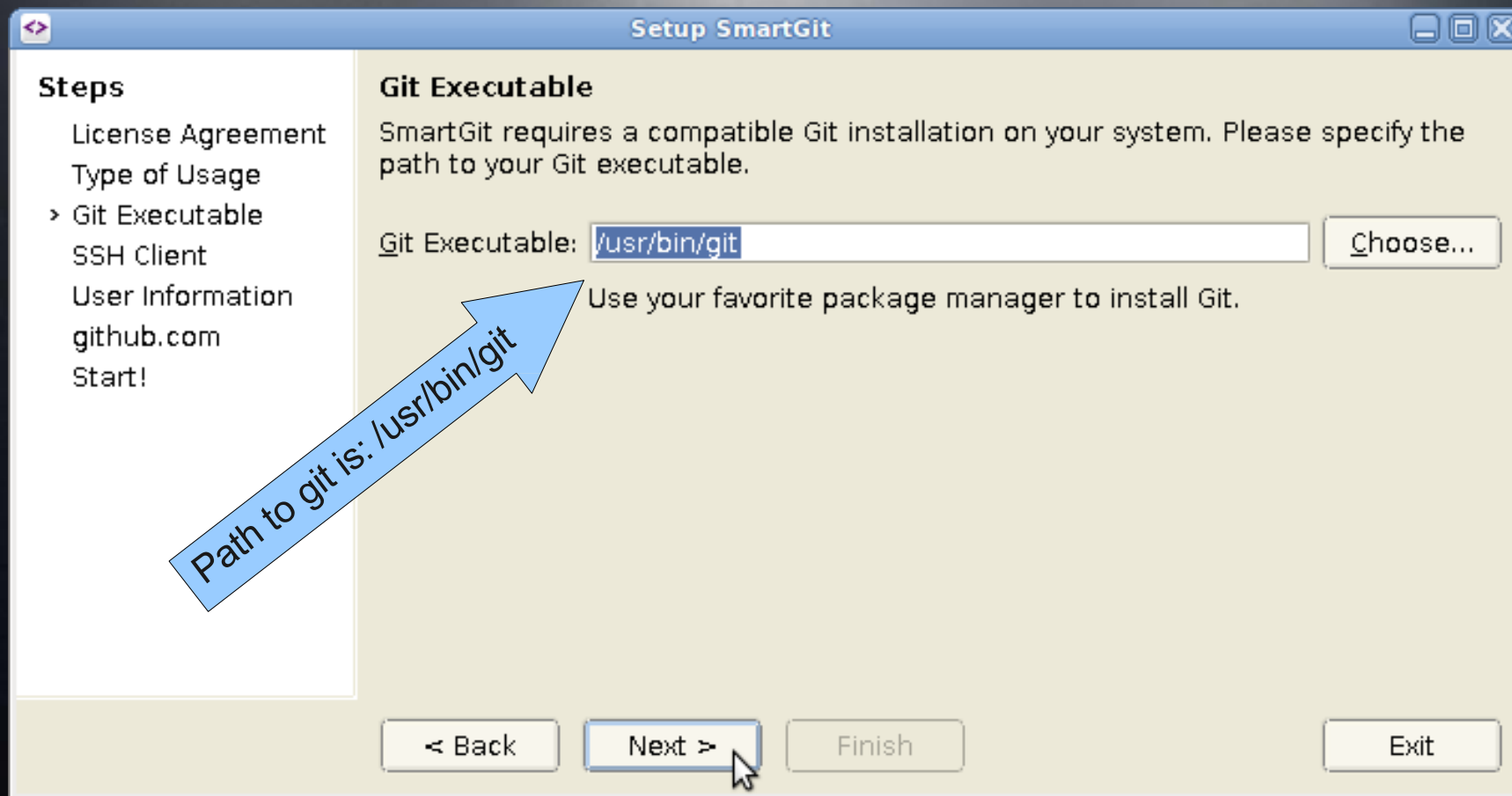
☐ Registered user, commercial use (support) Purchase
You have purchased a SmartGit license and are eligible to use SmartGit for both commercial and non-commercial purposes.
License File: Choose...

☒ Non-commercial use only (all features, but no support)
You confirm that you will use SmartGit solely for non-commercial purposes.

