Assignment 1: Tools

Joe Lee

September 9, 2013

Team Q 06

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Name	Role	Major
Lee, Joe	Business Manager	CS

Team Q 06

Name	Role	Major
Lee, Joe	Business Manager	CS
Vemparala, Swapna	Project Manager	CS

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Wong, Amber	Risk Manager	CS

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Narad, Shivalik	Development Manager	CS
Phan, Nam	Development Manager	CS
Alcoran, Ryan	Test Manager	CS

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GitHub is

- Gratis for public projects
- Paid for non-public projects.

Github vs Others [1]

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Google Code

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Tigris

- Restricted to collaborative software development tools.

Using Git

on GitHub's servers

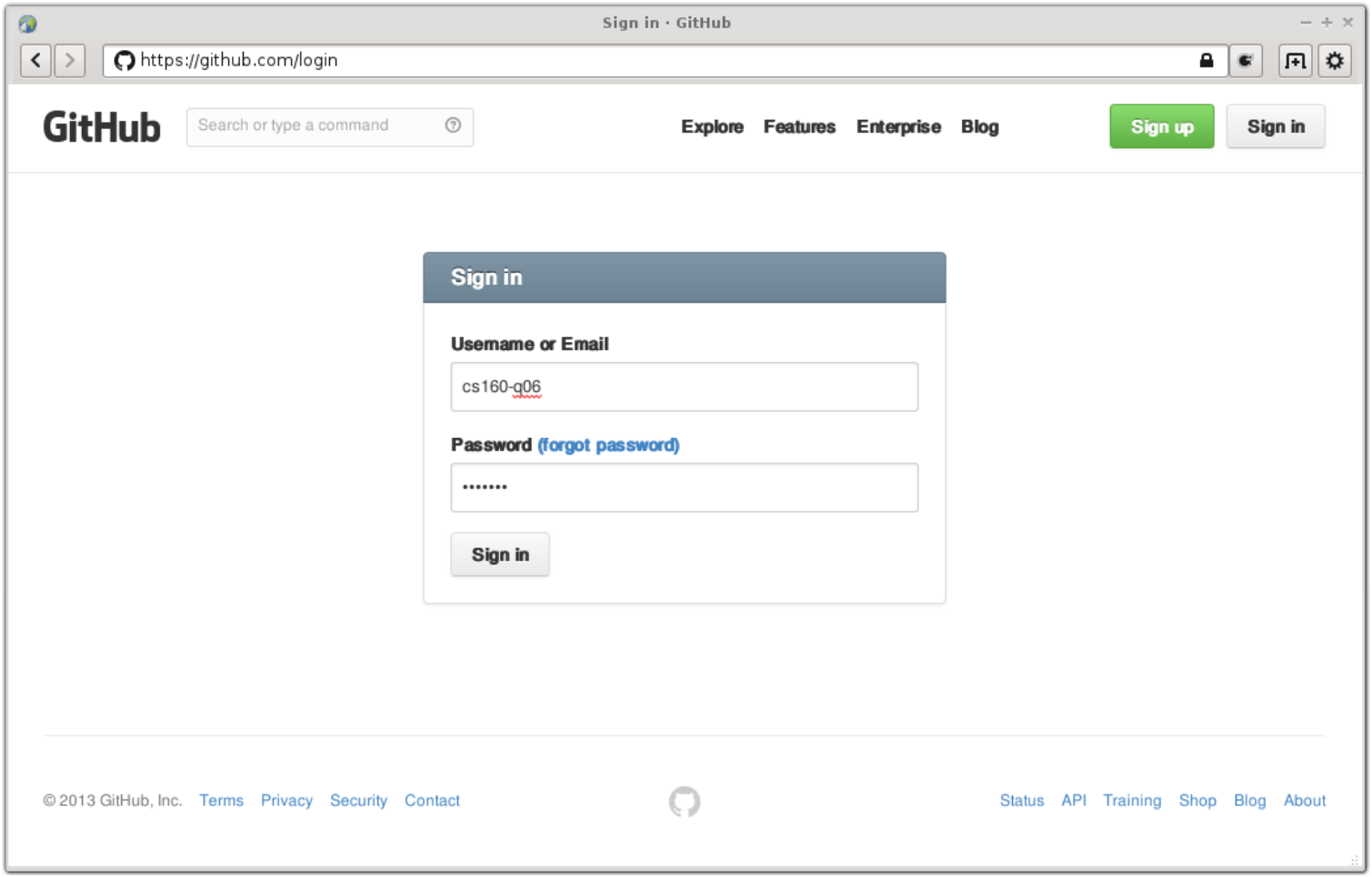


Figure : GitHub web site login page.

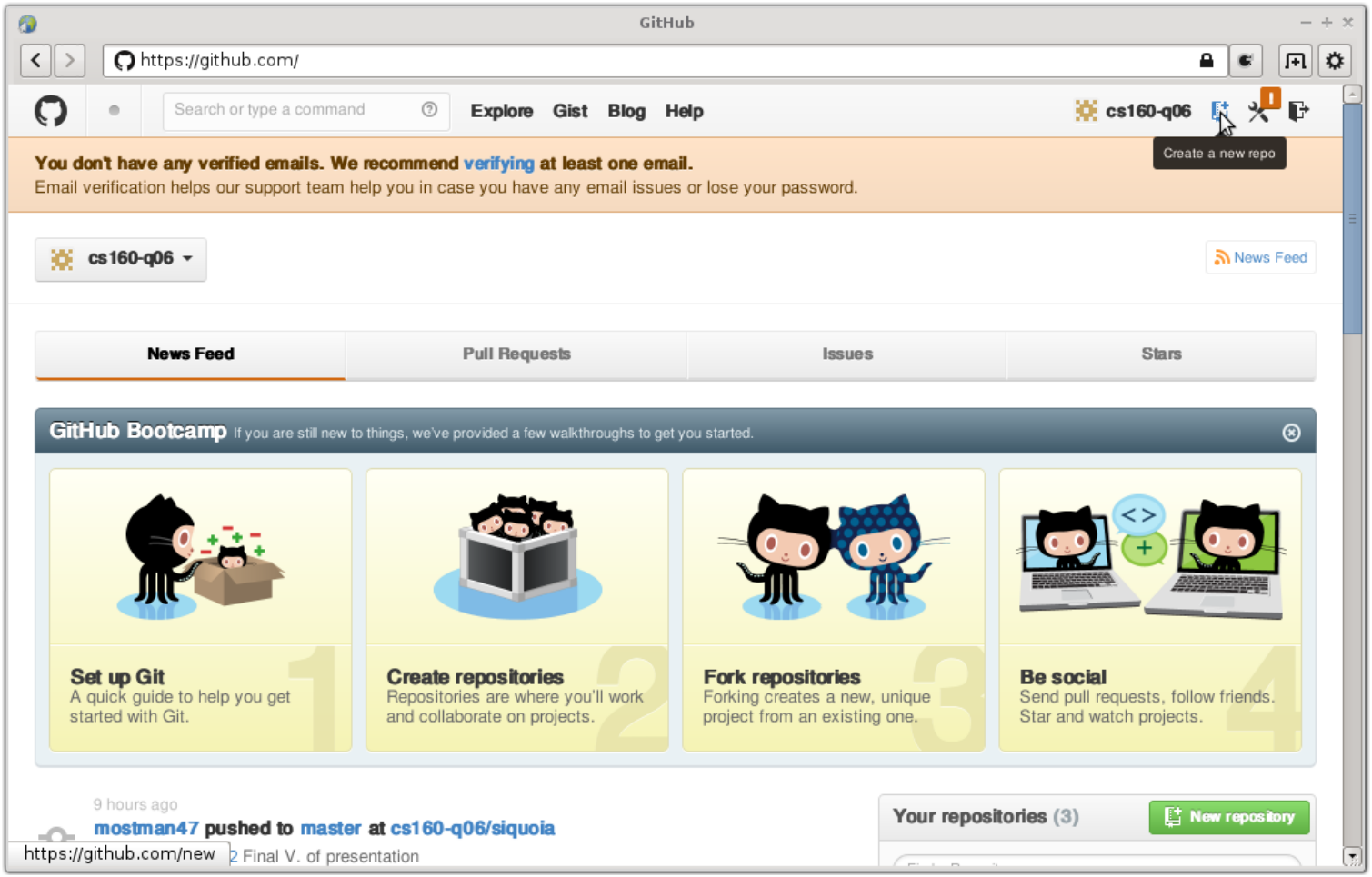


Figure : Click on the "Create a new repo" icon.

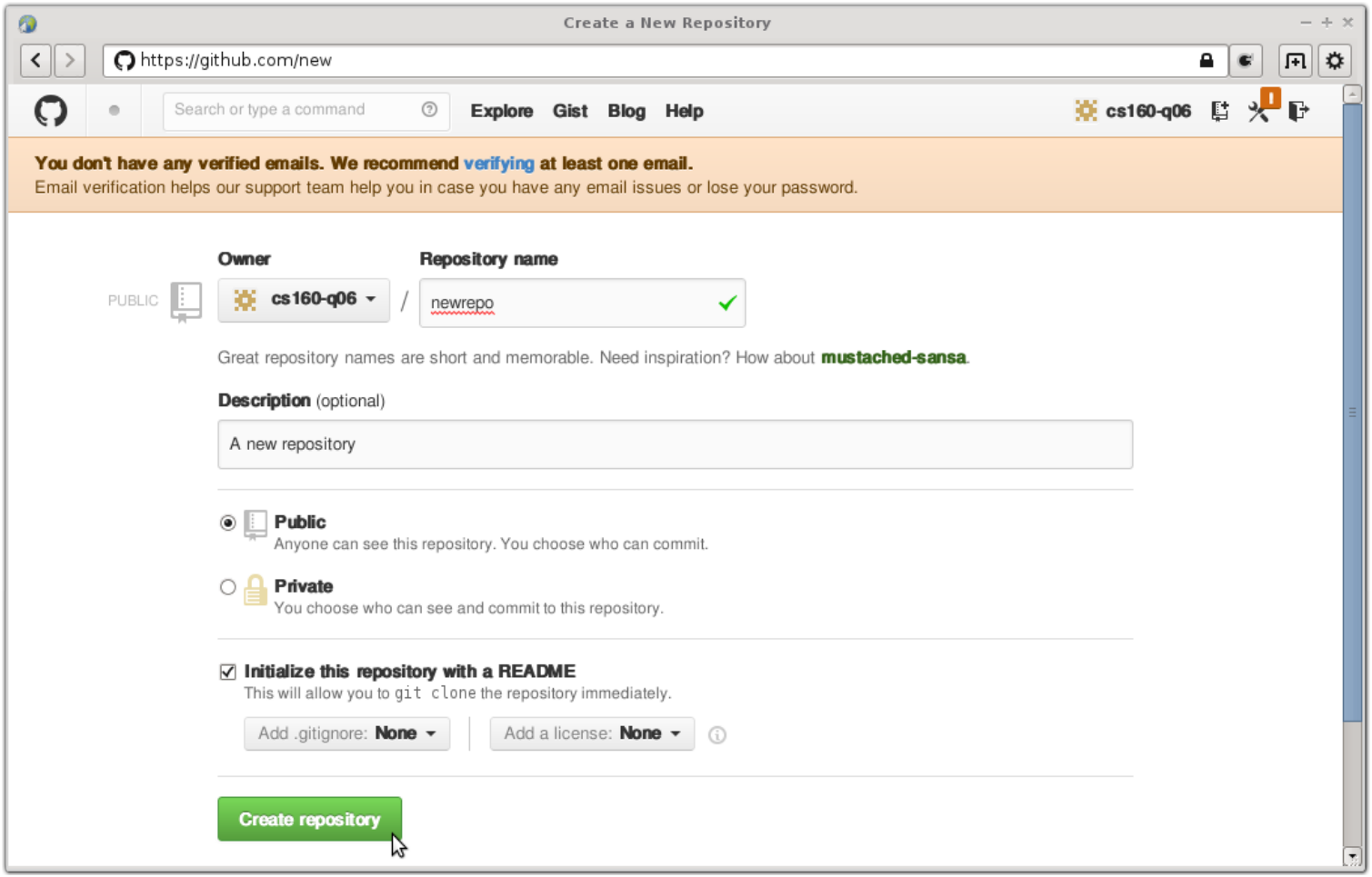


Figure : Name, describe, and initialize a new repo with a README file.

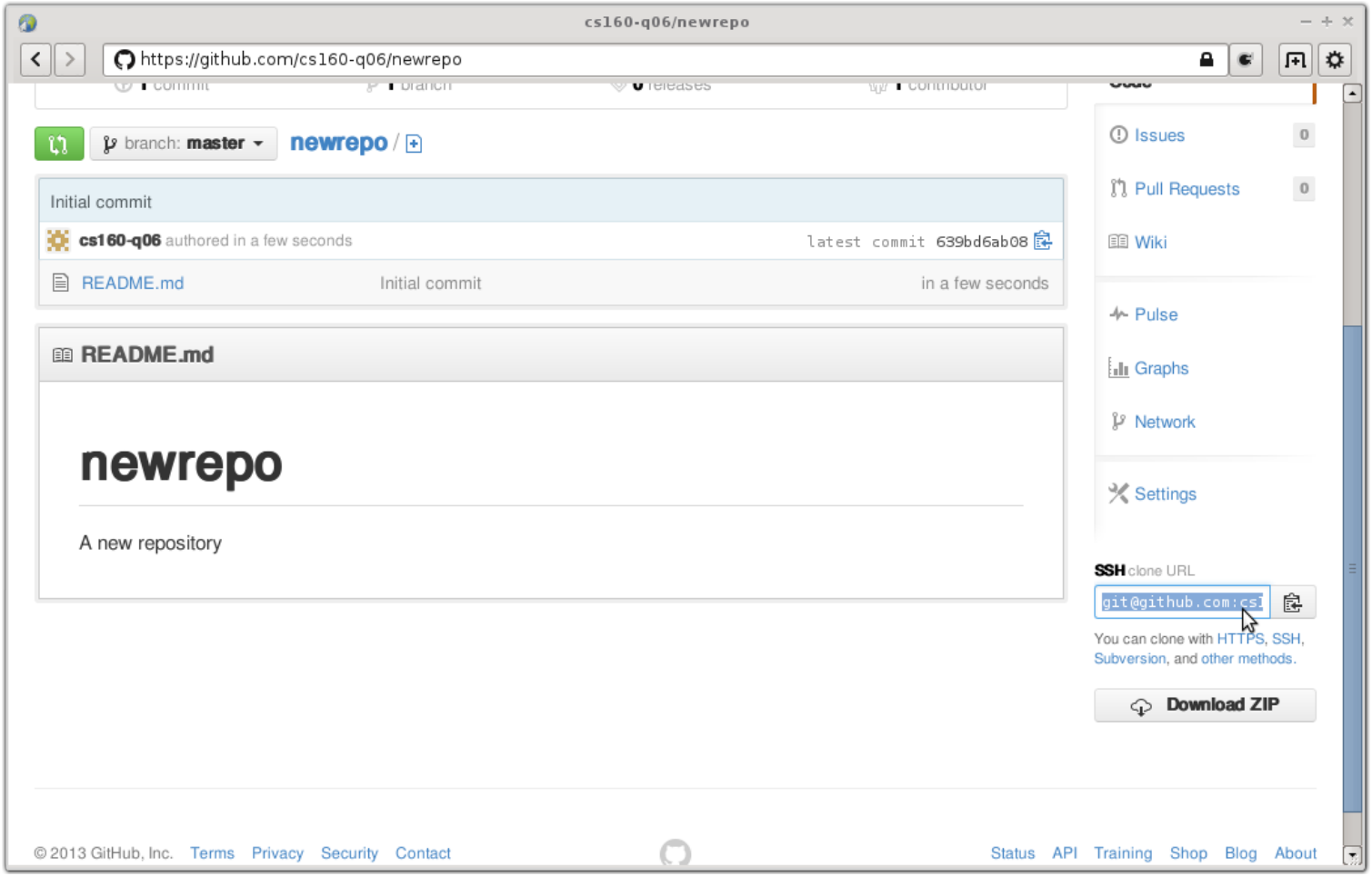


Figure : New repo named "newrepo" initialized. Copy the SSH address for the git repo.

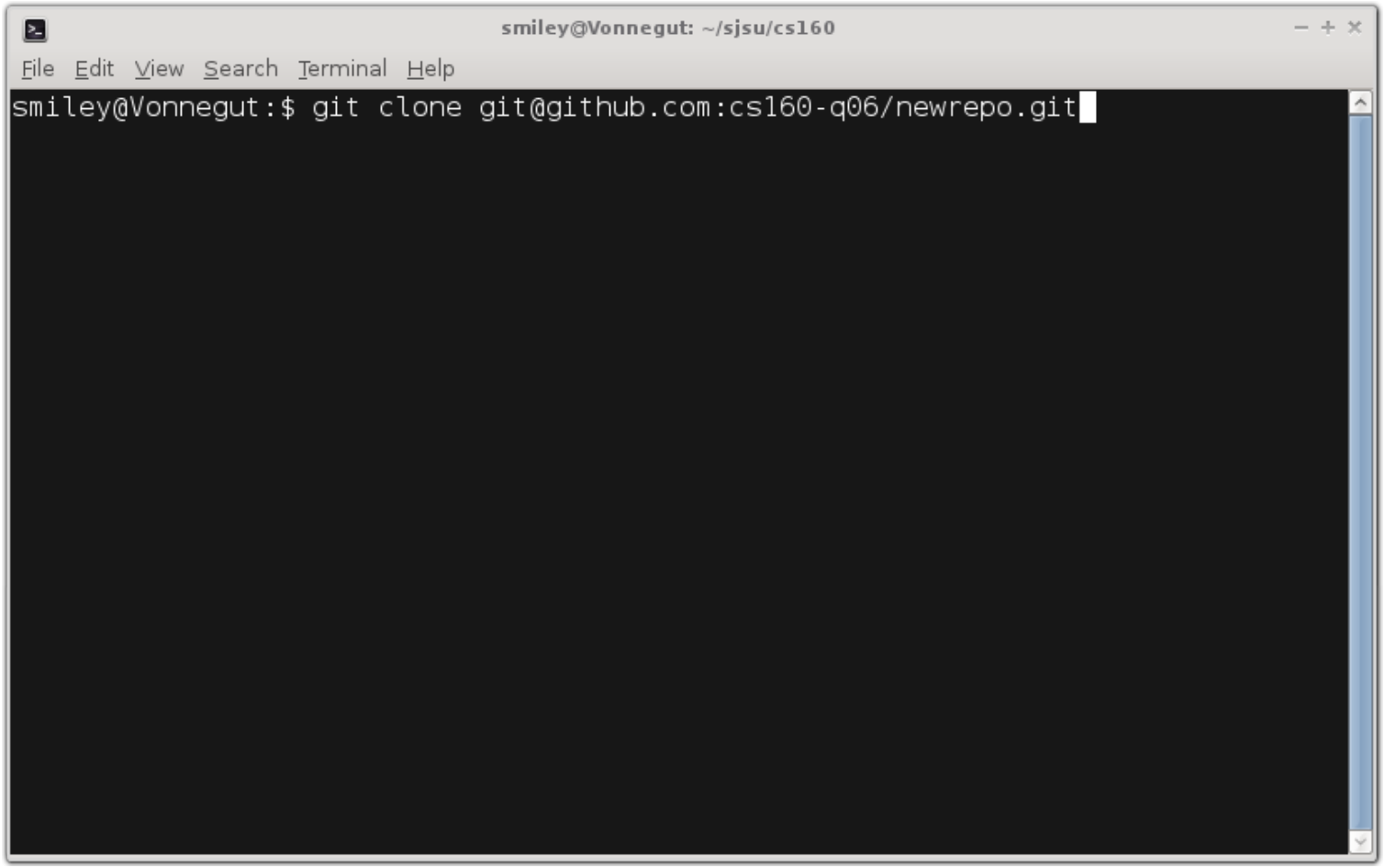


Figure : The command to clone the new repo at the address git@github.com:cs160-q06/newrepo.git.