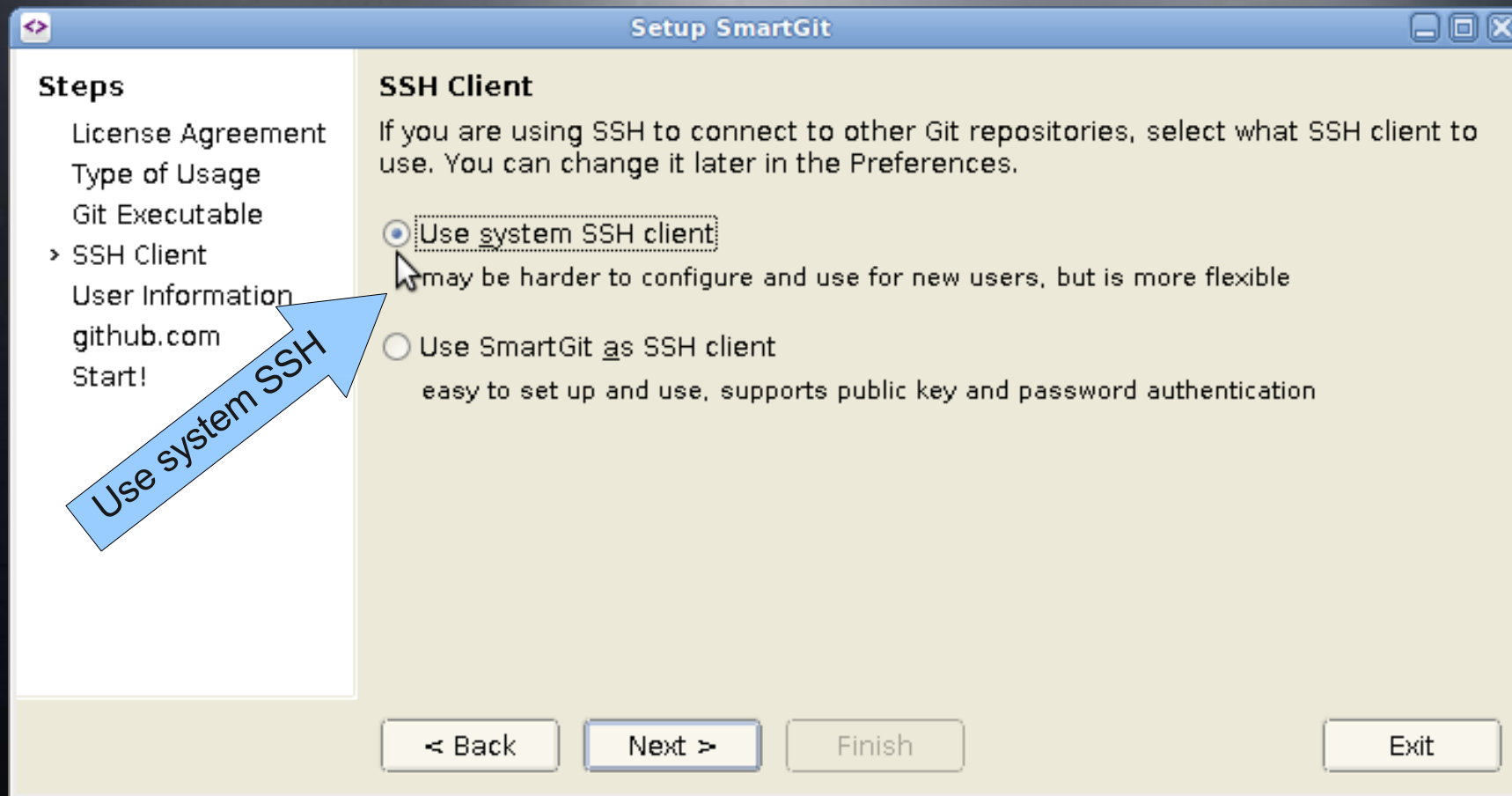
< Back Next > Finish Exit

Mark as non-commercial

Setup SmartGit 1.0.3



Setup SmartGit 1.0.3



Setup SmartGit 1.0.3

Setup SmartGit

Steps

- License Agreement
- Type of Usage
- Git Executable
- SSH Client
- > User Information
- github.com
- Start!

User Information

User name and e-mail will be stored in your commits. Below you can configure your default values which are stored in ~/.gitconfig. You can override them in each project by editing <project>/.git/config.

User Name:

E-Mail:

< Back Next > Finish Exit

Enter your username/email

Setup SmartGit 1.0.3

The screenshot shows the 'Setup SmartGit' window. On the left, a 'Steps' sidebar lists: License Agreement, Type of Usage, Git Executable, SSH Client, User Information, > github.com (selected), and Start!. The main area is titled 'github.com' and contains a checkbox labeled 'I have a github account'. Below this are input fields for 'User Name:' and 'API Token:', with a note: 'Take this value from your github 'Account Settings' page.' There are buttons for 'Create Account...' and 'Login at Github...'. At the bottom, there are navigation buttons: '< Back', 'Next >' (with a mouse cursor), 'Finish', and 'Exit'.

Steps

- License Agreement
- Type of Usage
- Git Executable
- SSH Client
- User Information
- > github.com
- Start!