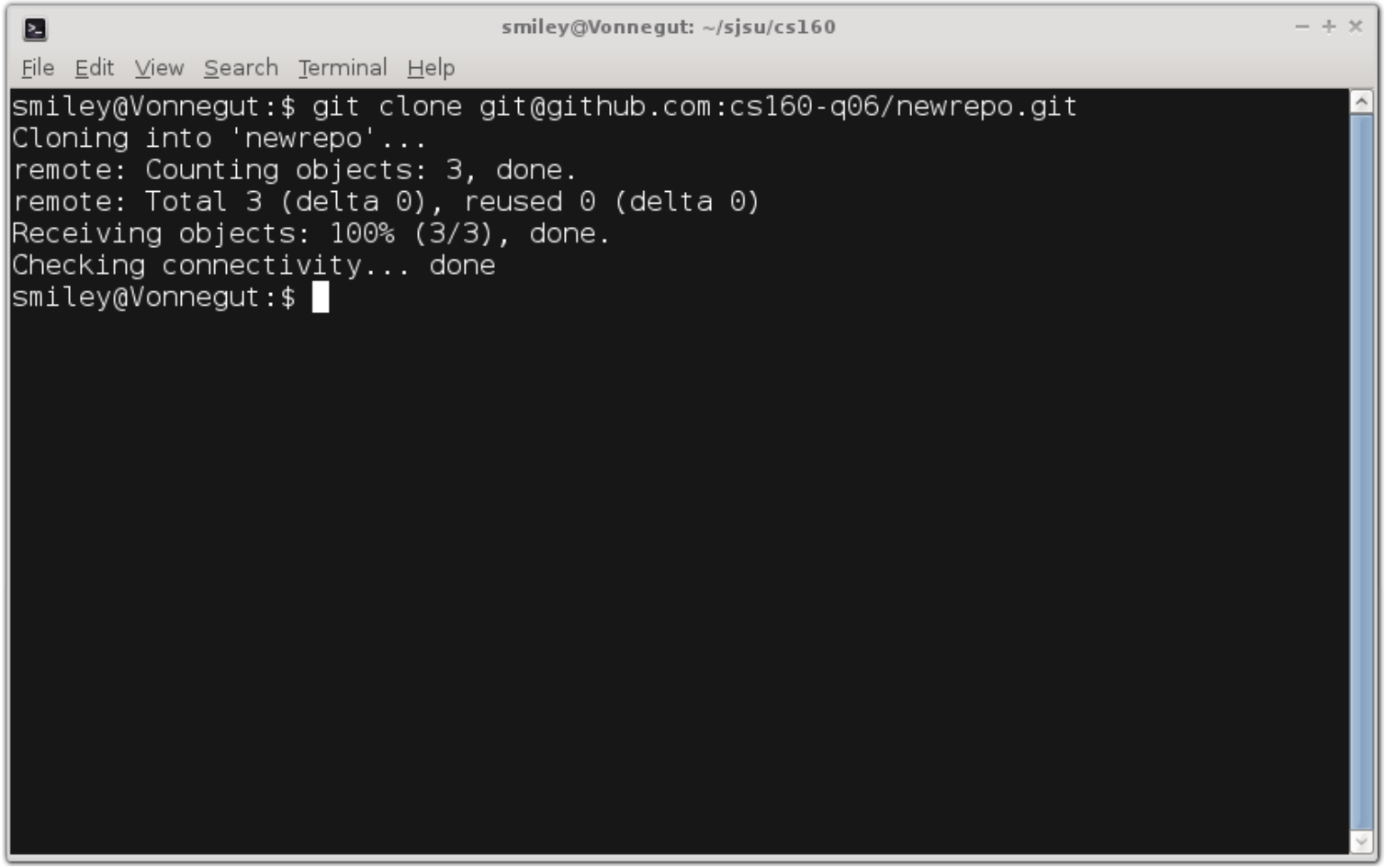


Figure : Cloned.

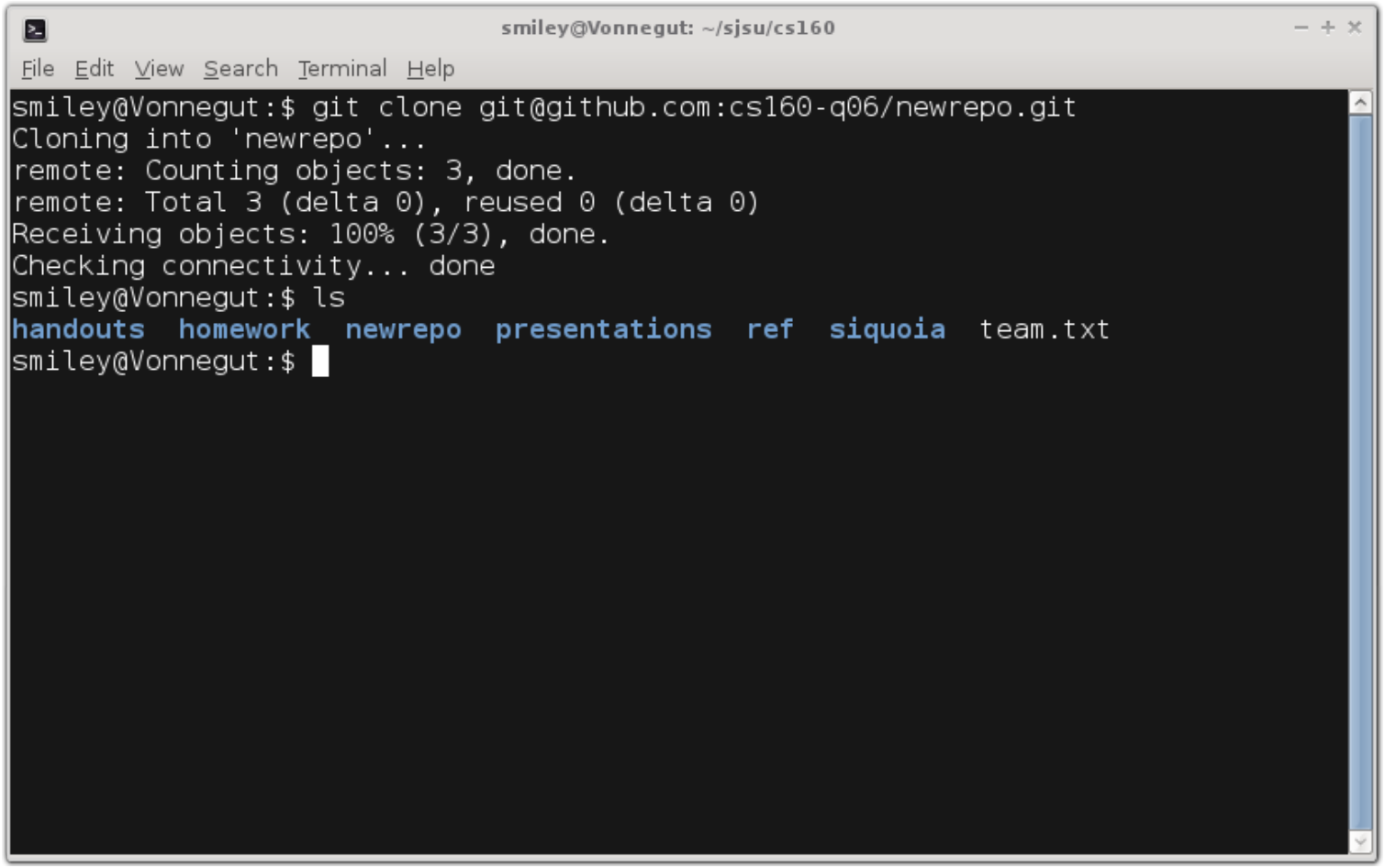


Figure : The cloned repo is in the directory named "newrepo".

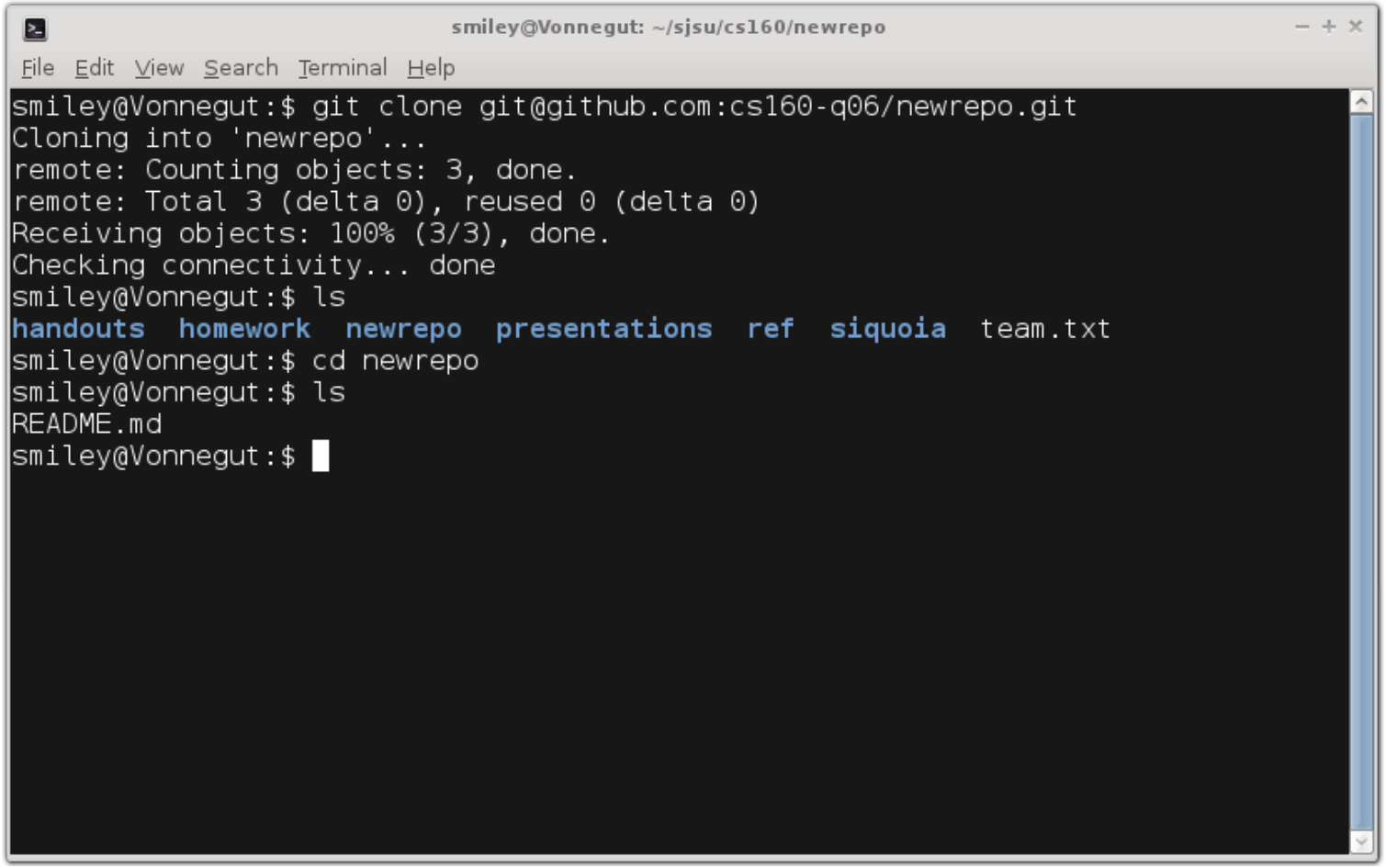


Figure : Enter the newrepo directory and list the files inside.

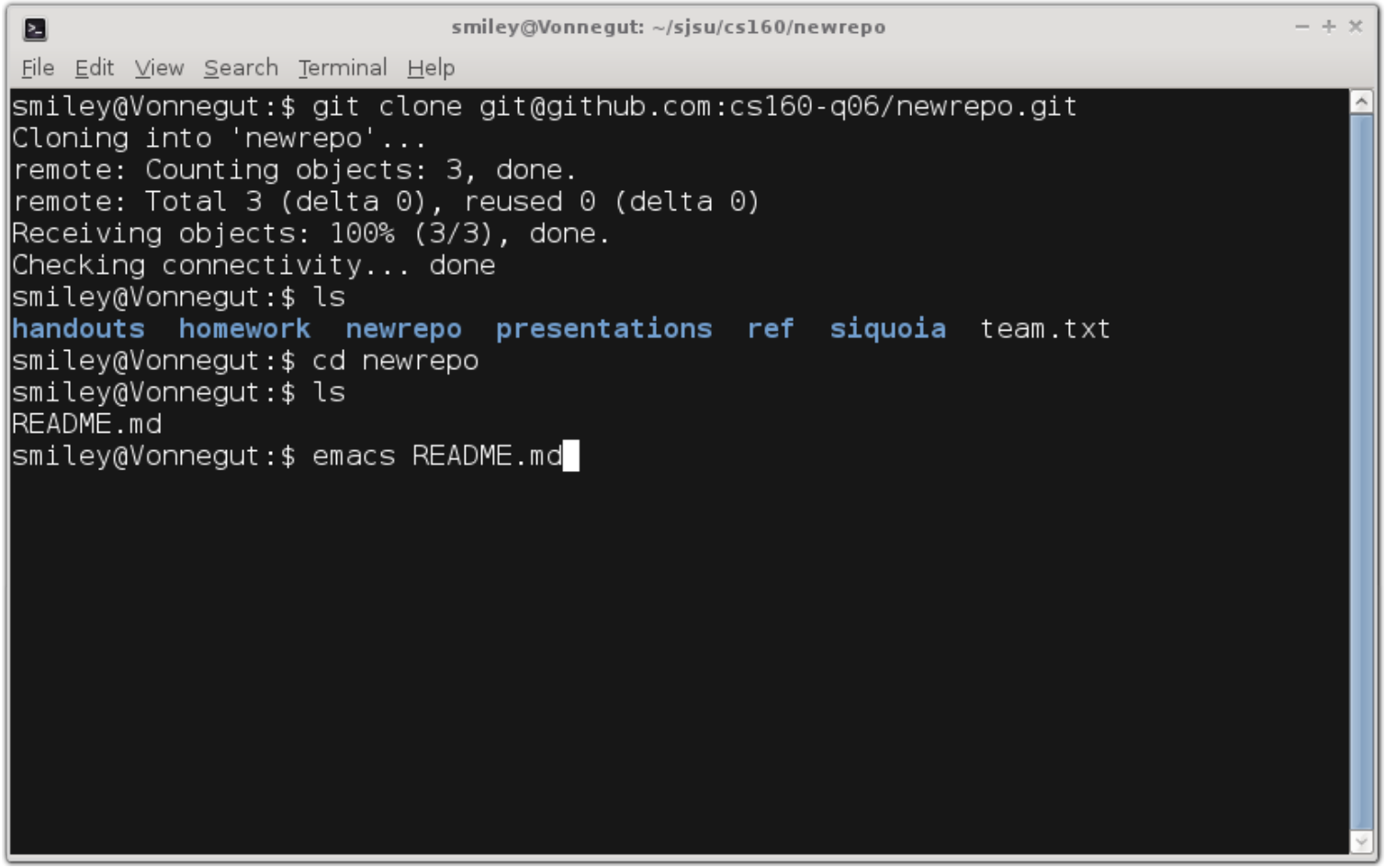
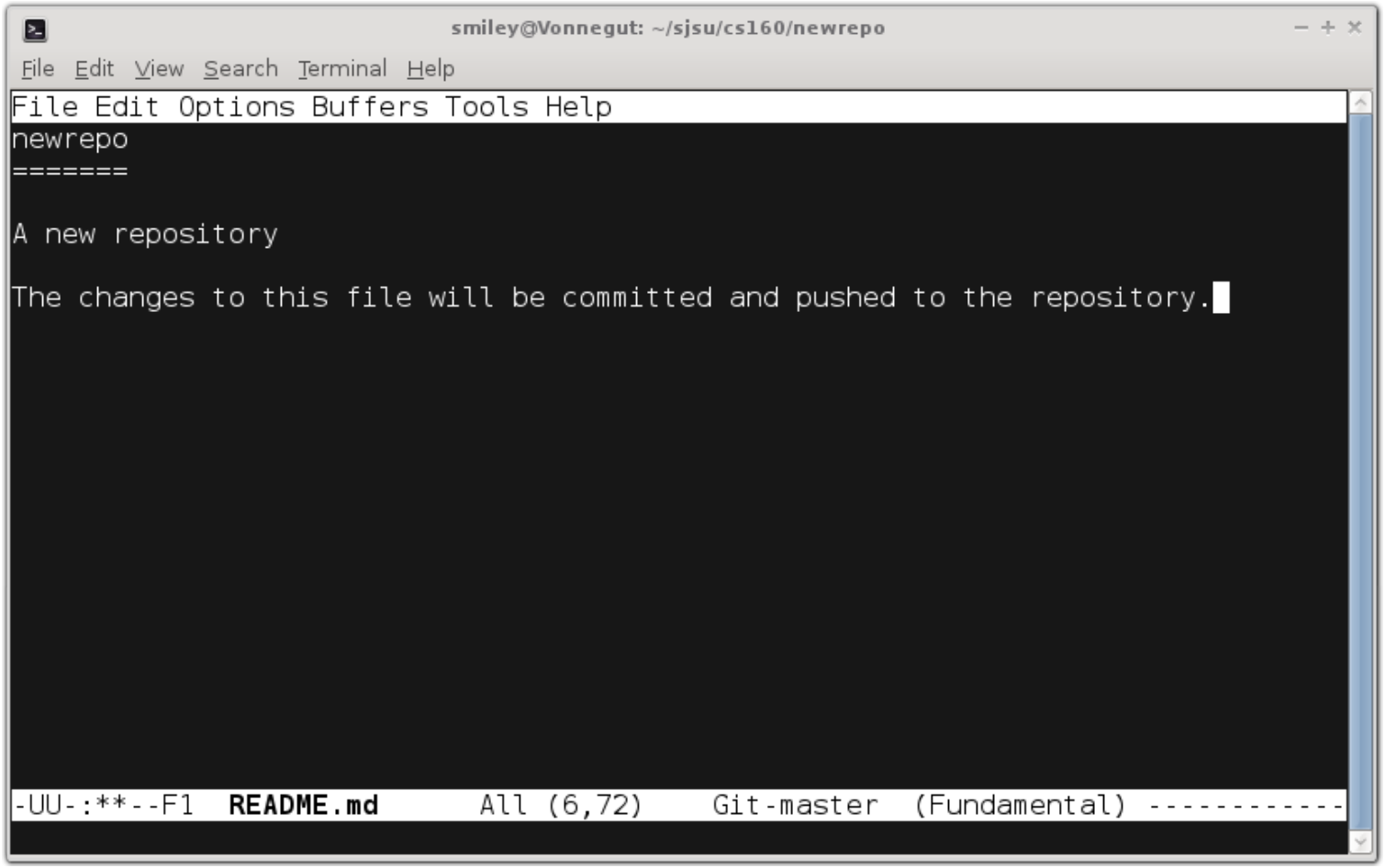