github.com

☐ I have a github account

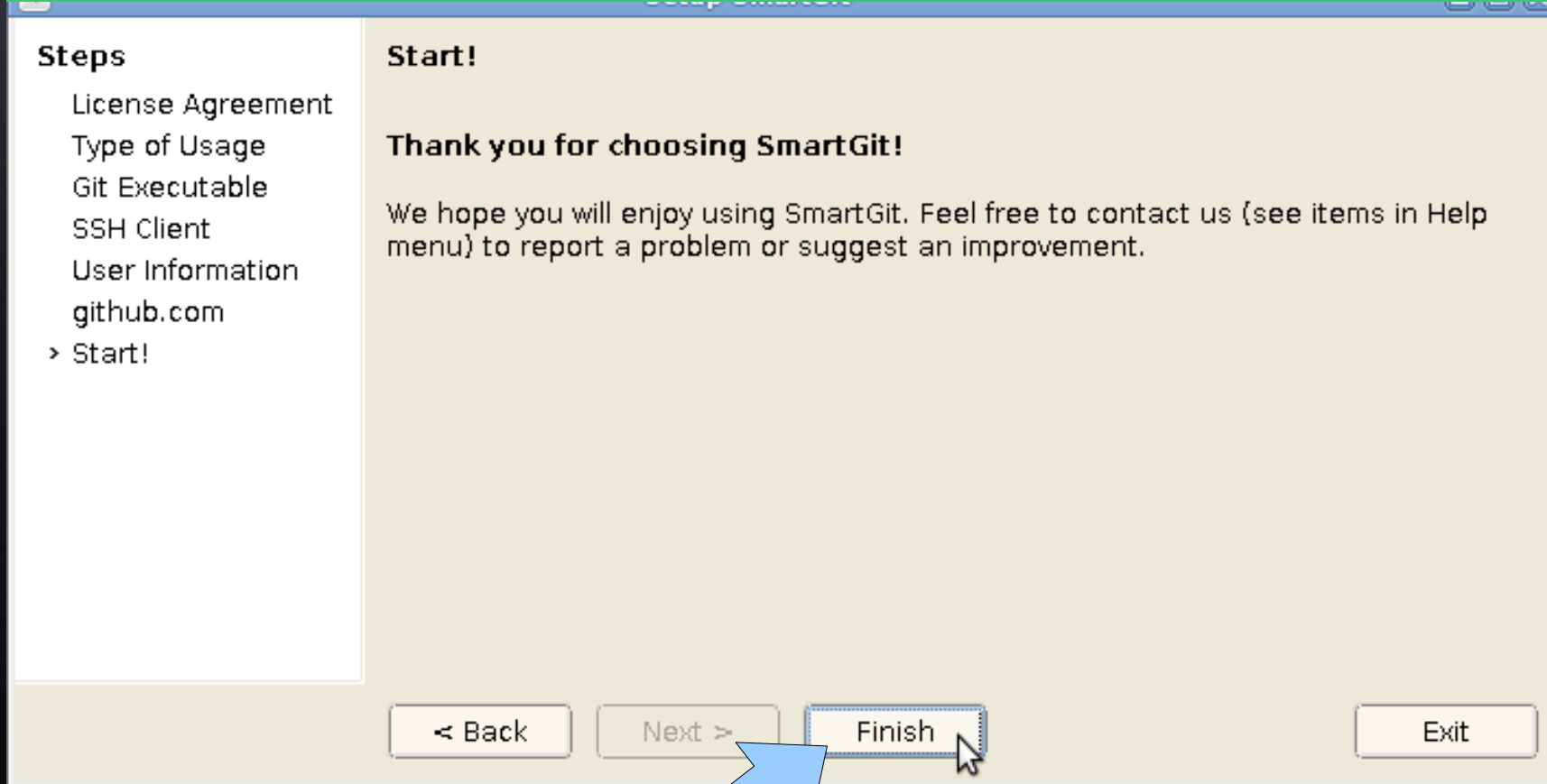
User Name:

API Token:

Take this value from your github 'Account Settings' page.