Figure : Edit a file in the repo.



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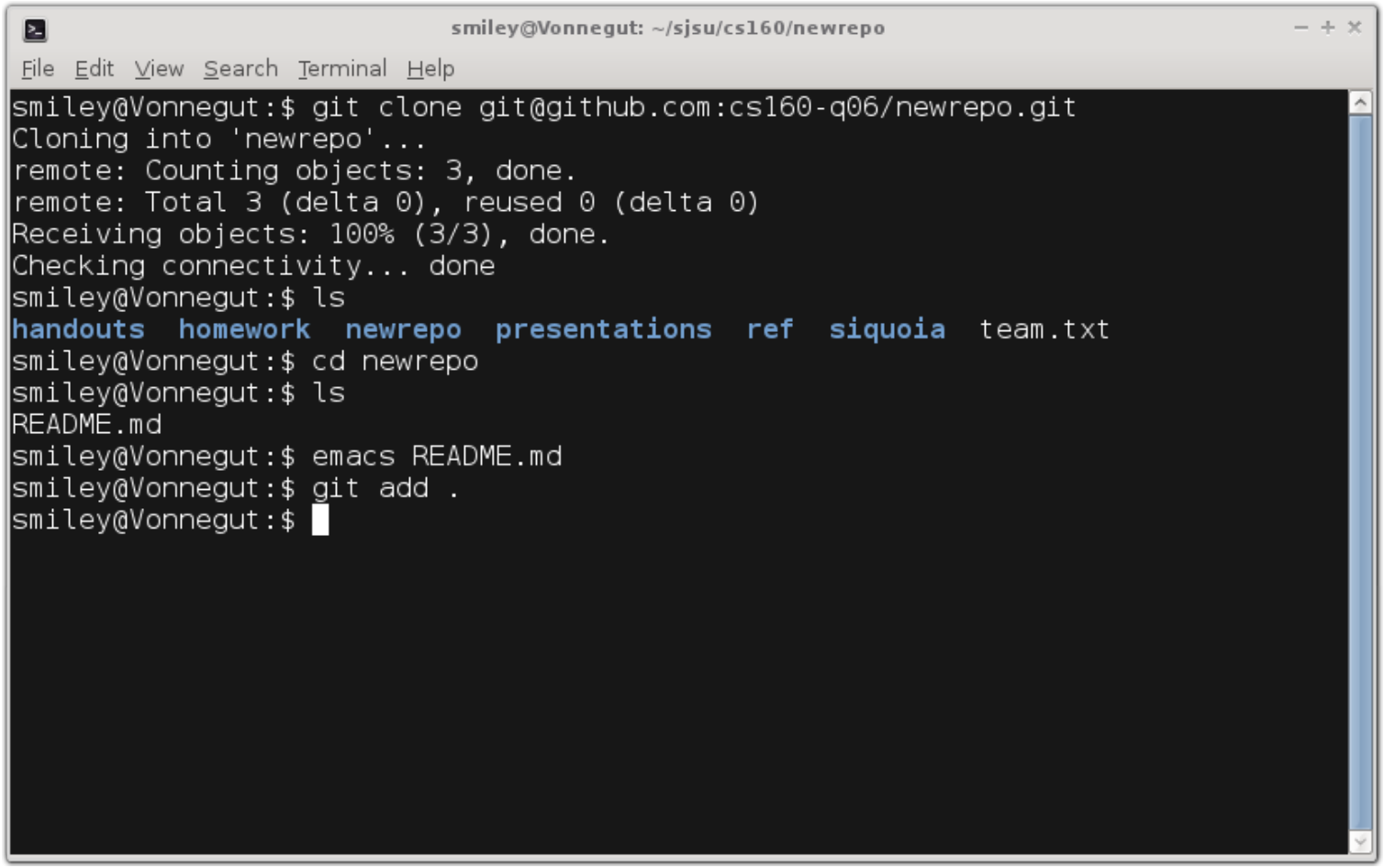

Figure : Add changed files to your next commit using the command "git add ." to add all changes in the present working directory.

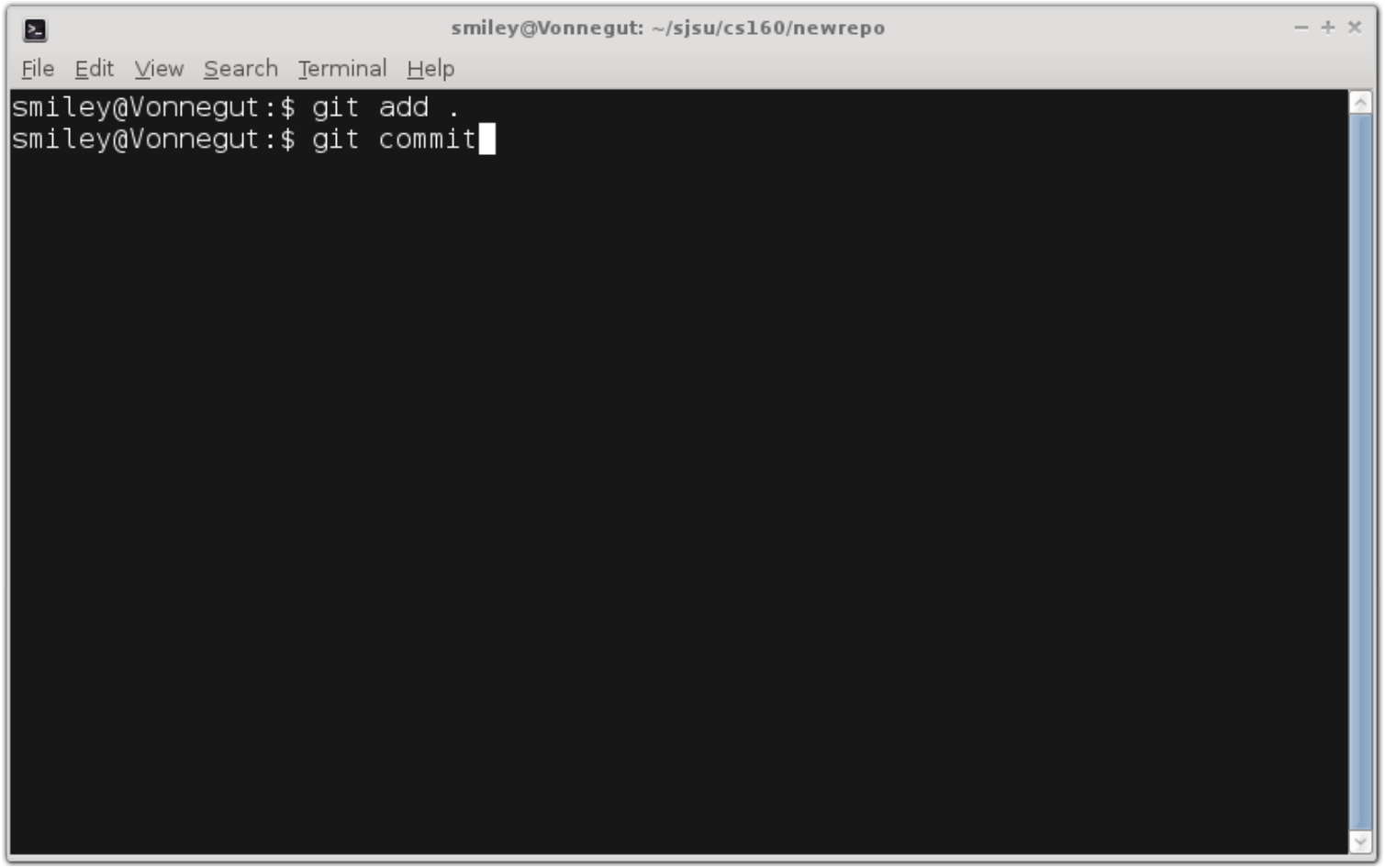

Figure : Commit your changes.

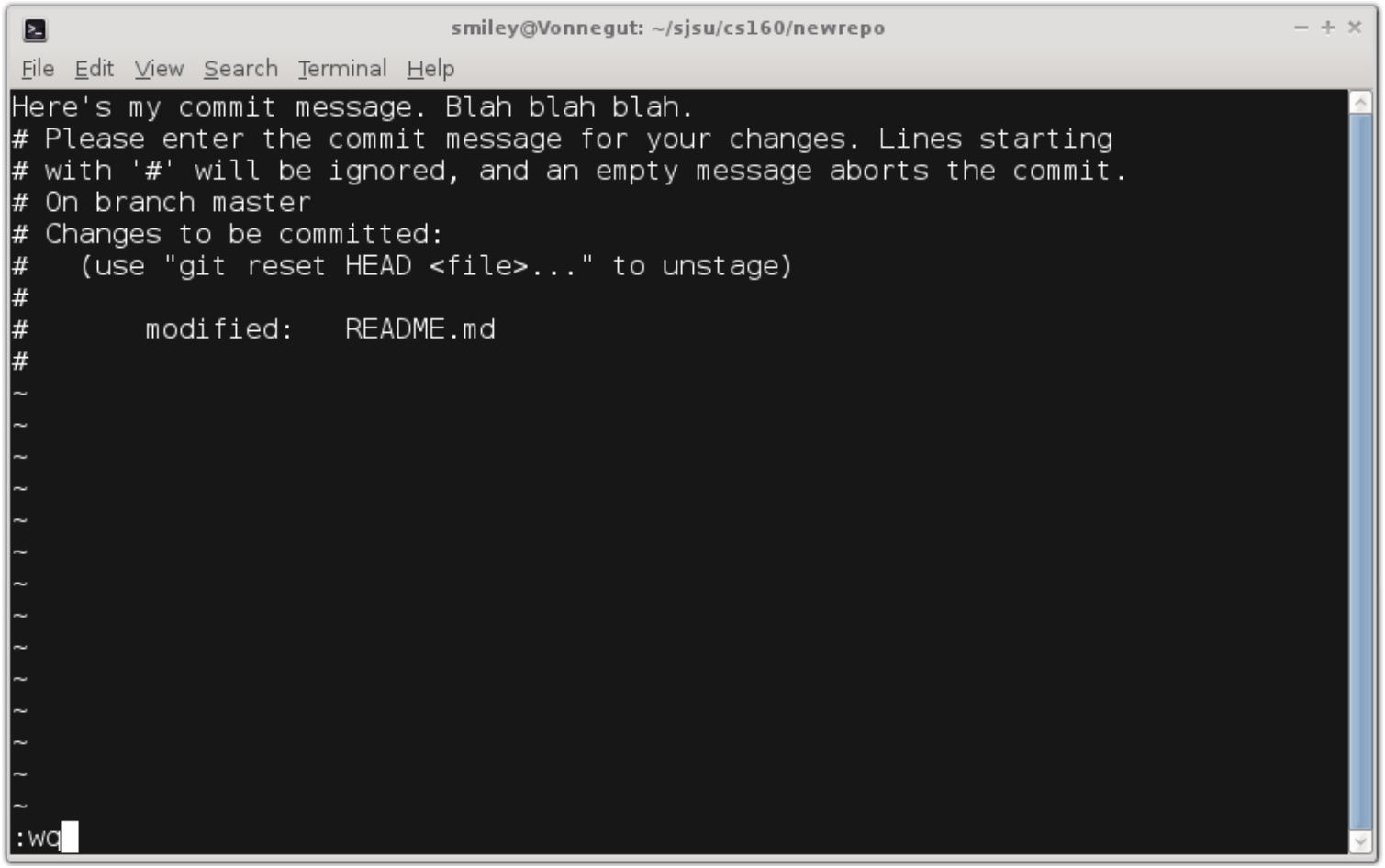

Figure : Enter a commit message to summarize your changes.

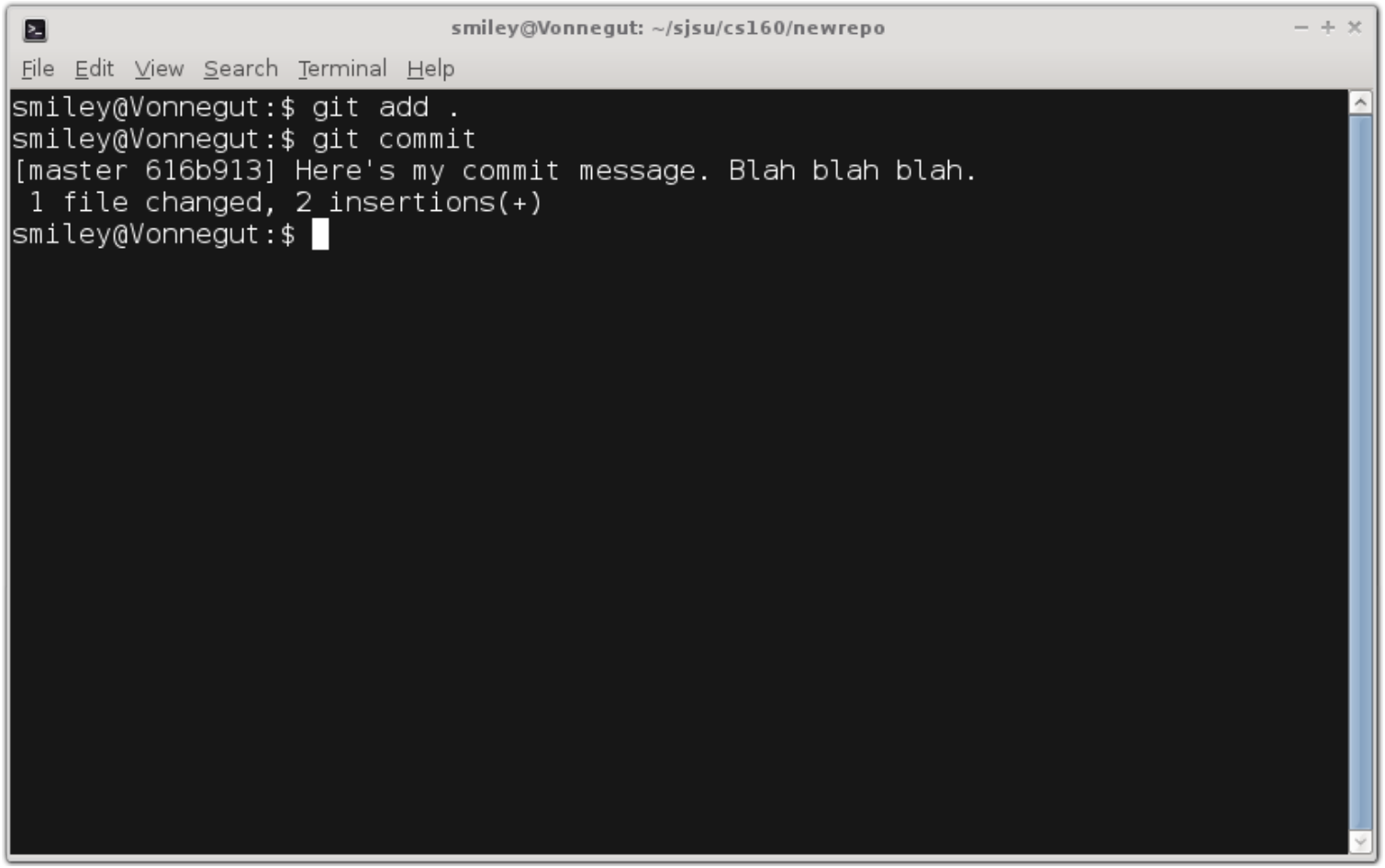

Figure : Commit complete.