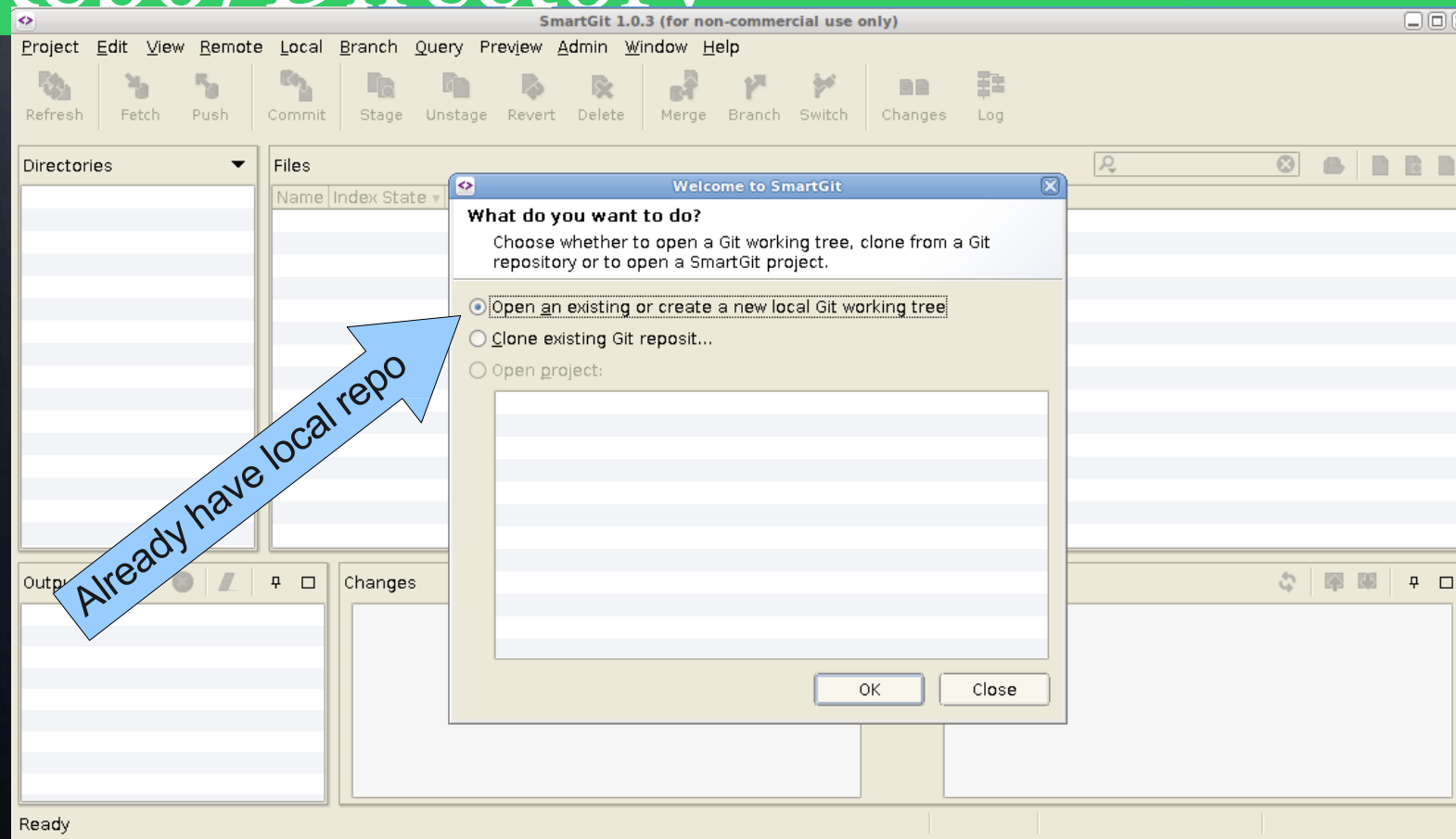
Optionally add github details

Open Existing Local Repo/Directory



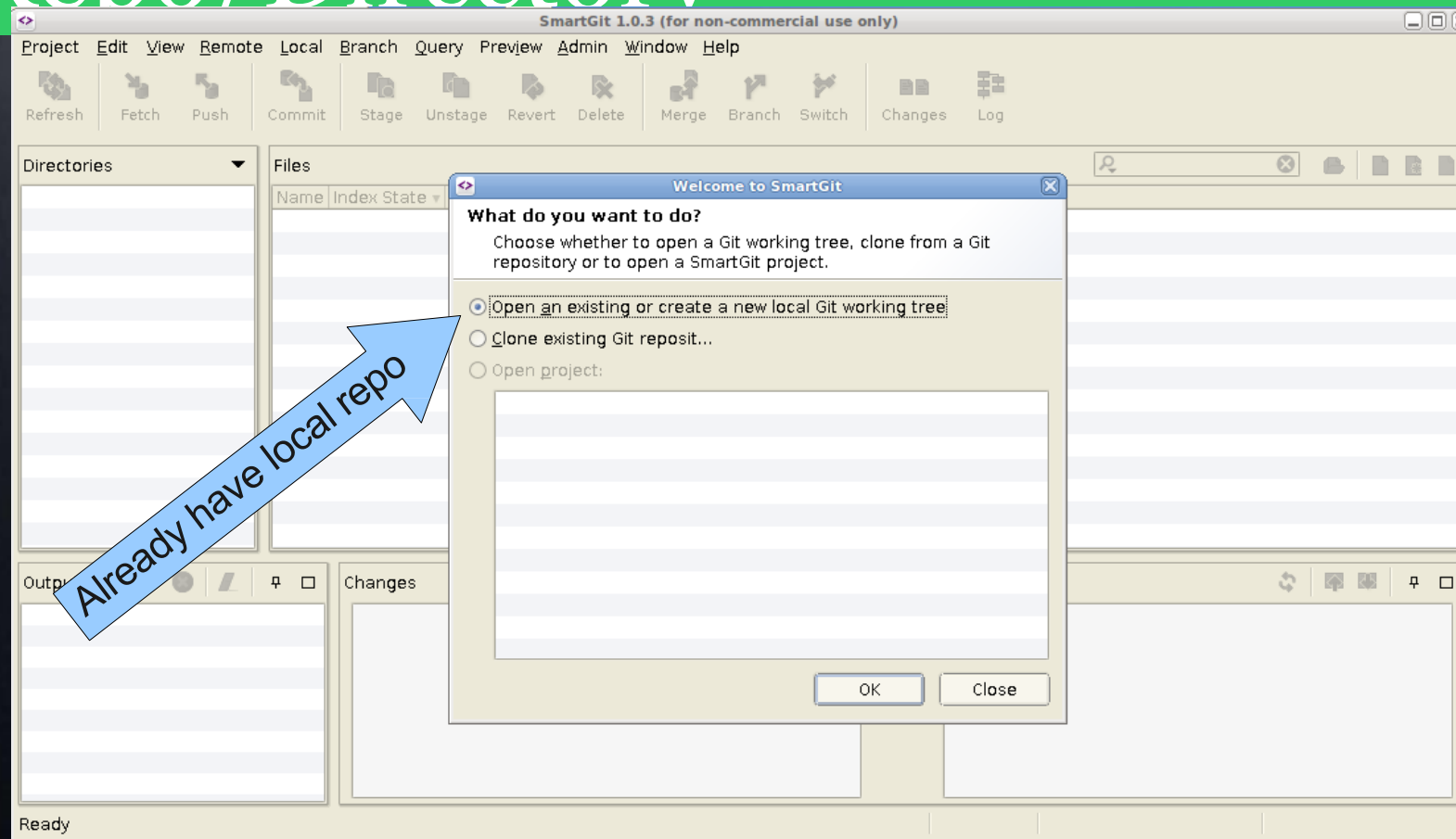
September 19, 2011

Open Existing Local Repo/Directory

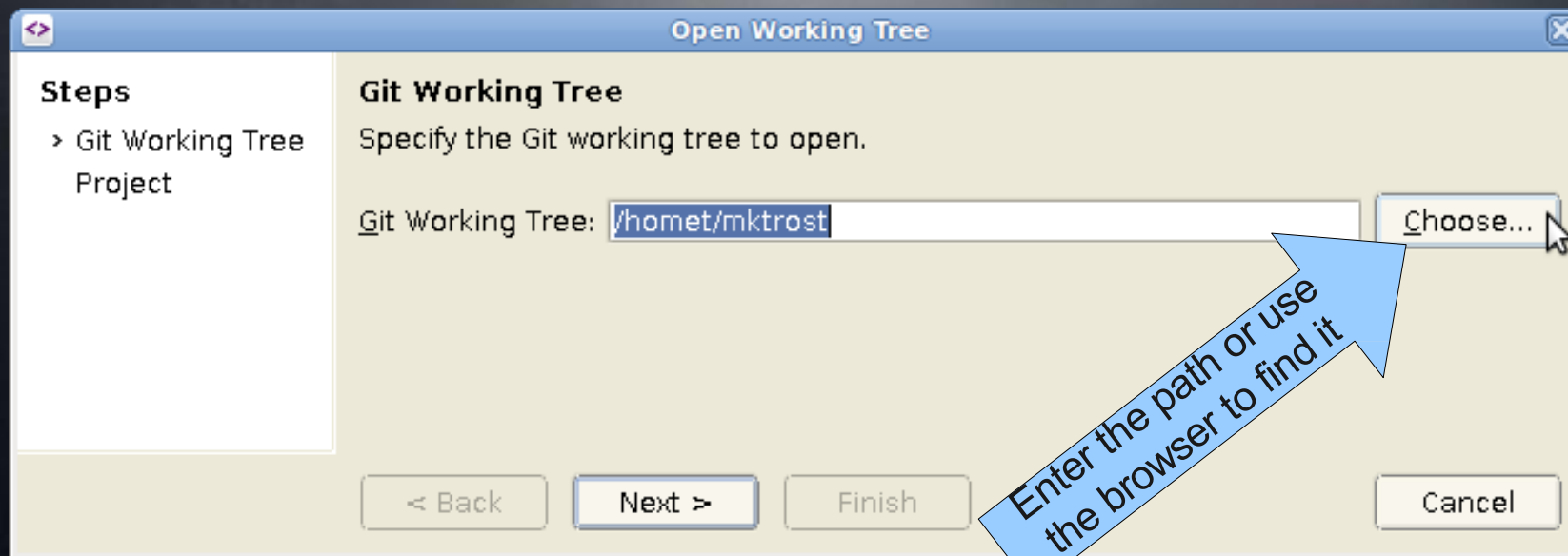


June 19, 2011

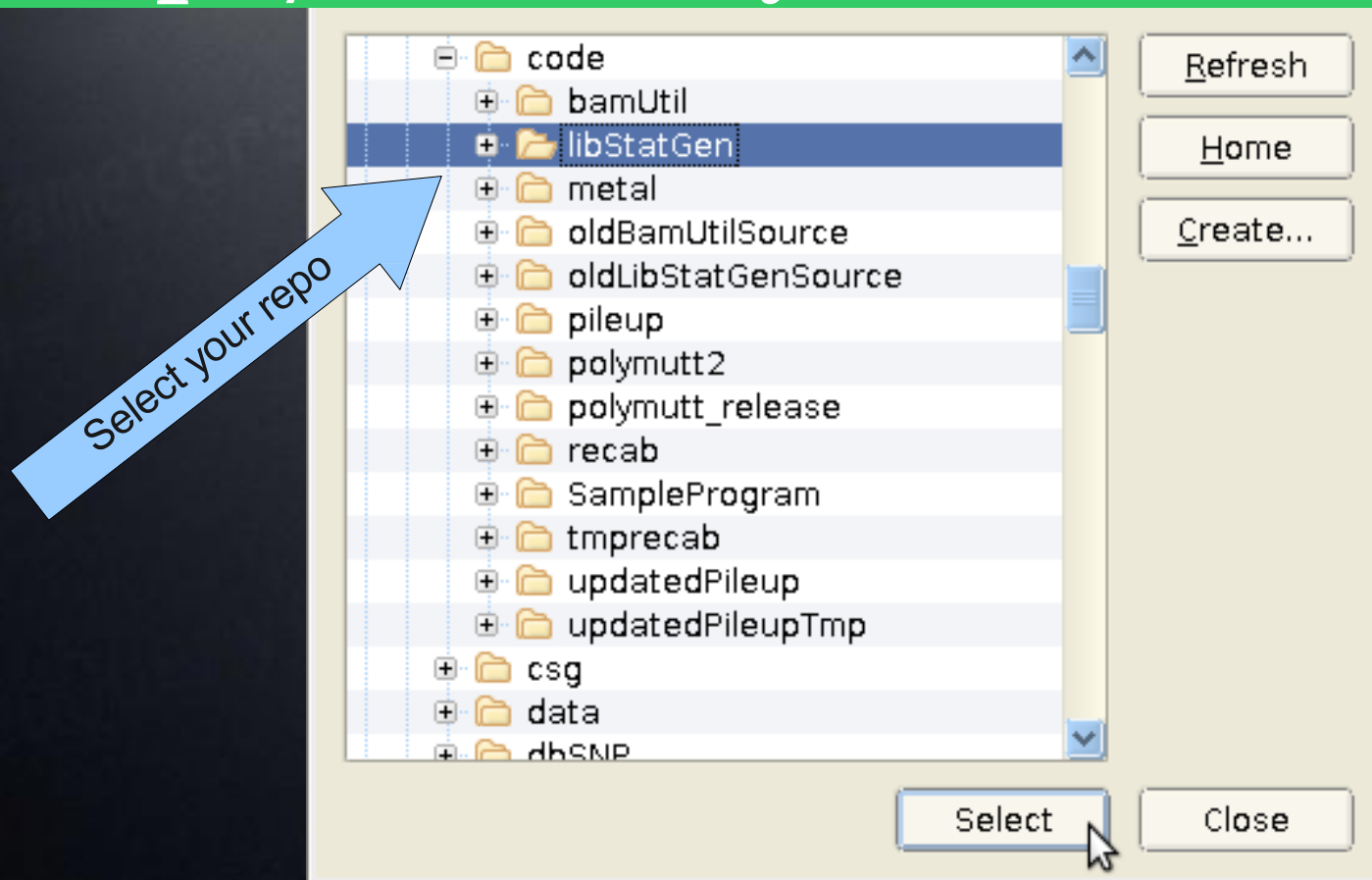
Open Existing Local Repo/Directory



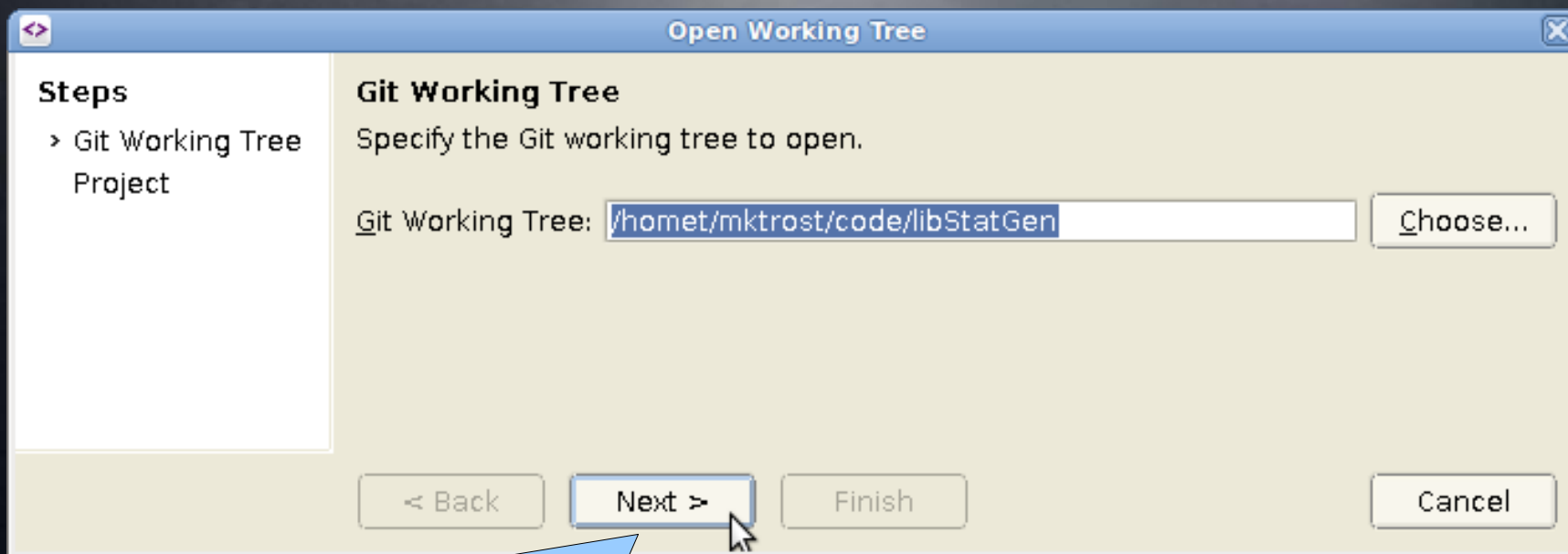
Open Existing Local Repo/Directory



Open Existing Local Repo/Directory

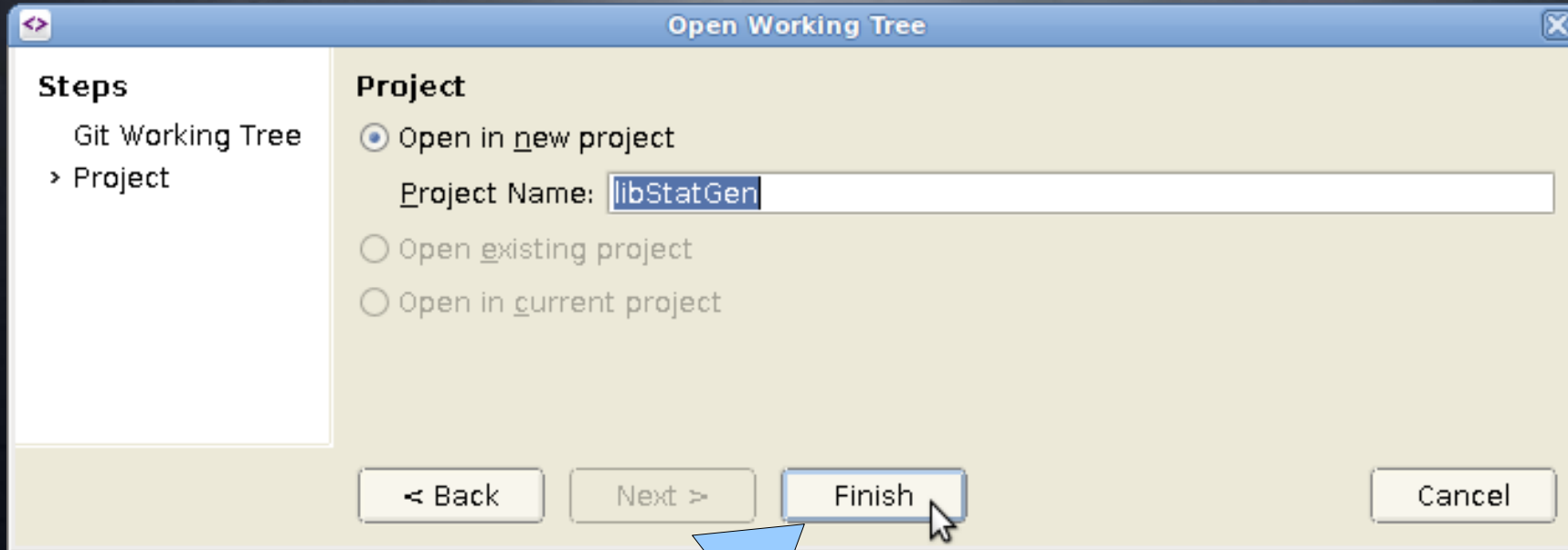


Open Existing Local Repo/Directory



Path specified, so click Next

Open Existing Local Repo/Directory



Use SmartGit

The screenshot shows the SmartGit 1.0.3 interface for a project named 'libStatGen'. The interface includes a menu bar, a toolbar with icons for