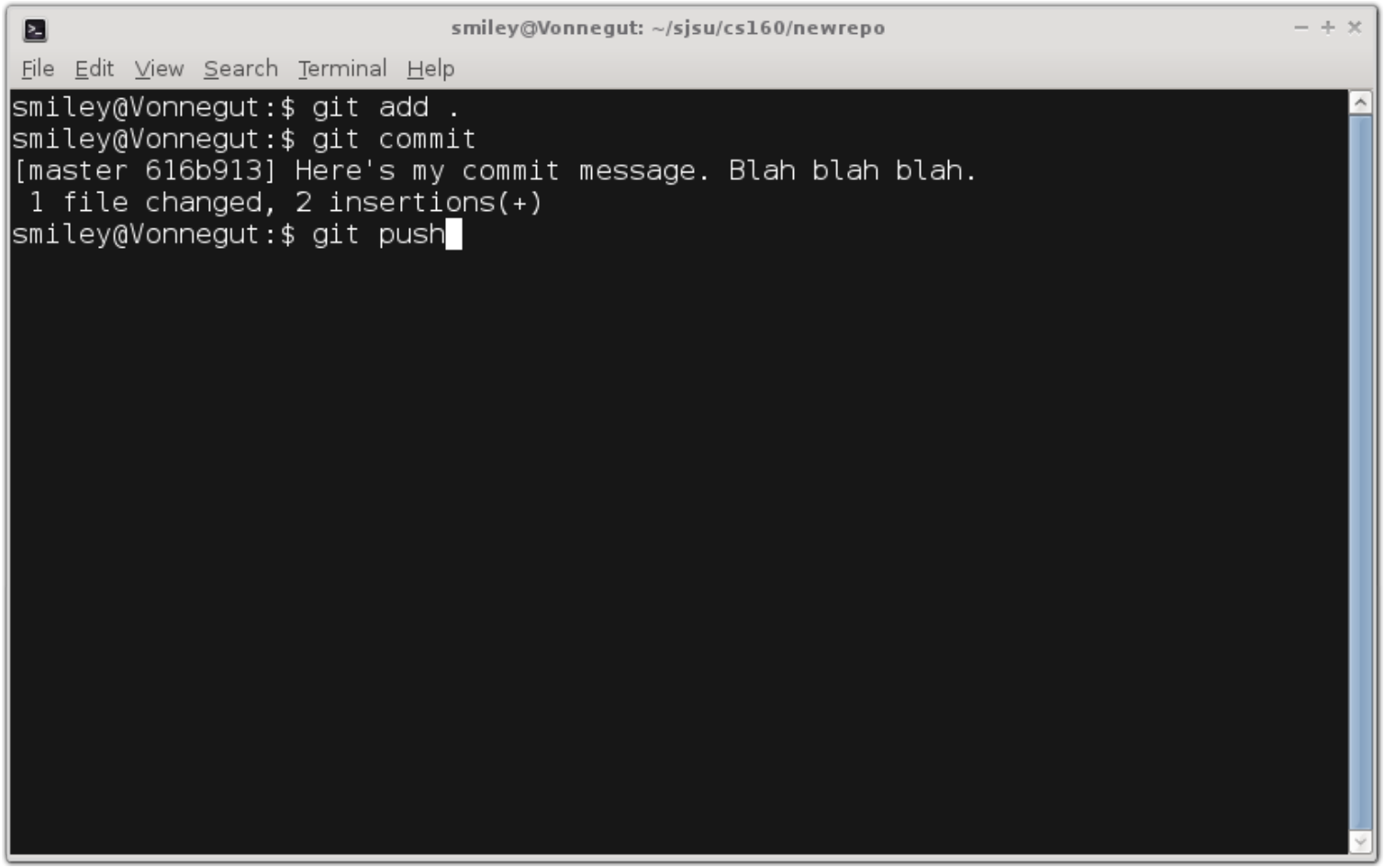

Figure : Push changes to the repository using the command "git push".

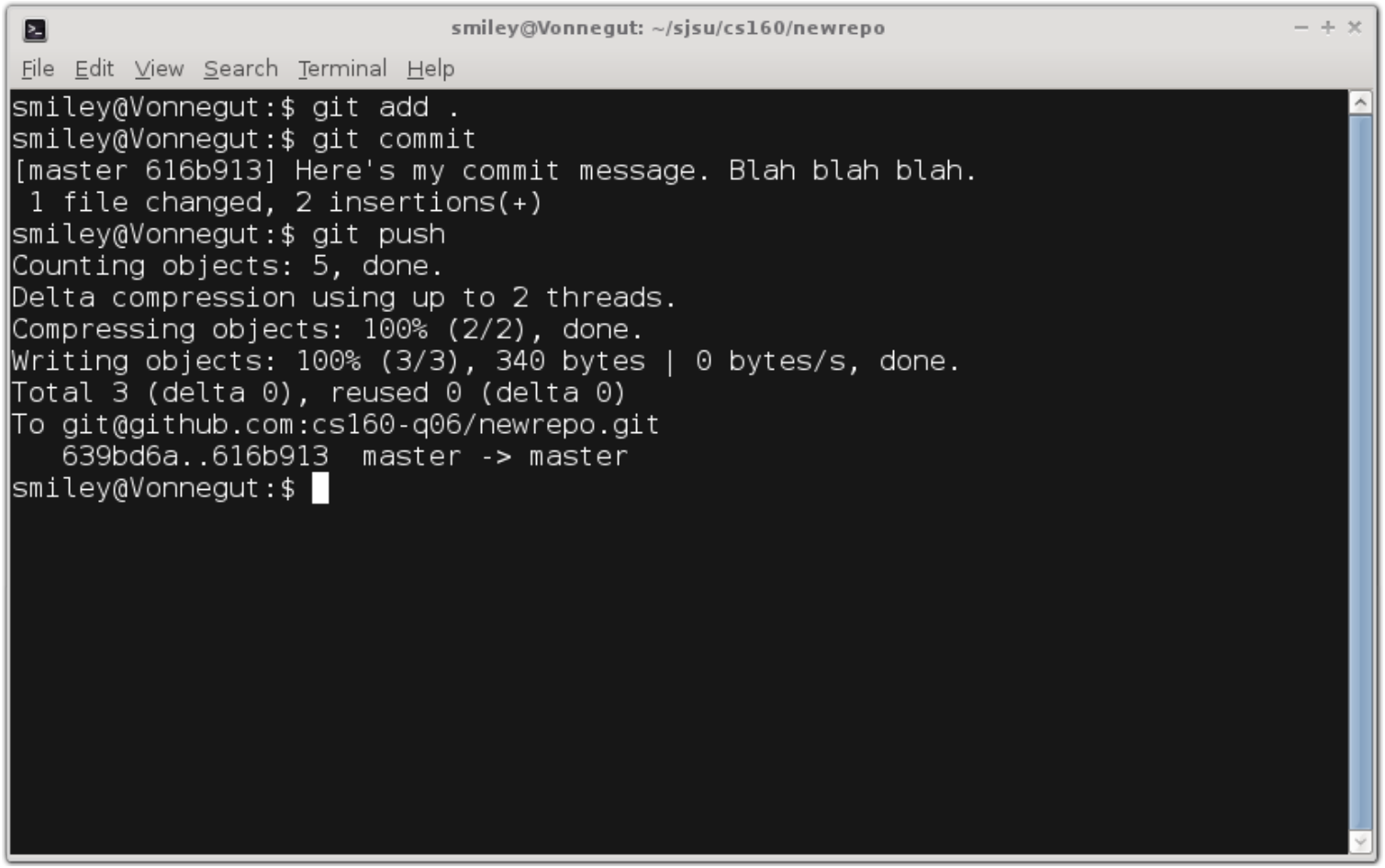

Figure : Changes committed and pushed to the repository.

EGit

EGit

"The EGit project is implementing Eclipse tooling on top of a Java implementation of Git."

EGit

"The EGit project is implementing Eclipse tooling on top of a Java implementation of Git."

- free, open source, designed for branching and merging
- decentralized model (everyone has own copy of repository, which can later be merged)
- Can be integrated into Eclipse, using a plug-in.

EGit vs Others

EGit vs Others

Subversion [5]

EGit vs Others

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- free, open source, actively developed
- easier to use than Git (more tools available for non-technical users, error messages are easier to understand)
- centralized model (everyone has a working copy and changes are submitted to central repository)

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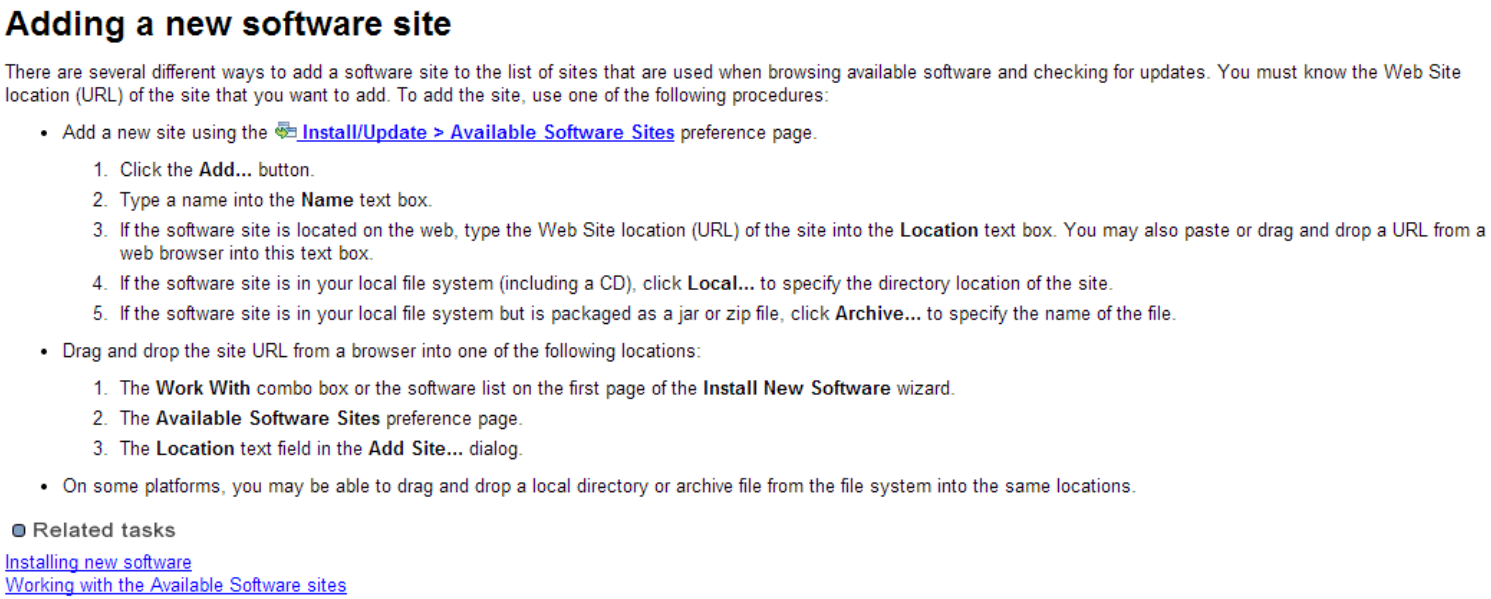
LibreSource

- free, open source, maintained and new features under development

EGit Installation

EGit Installation



Adding a new software site

There are several different ways to add a software site to the list of sites that are used when browsing available software and checking for updates. You must know the Web Site location (URL) of the site that you want to add. To add the site, use one of the following procedures:

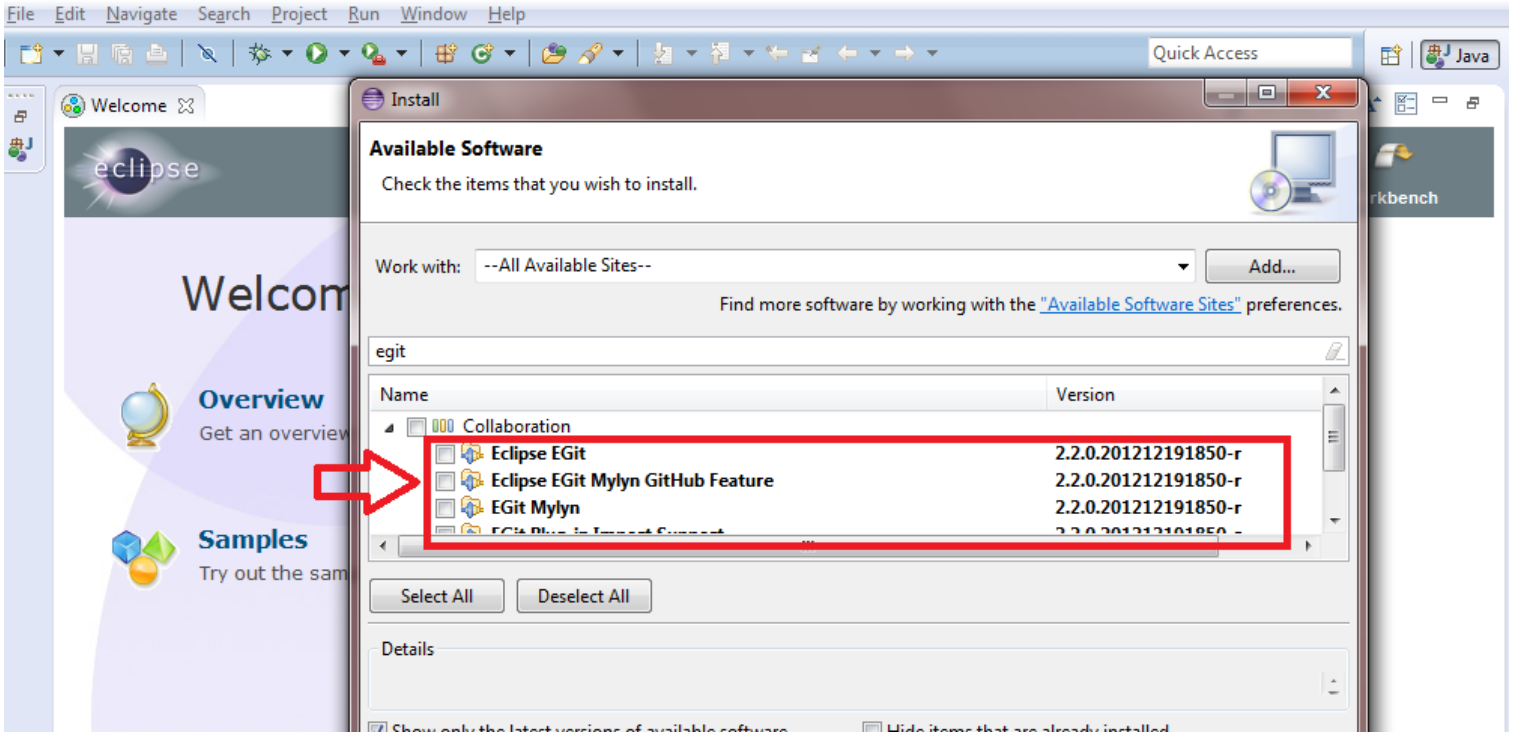
- Add a new site using the Install/Update > Available Software Sites preference page.
  1. Click the **Add...** button.
  2. Type a name into the **Name** text box.
  3. If the software site is located on the web, type the Web Site location (URL) of the site into the **Location** text box. You may also paste or drag and drop a URL from a web browser into this text box.
  4. If the software site is in your local file system (including a CD), click **Local...** to specify the directory location of the site.
  5. If the software site is in your local file system but is packaged as a jar or zip file, click **Archive...** to specify the name of the file.
- Drag and drop the site URL from a browser into one of the following locations:
  1. The **Work With** combo box or the software list on the first page of the **Install New Software** wizard.
  2. The **Available Software Sites** preference page.
  3. The **Location** text field in the **Add Site...** dialog.
- On some platforms, you may be able to drag and drop a local directory or archive file from the file system into the same locations.

Related tasks

Installing new software
Working with the Available Software sites

Figure : Instruction to install Egit into Eclispe

EGit Installation



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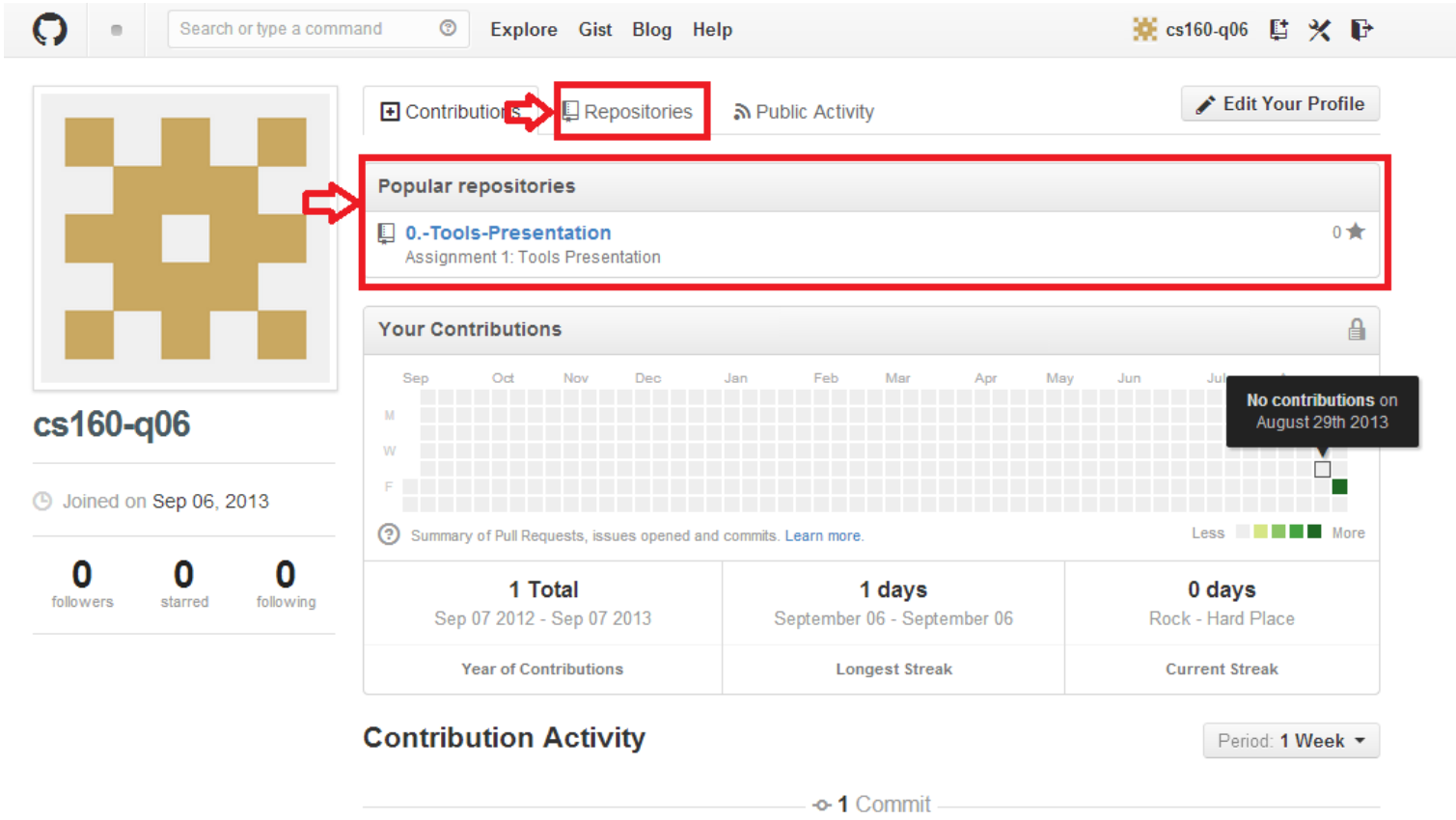


Figure : GitHub web UI and sample Repository

GitHub Windows client installation

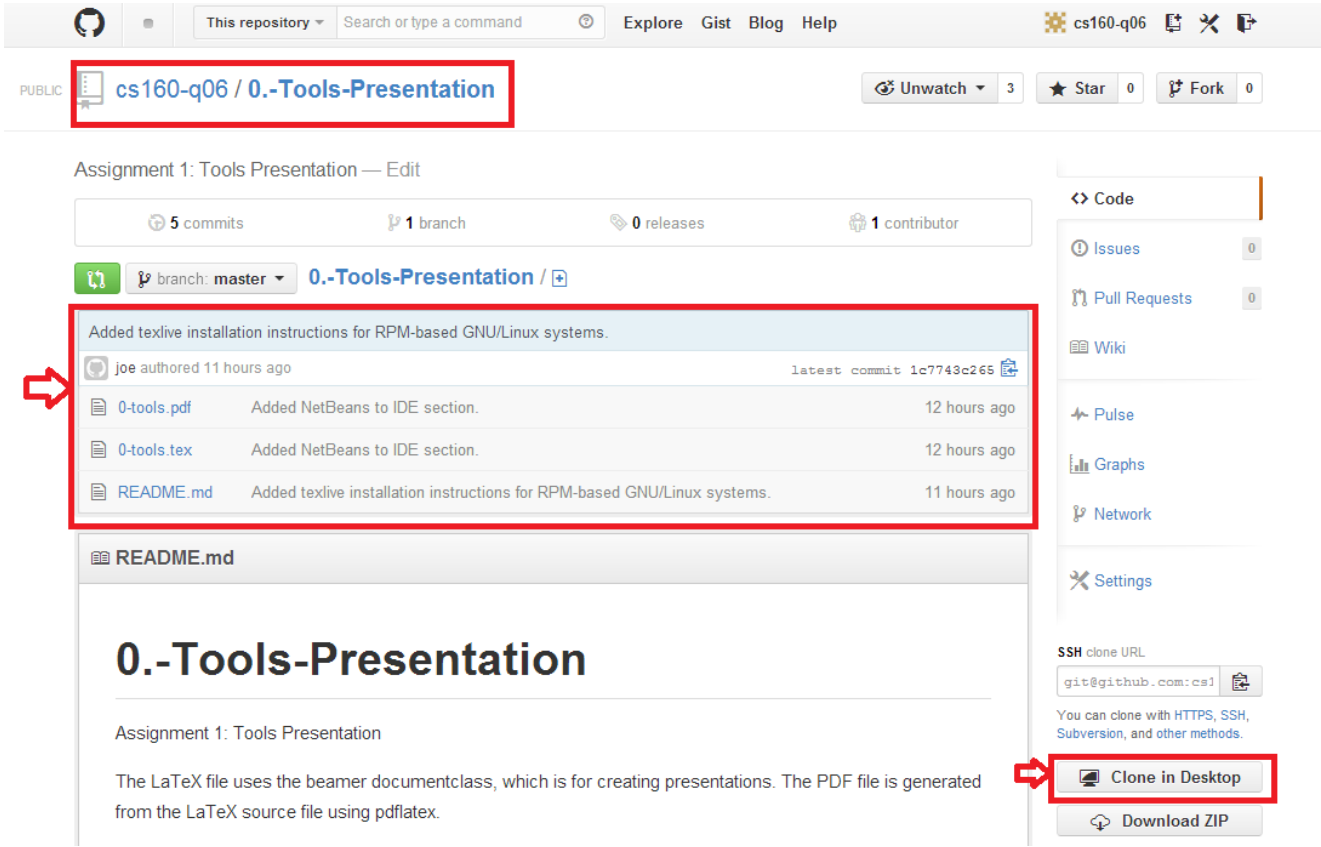


Figure : Inside a repository and how to clone it

GitHub Windows client installation

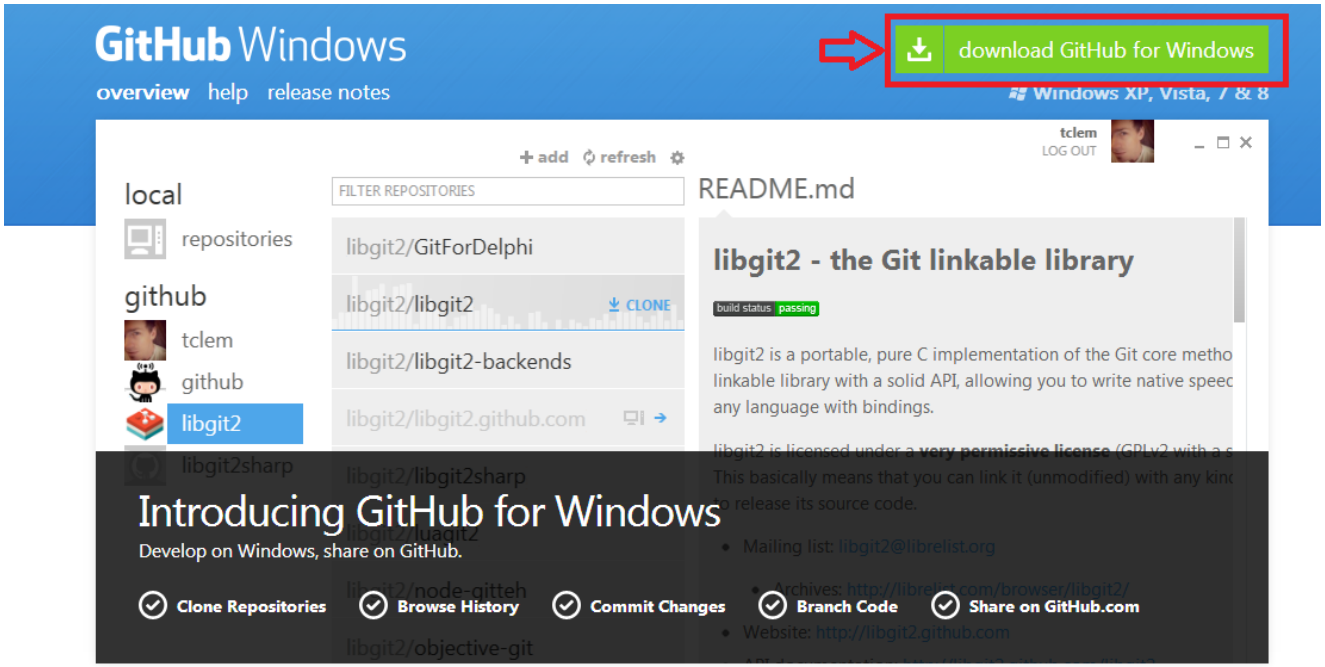
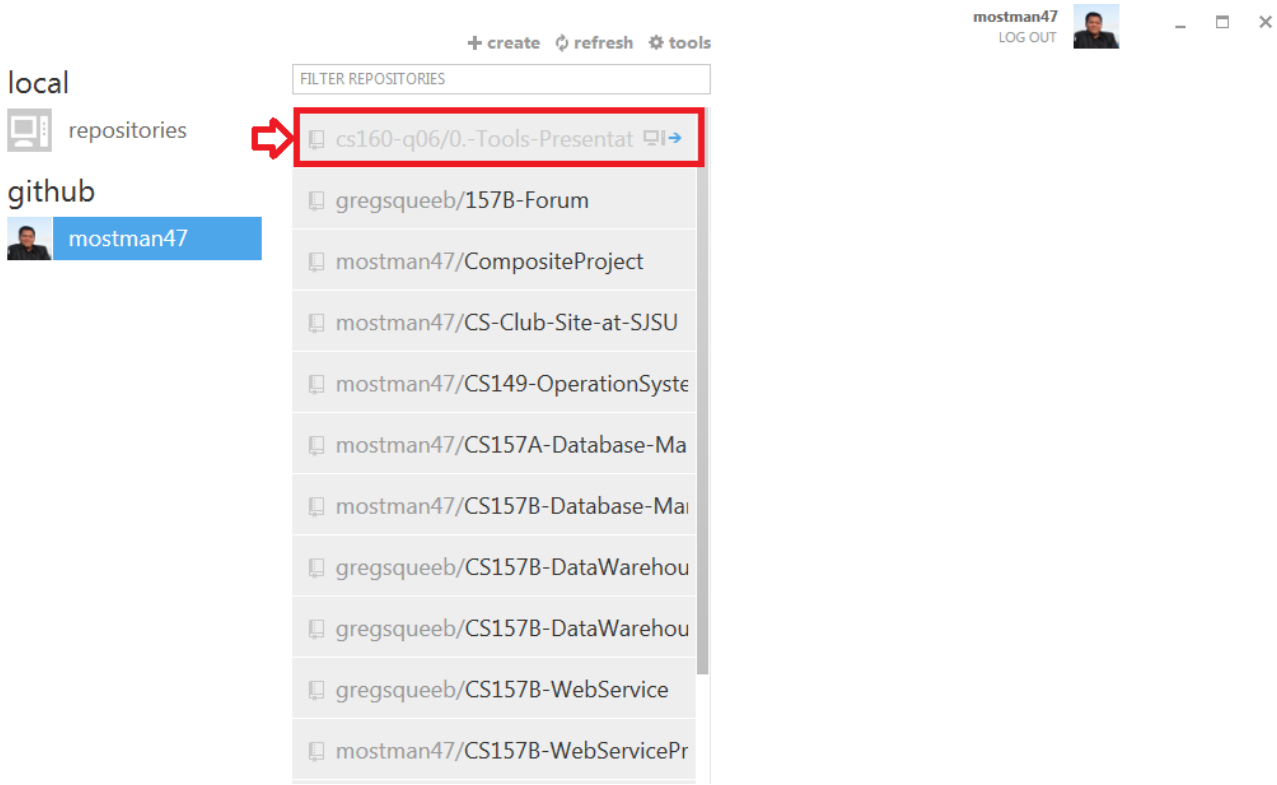


Figure : Github software for Windows

GitHub Windows client installation



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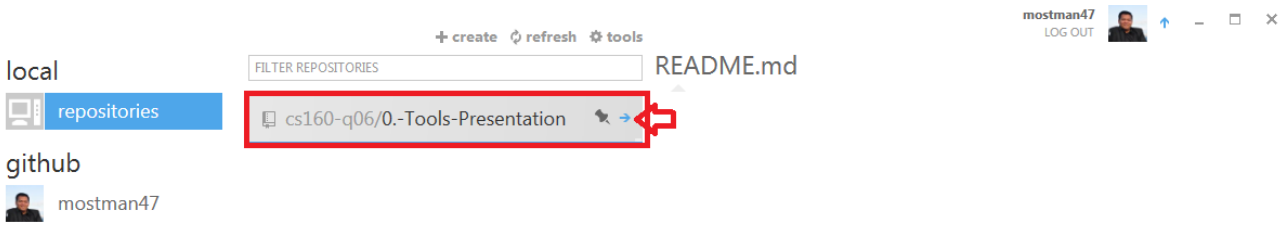
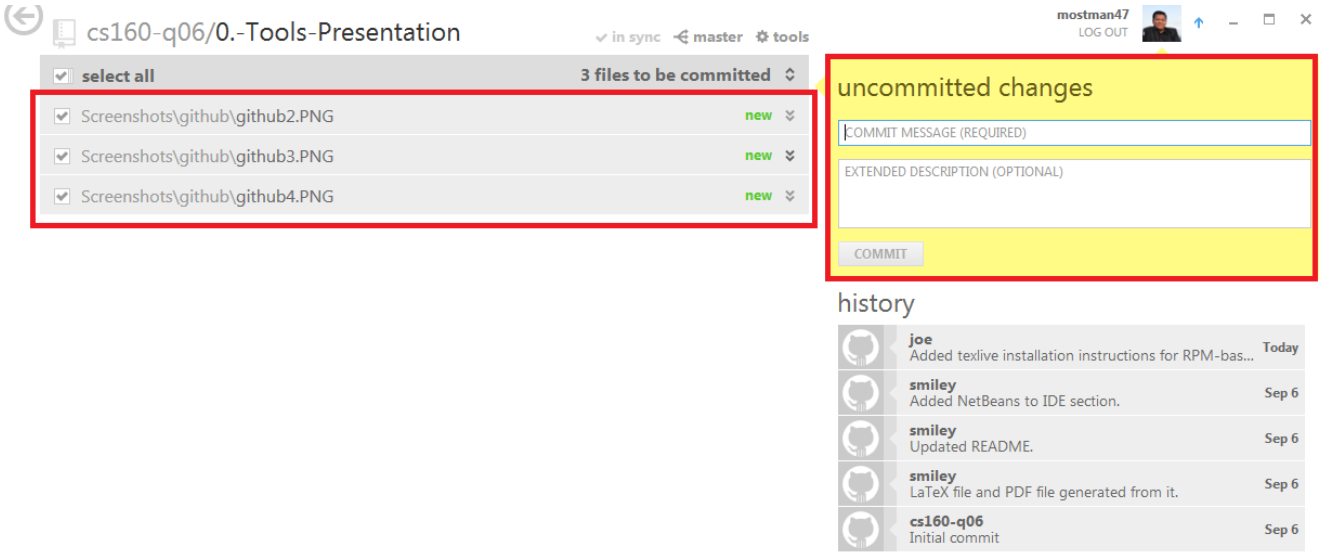


Figure : Manage and Commit Repo

GitHub Windows client installation



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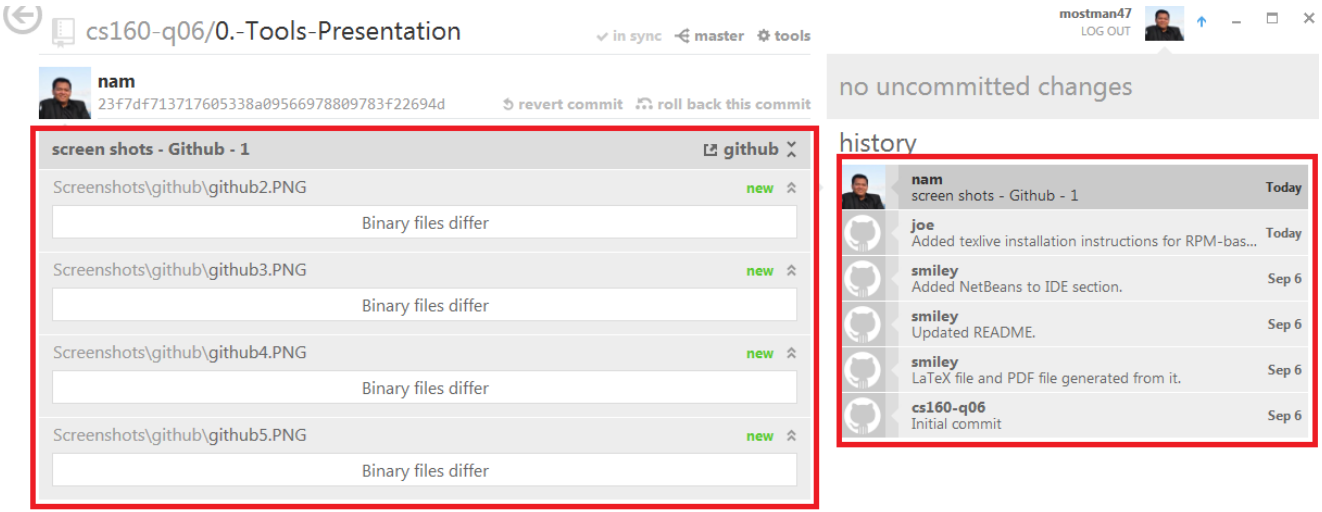

Figure : Result and History of Committing

CodeBeamer

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- Nonfree
- Backend: MariaDB (a.k.a. MySQL), Oracle, Apache Derby or PostgreSQL
- CodeBeamer is a collaborative Requirements Management (RM) and Application Lifecycle Management (ALM) solution for distributed software development.