Refresh, Fetch, Push, Commit, Stage, Unstage, Revert, Delete, Merge, Branch, Switch, Changes, and Log. On the left, a 'Directories' pane shows the project structure. The main 'Files' pane displays a table of files with columns for Name, Index State, Working Tree State, and Relative Directory. Callouts point to specific features: 'Show files from subdirectories' points to a folder icon; 'Show untracked files' points to a file icon; 'Show unchanged files' points to a file icon; 'Show ignored (.gitignore) files' points to a file icon; 'Modified but unstaged File' points to the 'Cigar.h' file; 'Staged File' points to 'Cigar.cpp'; 'Unchanged Files' points to '.gitignore', 'Doxyfile', 'Makefile', 'README.txt', 'Makefile.base', and 'Makefile.common'; 'Diffs for currently selected file' points to the 'Changes for Cigar.h' diff view at the bottom. The diff view shows changes between the Head and Working Tree versions of 'Cigar.h', highlighting a change from '2010' to '2010-2011' in the copyright notice. The status bar at the bottom indicates 'Ready' and 'Up-to-date'.

libStatGen - SmartGit 1.0.3 (for non-commercial use only)

Project Edit View Remote Local Branch Query Preview Admin Window Help

Refresh Fetch Push Commit Stage Unstage Revert Delete Merge Branch Switch Changes Log

Directories

- /home/mktrorst/cod
 - Makefiles
 - bam
 - copyrights
 - fastq
 - general
 - glf
 - include

Files

Name	Index State	Working Tree State	Relative Directory
Cigar.h	unchanged	modified	general
Cigar.cpp	modified	as-index	general
.gitignore	unchanged	unchanged	
Doxyfile	unchanged	unchanged	