CodeBeamer vs Others

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Bugzilla

CodeBeamer vs Others

Bugzilla

- Licensed under the Mozilla Public License (a GNU GPL-compatible license, which means it is free software, so you have the freedom to run your own copy on your own server), developed/maintained by Mozilla Foundation.
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Google Code Hosting

CodeBeamer vs Others

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Google Code Hosting

- Not distributed as software that you can run on your own computer (hosted only); available for "open source" projects (by Google Code)
- BigTable backend (also proprietary)

CodeBeamer Installation

CodeBeamer Installation

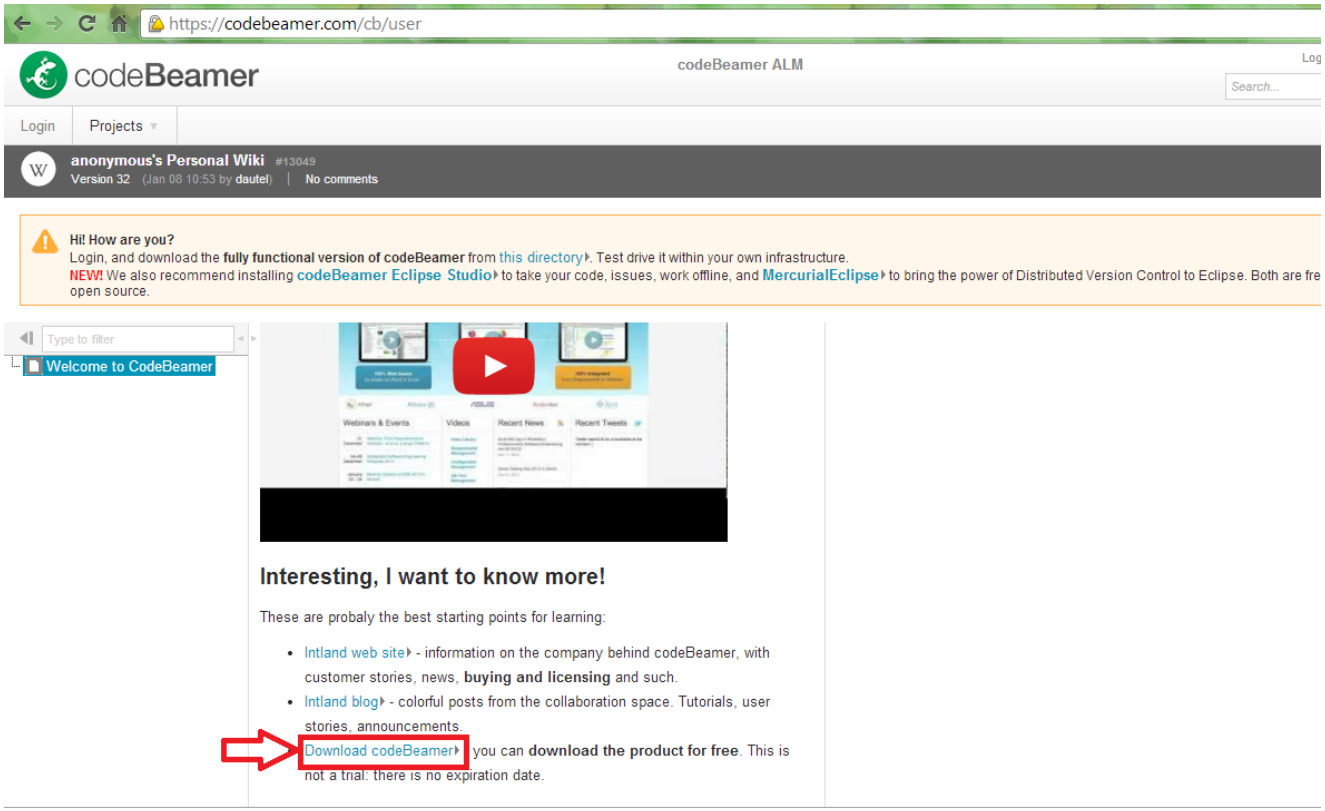
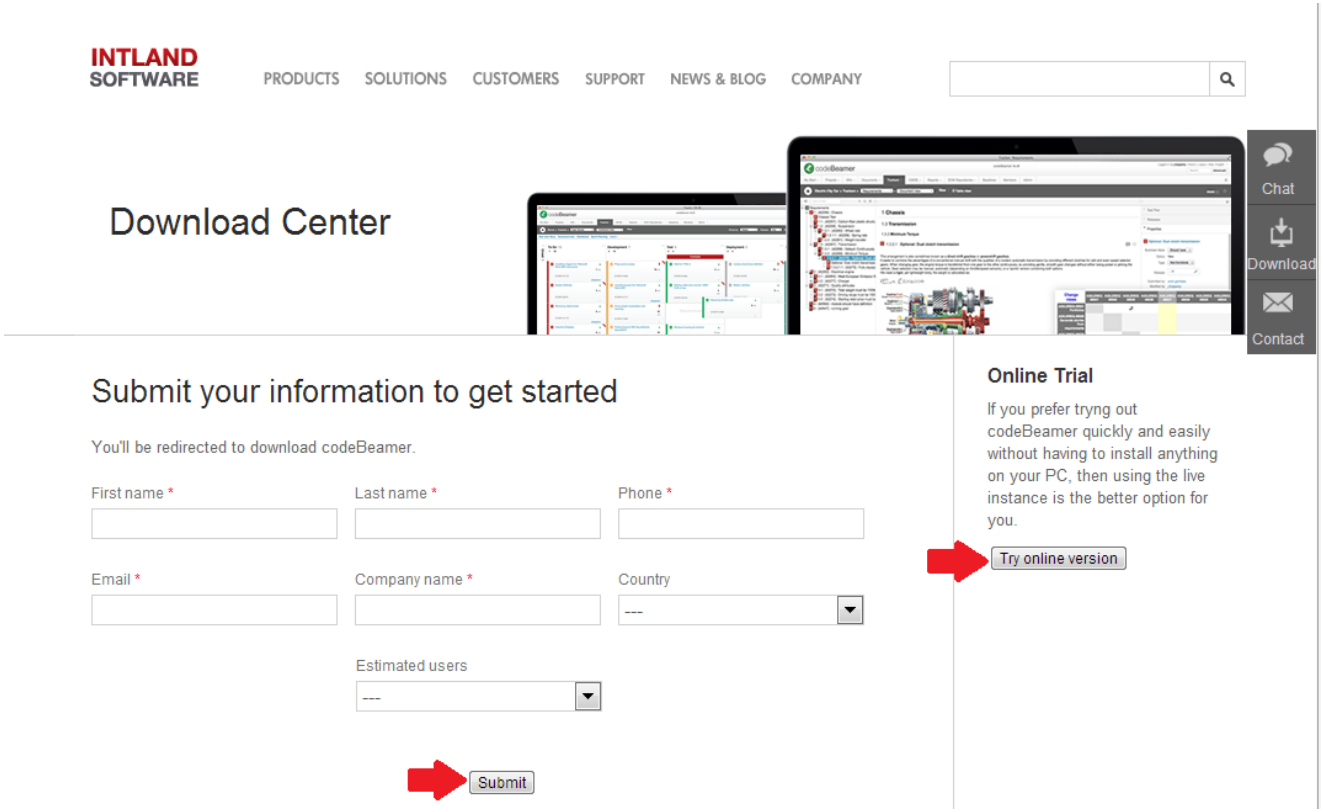


Figure : Download

CodeBeamer Installation



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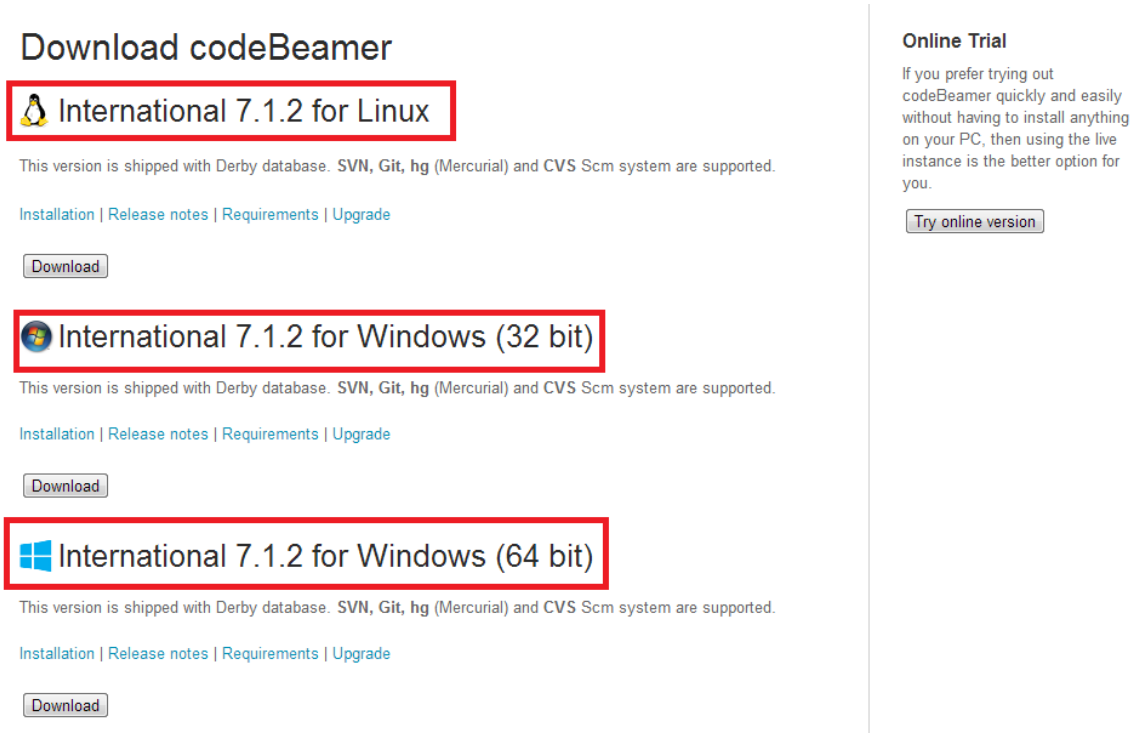

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CodeBeamer Installation

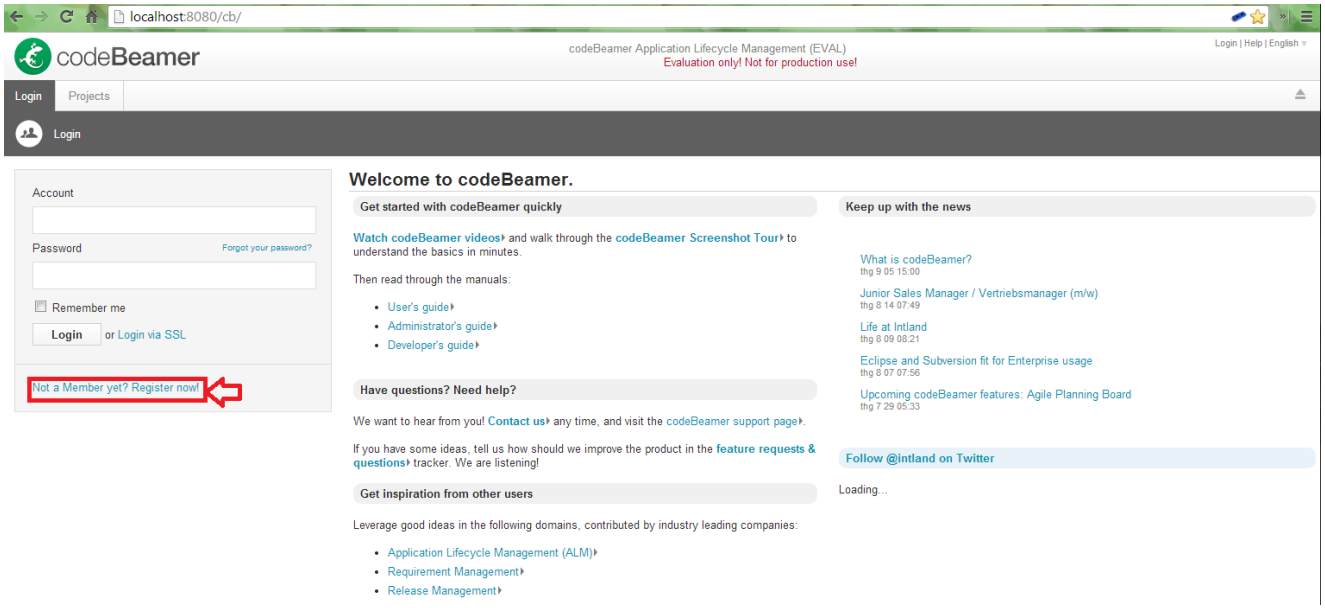

Figure : Web UI in localhost

CodeBeamer Installation

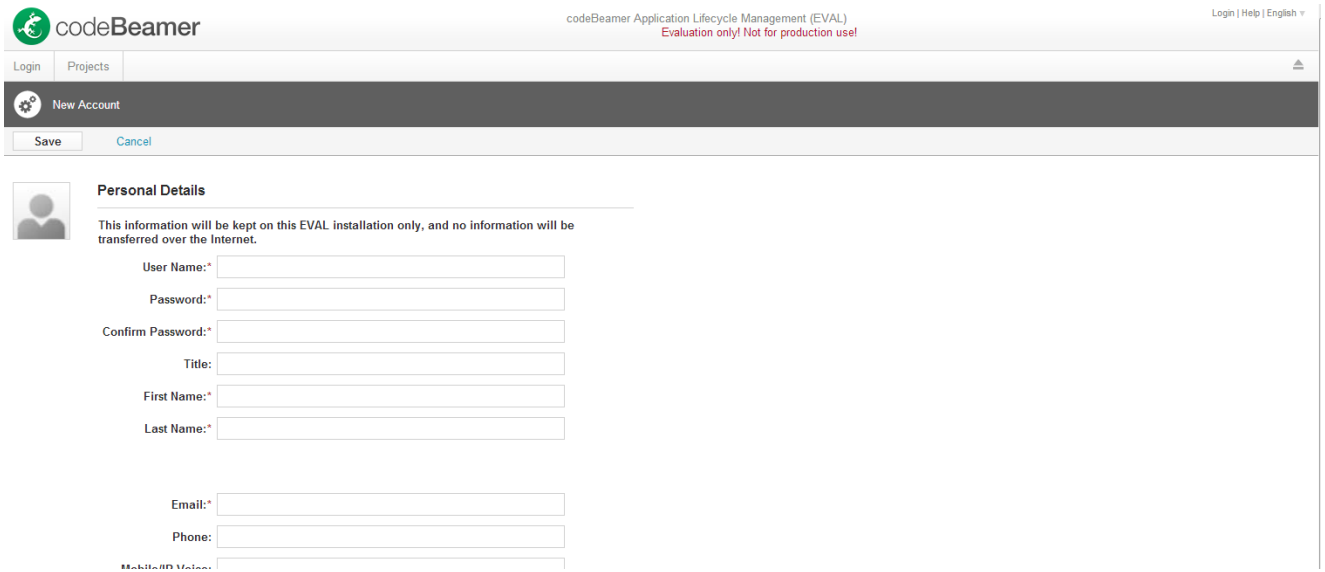

Figure : Register User

CodeBeamer Installation

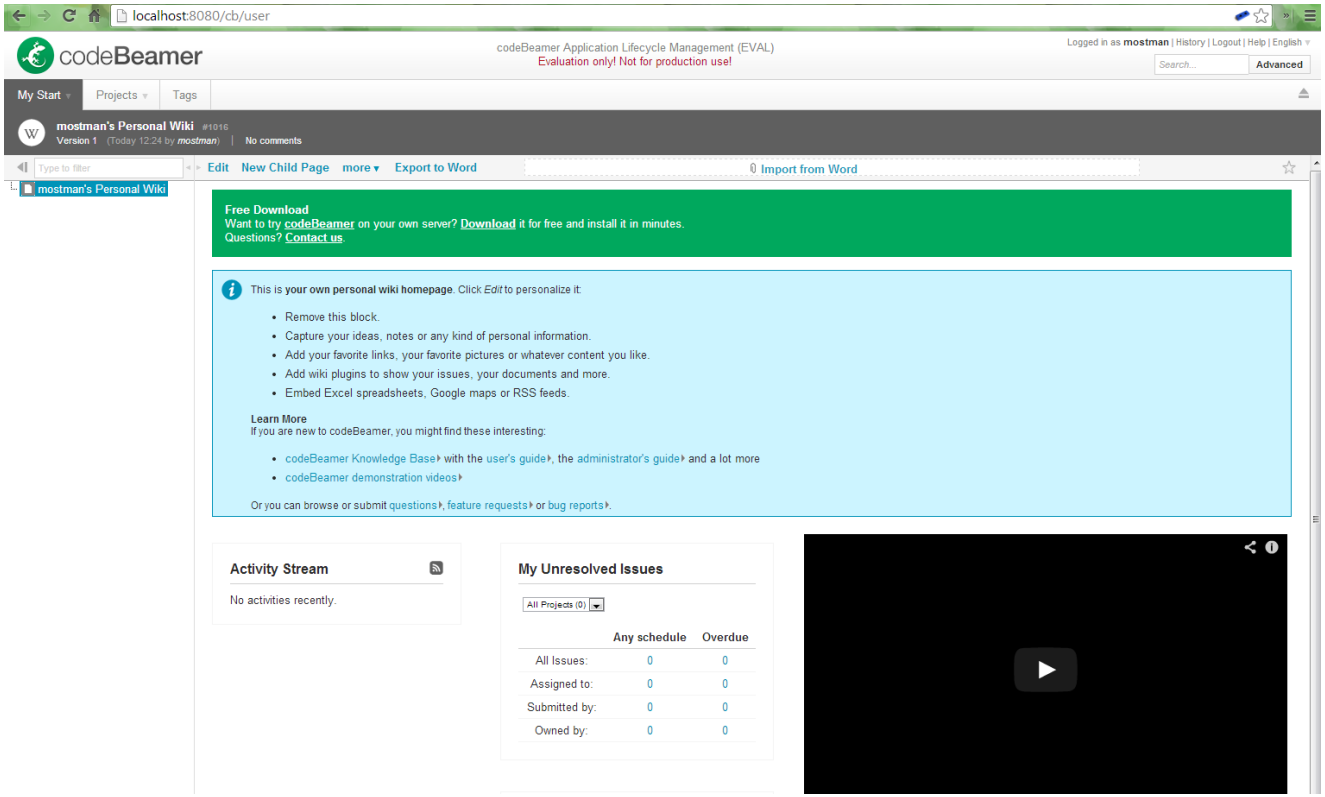

Figure : User's Management UI

Editors and IDEs
Netbeans, Eclipse, GNU Emacs

- **GNU Emacs**

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  - License: GNU GPLv3

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Netbeans, Eclipse, Emacs

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Eclipse Installation

Eclipse Installation

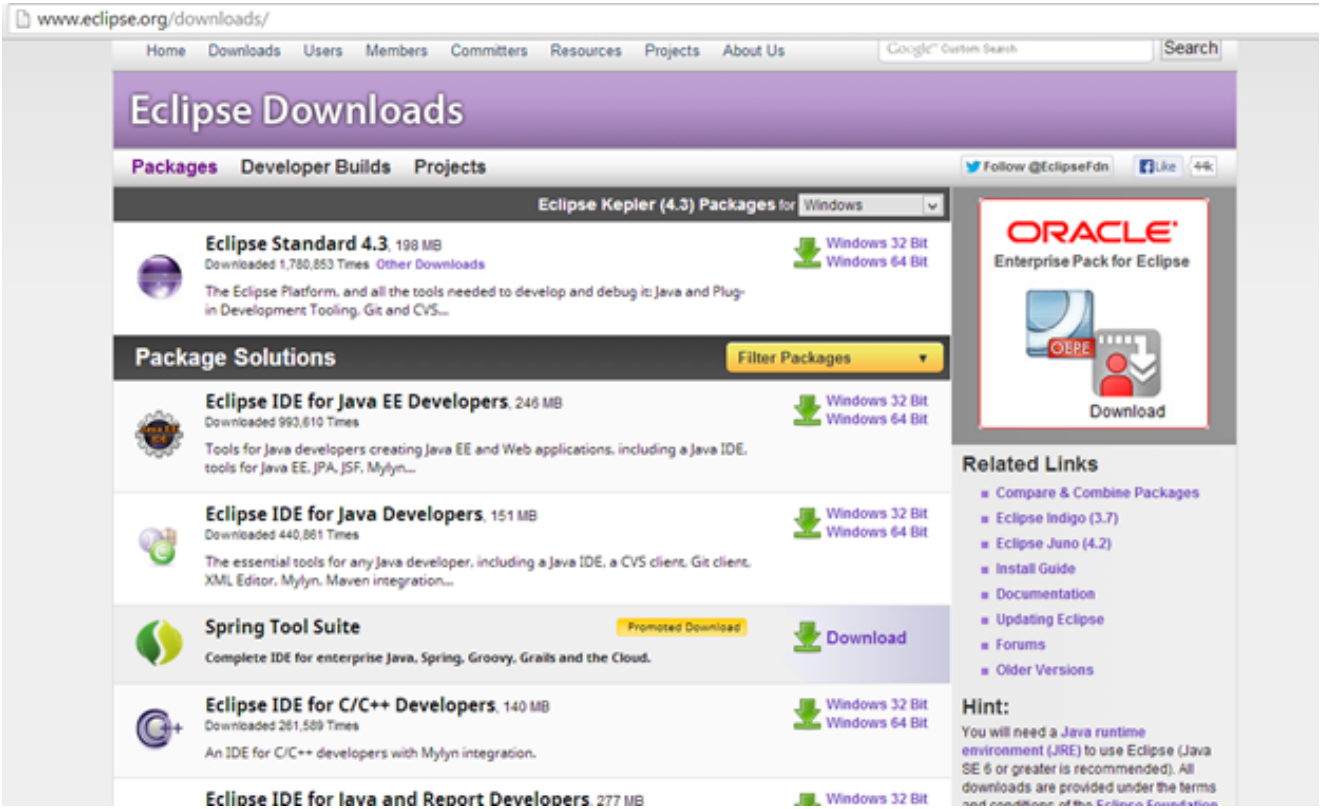


Figure : Download

Eclipse Installation

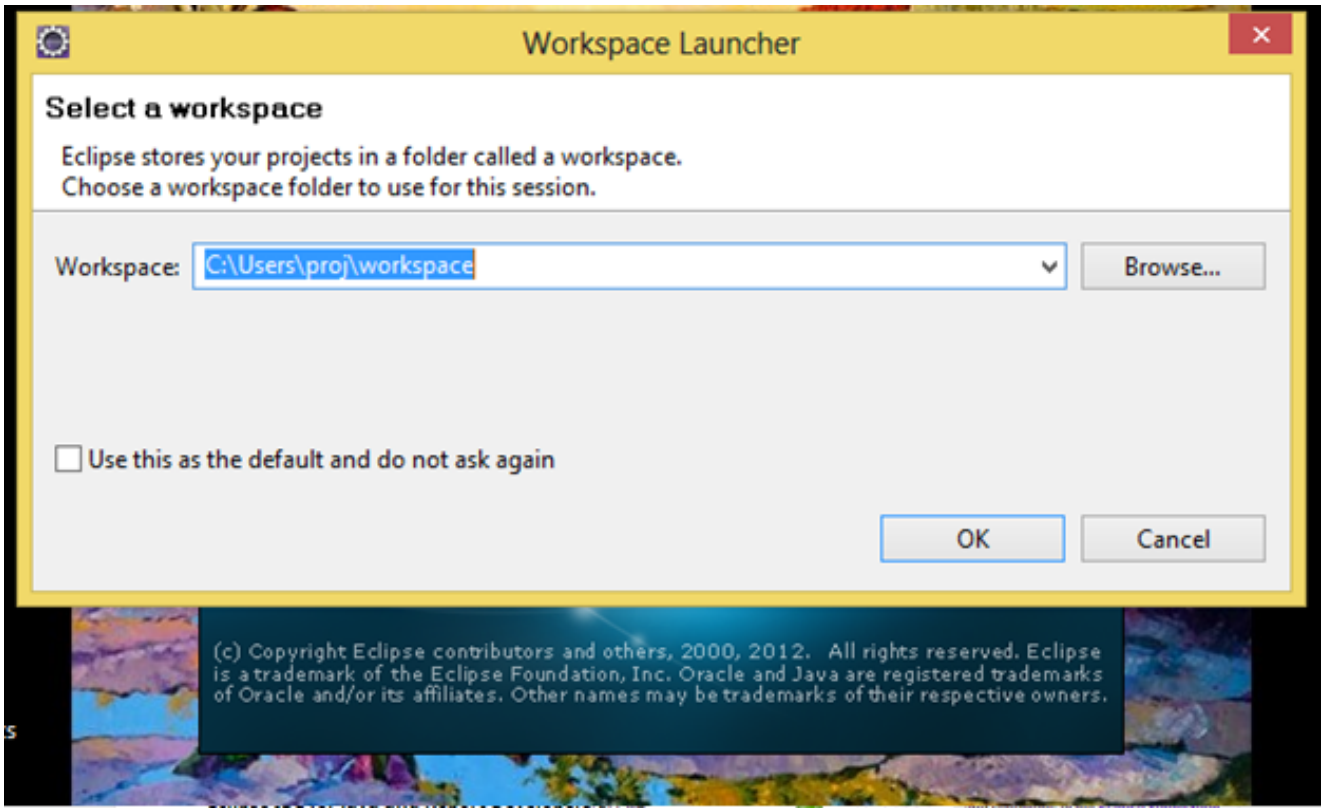


Figure : Workspace

Eclipse Installation

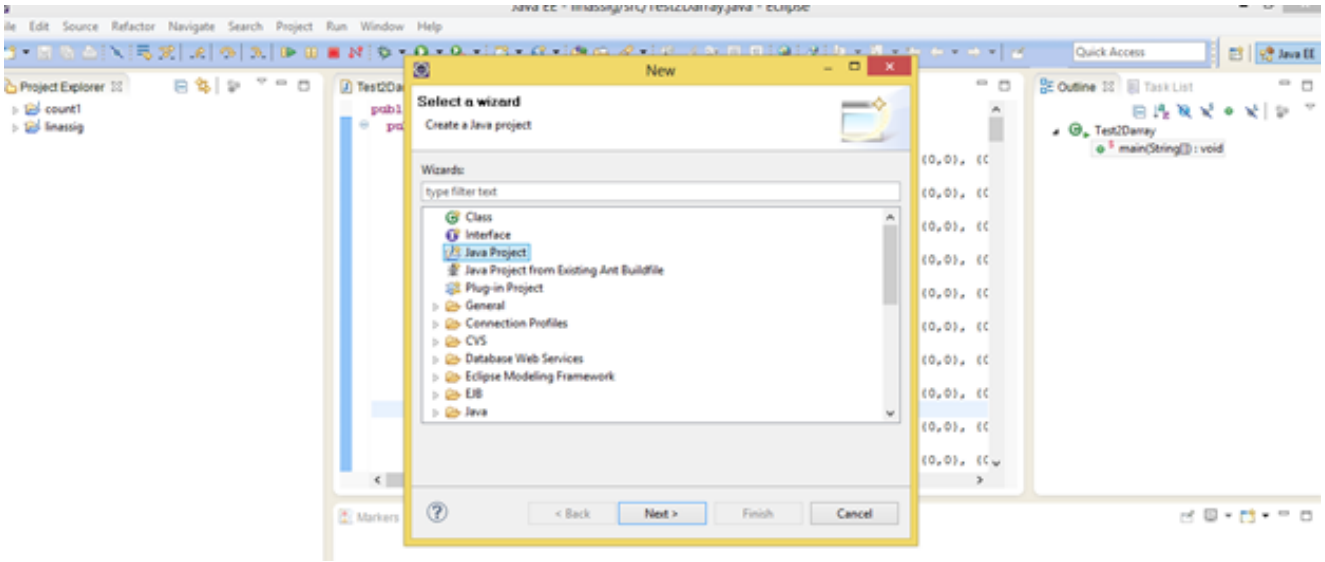
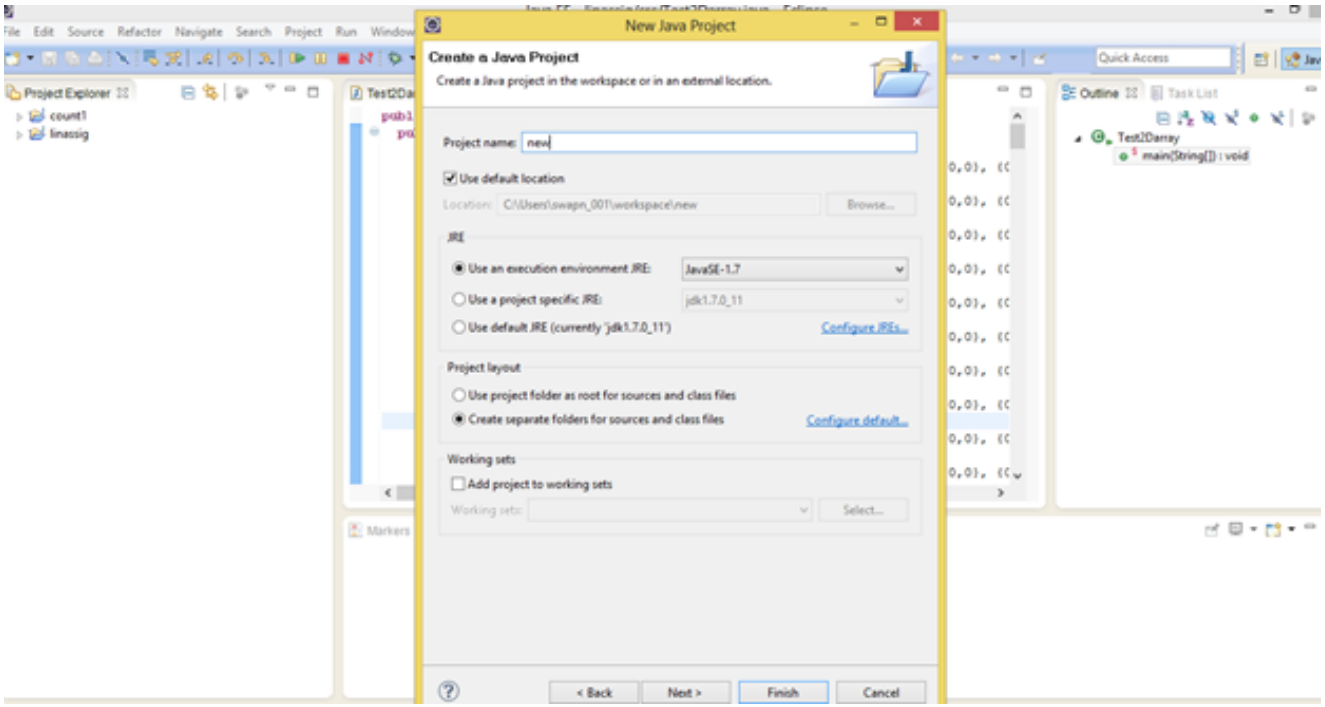


Figure : Create new project

Eclipse Installation



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Eclipse Installation

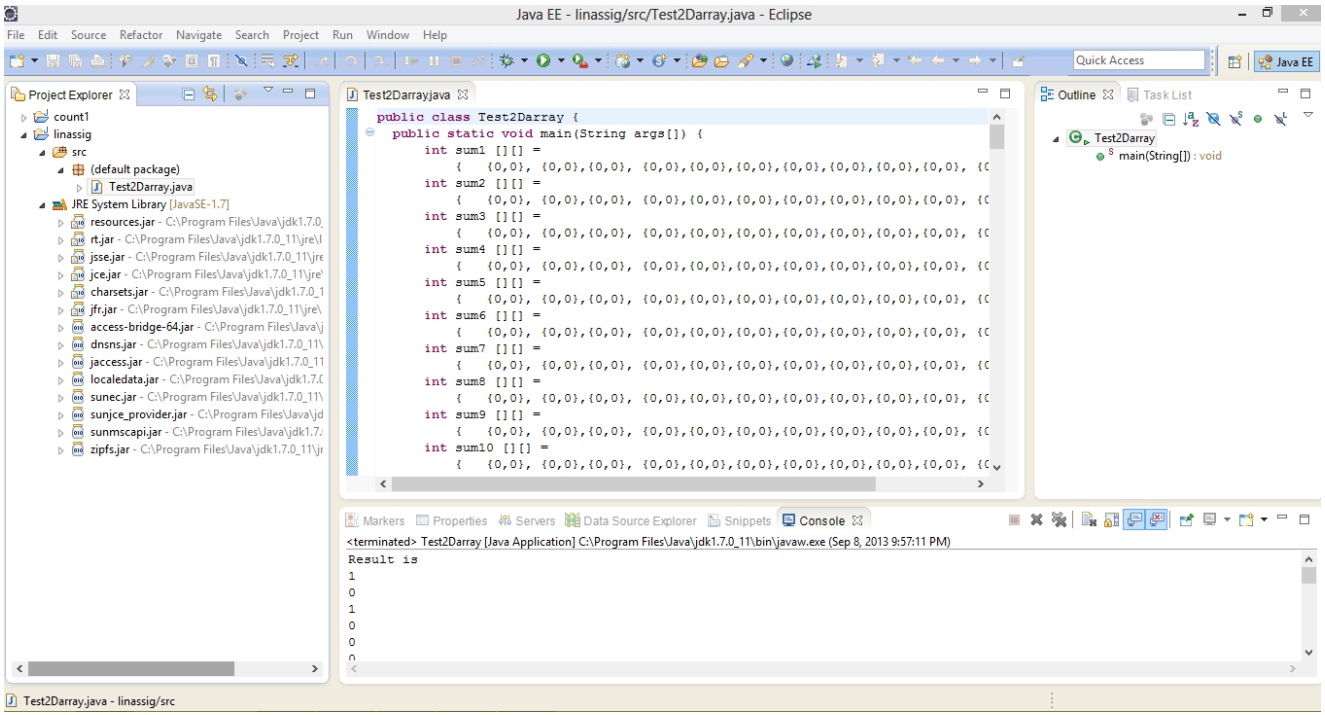

Figure : Running Program

Eclipse Installation

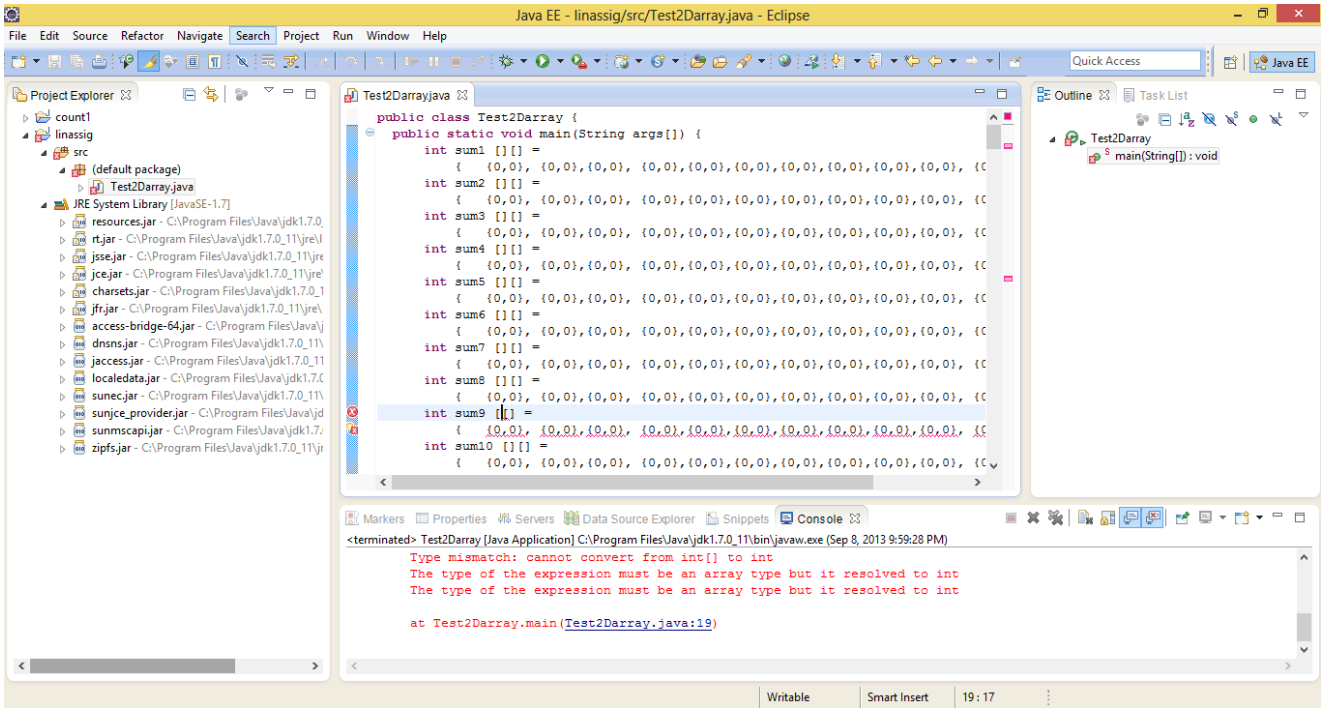

Figure : Error Logs

OpenProj

OpenProj

"OpenProj is an open source project management software application. It intends to be a complete desktop replacement for Microsoft Project. It runs on the Java platform, allowing it to run on a variety of different operating systems" [4]