Makefile	unchanged	unchanged	
README.txt	unchanged	unchanged	
Makefile.base	unchanged	unchanged	Makefiles
Makefile.common	unchanged	unchanged	Makefiles

File Filter

Changes for Cigar.h (Head vs. Working Tree)

```

/*
 * Copyright (C) 2010 Regents of the University of
 *
 * This program is free software: you can redistribute
 * it under the terms of the GNU General Public License
 * the Free Software Foundation, either version 3 of
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it v
 * but WITHOUT ANY WARRANTY; without even the implic
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPO
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU Genera
 * along with this program. If not, see <http://www
 */

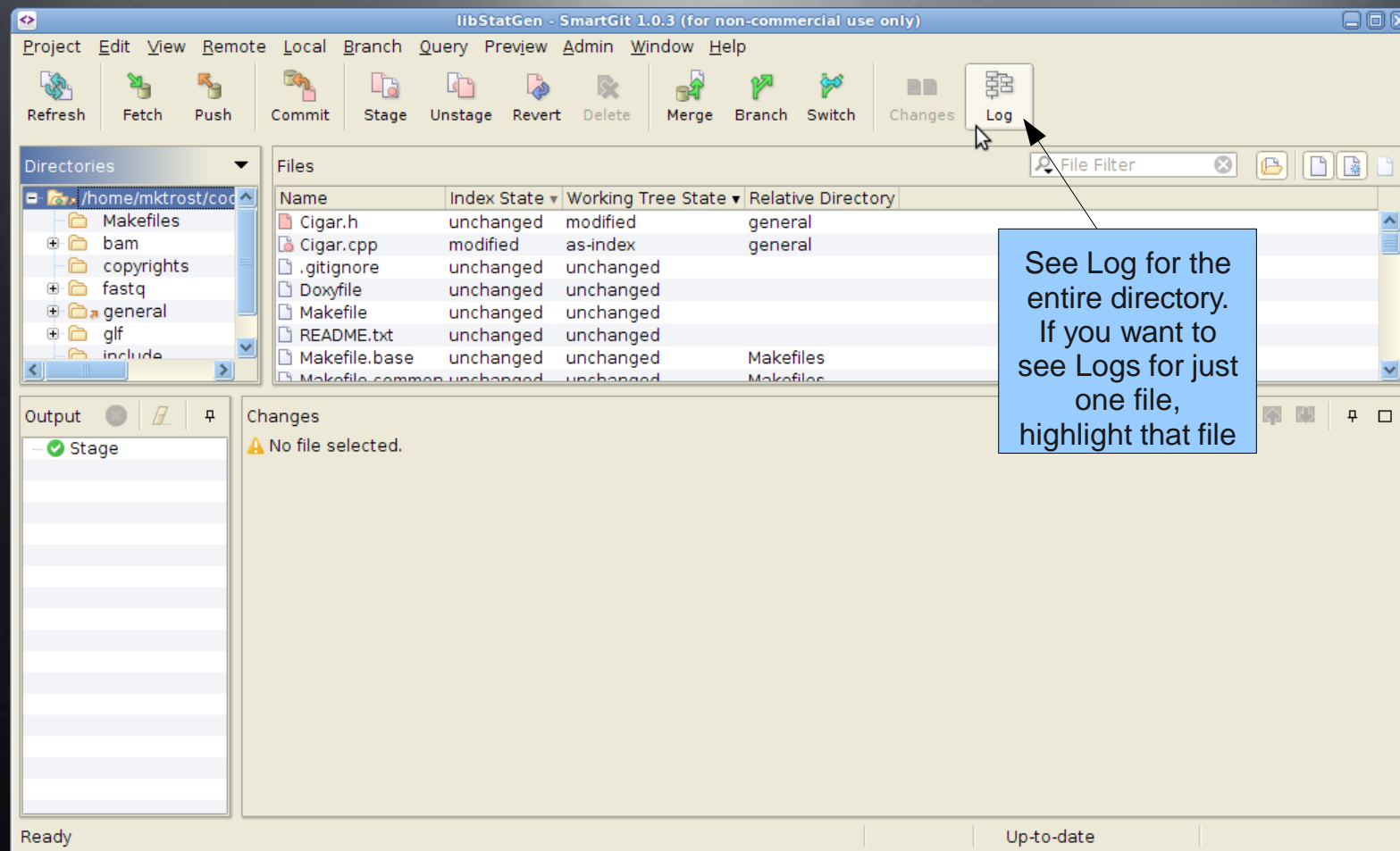
#ifdef _CIGAR_H
#define _CIGAR_H
  