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"OpenProj is an open source project management software application. It intends to be a complete desktop replacement for Microsoft Project. It runs on the Java platform, allowing it to run on a variety of different operating systems" [4]

- License: Free, open source project management application that supports project timelines, issue tracking, wiki, document management, time and cost reporting, code management, Scrum, and more.
- Earned Value costing
- Gantt chart
- Resource Breakdown Structure (RBS) chart

OpenProj vs. Microsoft Project

OpenProj vs. Microsoft Project

Similar

- user interface and approach to construction of project plan
- create workbench breakdown structure
- assign resources

OpenProj vs. Microsoft Project

Similar

- user interface and approach to construction of project plan
- create workbench breakdown structure
- assign resources

Different

- OpenProj can link upwards with methods (inserting tasks is more difficult than with Microsoft Project)
- OpenProj can just create resources (have to do so in the resource sheet)
- OpenProj lacks a more detailed view and project reports that is available with Microsoft Project

OpenProj Installation

OpenProj Installation

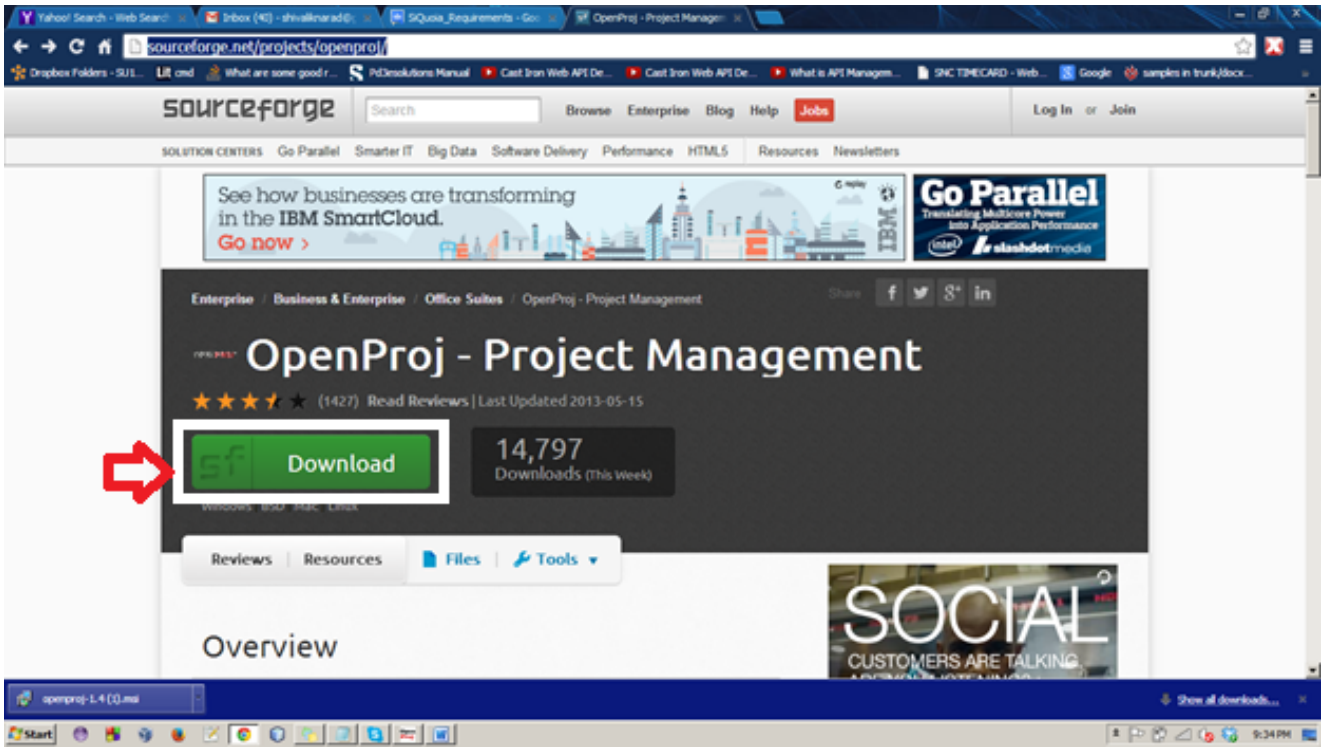

Figure : Download

OpenProj Installation

- Step 1 Double click and open the downloaded file. A dialog box will appear.
- Step 2 Hit run button on the dialog box.
- Step 3 Choose the directory where you want to install. And click next.
- Step 4 click install
- Step 5 click Finish. And your installation will be complete.

OpenProj Installation

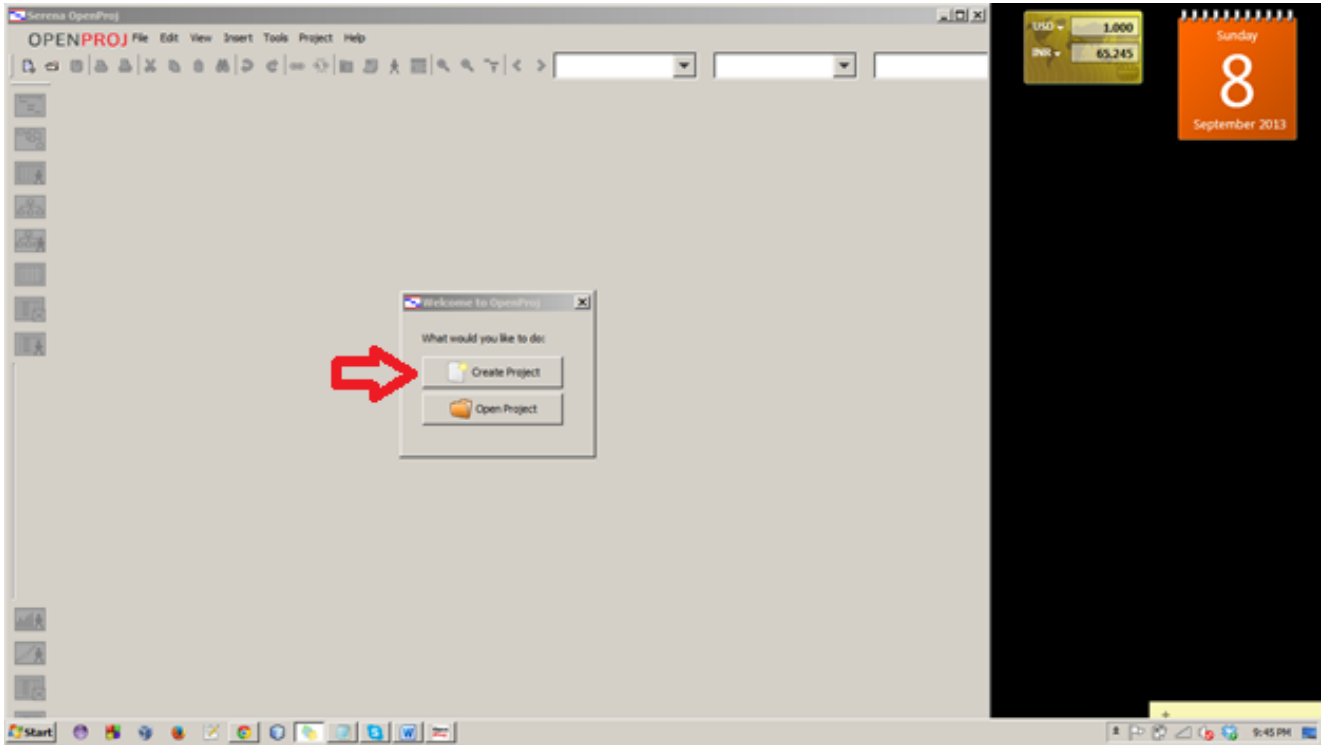

Figure : OpenProj's UI

OpenProj Installation

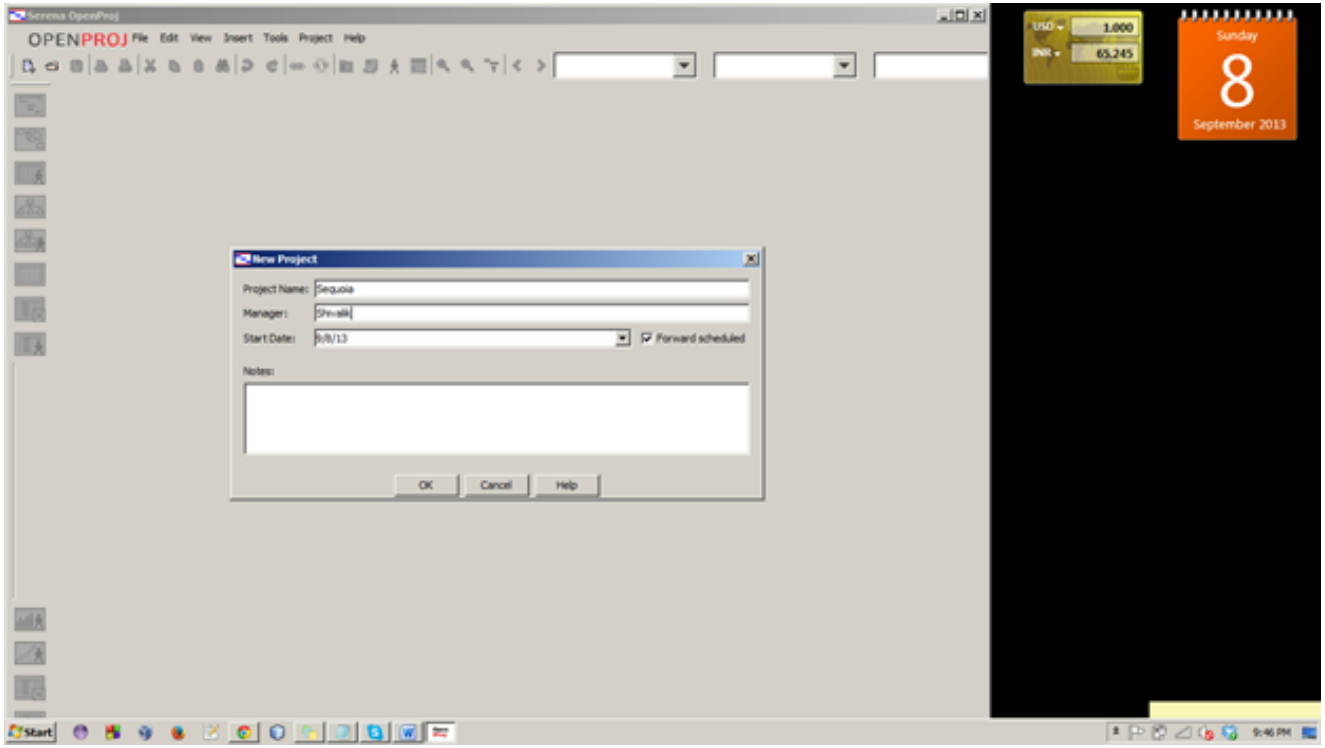

Figure : Create new Project

OpenProj Installation

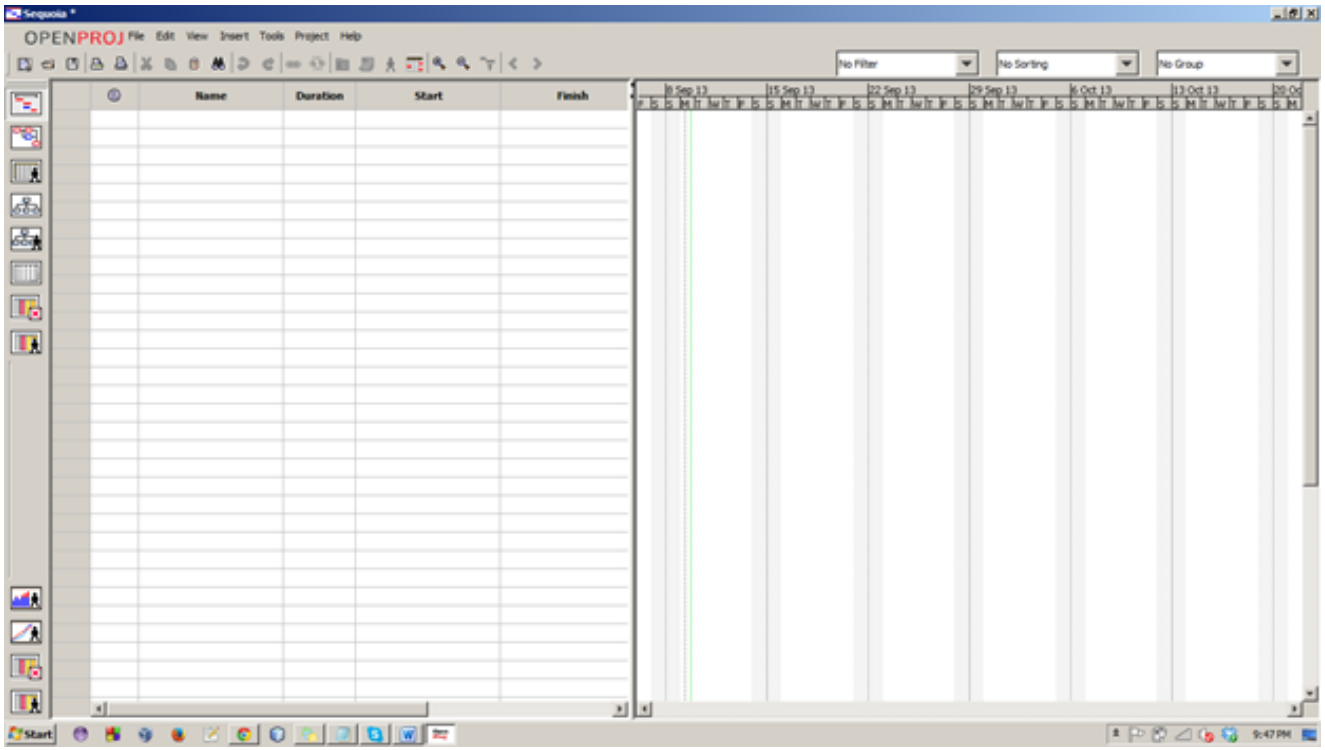

Figure : A project with empty sheet

OpenProj Installation

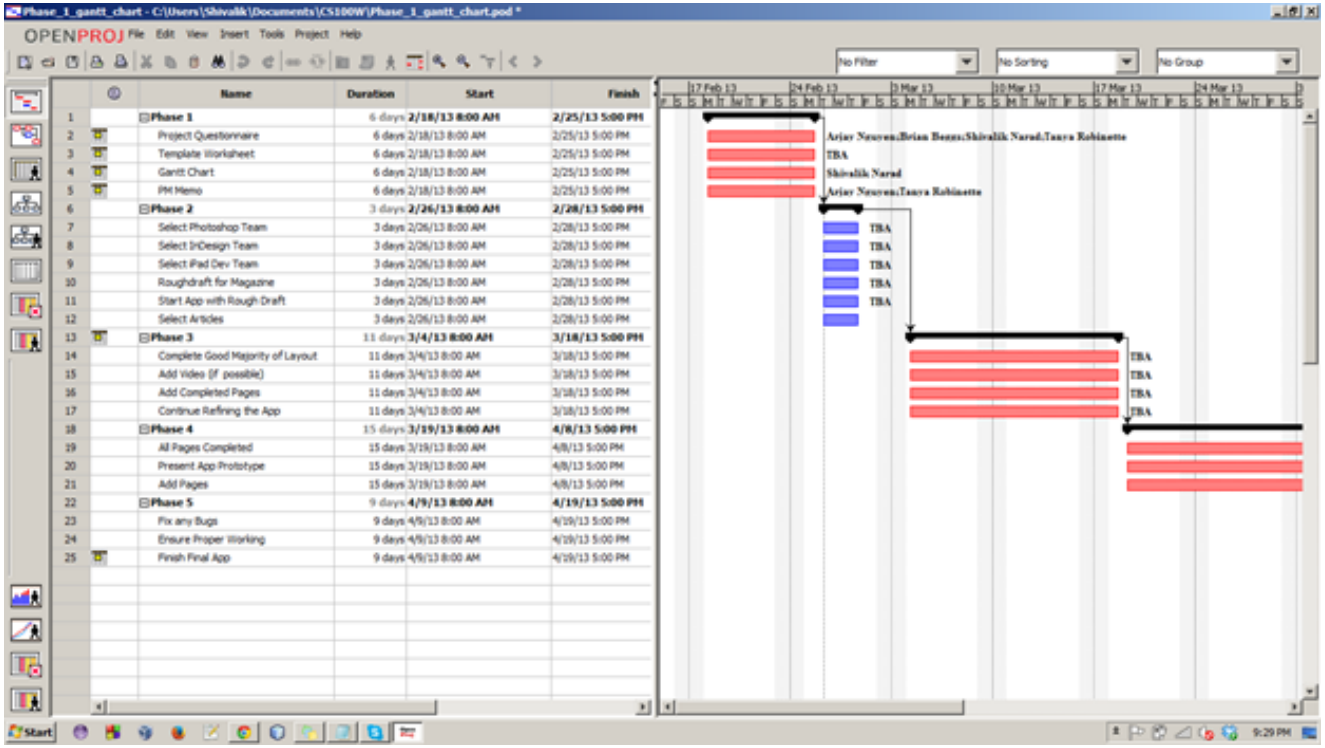

Figure : A project with details and timeline

References

[1] http://en.wikipedia.org/wiki/Comparison_of_revision_control_software

[2] http://en.wikipedia.org/wiki/Comparison_of_open-source_software_hosting_facilities

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[4] http://en.wikipedia.org/wiki/OpenProj#Comparison_to_Microsoft_Project

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Team Q 06
thanks you. . .