```

Stage

Diff for currently selected file

Ready Up-to-date

Logs



Logs

The screenshot shows a version control interface with several panels and annotations:

- Commits Panel:** A list of commits with columns for Message, Commit Date, and Author. The selected commit is "Update Makefiles to add wholep...".
- Message Panel:** Displays the commit message: "Update Makefiles to add wholepackage option for releasing tools."
- Files Panel:** Shows a list of files, including "Makefile.tool" and "Makefile.wholepackage".
- Changes of Makefile.tool Panel:** Displays the diff for the selected file, showing changes to the "package" target.
- Directories Panel:** Shows a list of directories, including "Makefiles".

Annotations with arrows pointing to specific parts of the interface:

- Change the currently viewed Branch:** Points to the "Root: master" dropdown.
- Branches at this commit:** Points to the "alignCigar", "master", and "origin/master" branches in the commit list.
- Commits for this repo:** Points to the commit list.
- Selected commit's message:** Points to the commit message in the Message panel.
- Selected File's Diffs for selected commit:** Points to the diff view for "Makefile.tool".
- Files modified by selected commit:** Points to the "Makefile.wholepackage" file in the Files panel.

3
2
1
5
,
2
0
1
1

File Log

Log for bam/SamRecord.h

File Edit View Query Preview Window

Commits

Root: <Current>

Message

Message	Commit Date	Author
SamRecord add an accessor to get the reference.	05/31/2011 03:33 PM	mktrost
Update SamRecord::addTag & addIntTag to check to see if the tag is already there and if so update the existing one to the new value.	05/31/2011 09:54 AM	mktrost
Update SamFile to have method to check if it is open, Update SamRecord...	05/23/2011 05:20 PM	mktrost
Add getTagsString method to SamRecord.	05/18/2011 02:08 PM	mktrost
Add the ability to remove a set of tags from a SamRecord.cpp. Added to ...	04/04/2011 06:44 PM	mktrost
Cleanup/Fix SAM/BAM tags logic and add ability to revert BAM files to previ...	03/30/2011 07:09 PM	mktrost
SamRecord - add ability to remove a specified tag.	02/25/2011 11:30 AM	mktrost
Add handling of the reference to the SAM Library to allow the conversion ...	12/06/2010 05:45 PM	mktrost
Update comments in SamRecord.h for Doxygen.	11/24/2010 01:34 PM	mktrost
Add some code for bam	10/20/2010 07:39 PM	mktrost

Selected commit's message

Selected File's Diffs for selected commit

Directories

- bam
- test
 - expected

Files

Name	Modification	Relative
SamRecord.cpp	Modified	bam
SamRecord.h	Modified	bam
test.sh	Modified	bam/test
ReadFiles.cpp	Modified	bam/test
addedTagToSam.sam	Added	bam/test
addedTagToSam.bam	Added	bam/test
addedTagToBam.sam	Added	bam/test
addedTagToBam.bam	Added	bam/test

All files modified by selected commit

Changes of SamRecord.h

```
/// Add the specified integer tag to the
/// handles switching between SAM/BAM fo
/// determining the type for BAM format.
/// \param tag two character tag to be a
/// \param value value for the specified
/// \return true if the tag was successf
bool addIntTag(const char* tag, int32_t

/// Add the specified tag to the record.
/// switching between SAM/BAM formats w
/// \param tag two character tag to be a
/// \param vtype vtype of the specified
/// \param value value for the specified
/// \return true if the tag was successf
bool addTag(const char* tag, char vtype,

//@}

////////////////////////////////////
// ...
```

Message

Update SamRecord::addTag & addIntTag to check to see if the tag is already there and if so update the existing one to the new value.

Details

```
/// handles switching between SAM/BAM fo
/// determining the type for BAM format
/// this code will replace it if the spe
/// \param tag two character tag to be a
/// \param value value for the specified
/// \return true if the tag was successf
bool addIntTag(const char* tag, int32_t

/// Add the specified tag to the record.
/// switching between SAM/BAM formats w
/// is already there this code will repl
/// is different.
/// \param tag two character tag to be a
/// \param vtype vtype of the specified
/// \param value value as a string for t
/// \return true if the tag was successf
bool addTag(const char* tag, char vtype,

//@}
```


Praktek

- Buat akun github
- Masukkan sebuah file txt di sana
- Push dengan sebuah commit

Sublime Text 3

Install Plugins

- Buka <https://packagecontrol.io/installation>
- Copy yang ada di dalam web site tersebut
- Buka sublime text 3
- Tekan ctrl + `
- Paste kan yang sudah dicopy
- Setelah itu install emmet

Composer

Composer?

- Merupakan dependency management system
- Terdapat project php yang membutuhkan library. Misalnya, library buat eksport data ke Excel yaitu PHPExcel.
- Library-library tersebut butuh library lain. Dalam kasus ini, PHPExcel butuh library ext-xml
- Kasus seperti ini, namanya dependensi. Jadi, bisa disebut PHPExcel memiliki dependensi ext-xml.

Install composer di linux

- `sudo apt-get install curl php-cli php-mbstring git unzip`
- `curl -sS https://getcomposer.org/installer -o composer-setup.php`
- `sudo php composer-setup.php --install-dir=/usr/local/bin --filename=composer`

Tes dengan mengetikkan perintah

- composer