Eric Pitman Summer Workshop in Computational Science

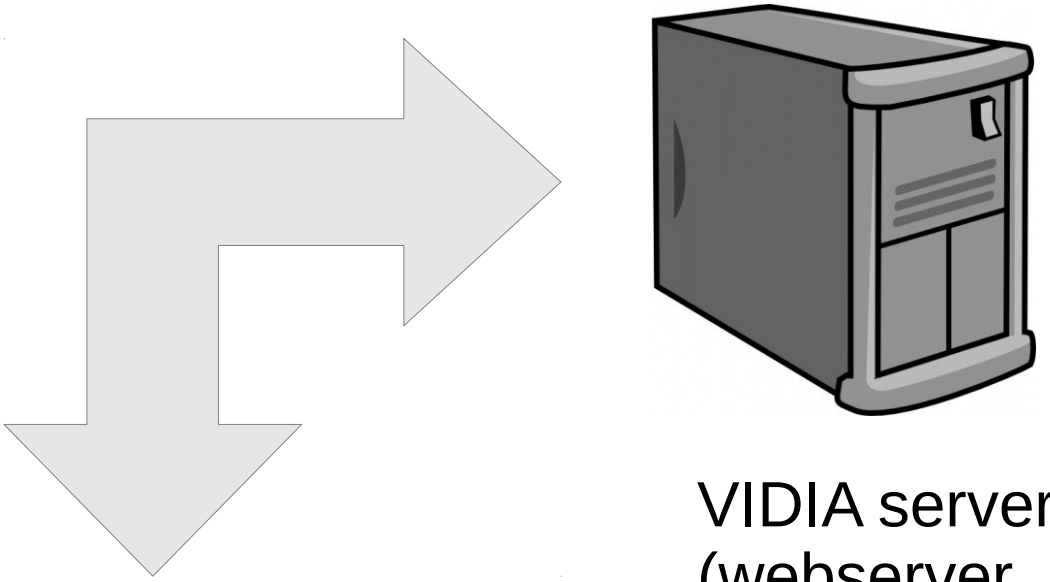
0. Workshop environment

Intro to 

0. Workshop environment: set up on vidia.ccr.buffalo.edu

- Register on VIDIA
- Starting the RStudio tool
- Setting up RStudio Projects: GitHub
- File transfer: using WebDAV
- Using groups on VIDIA

Workshop Computing Environment



VIDIA server
(webserver, RStudio)

You
are
here!

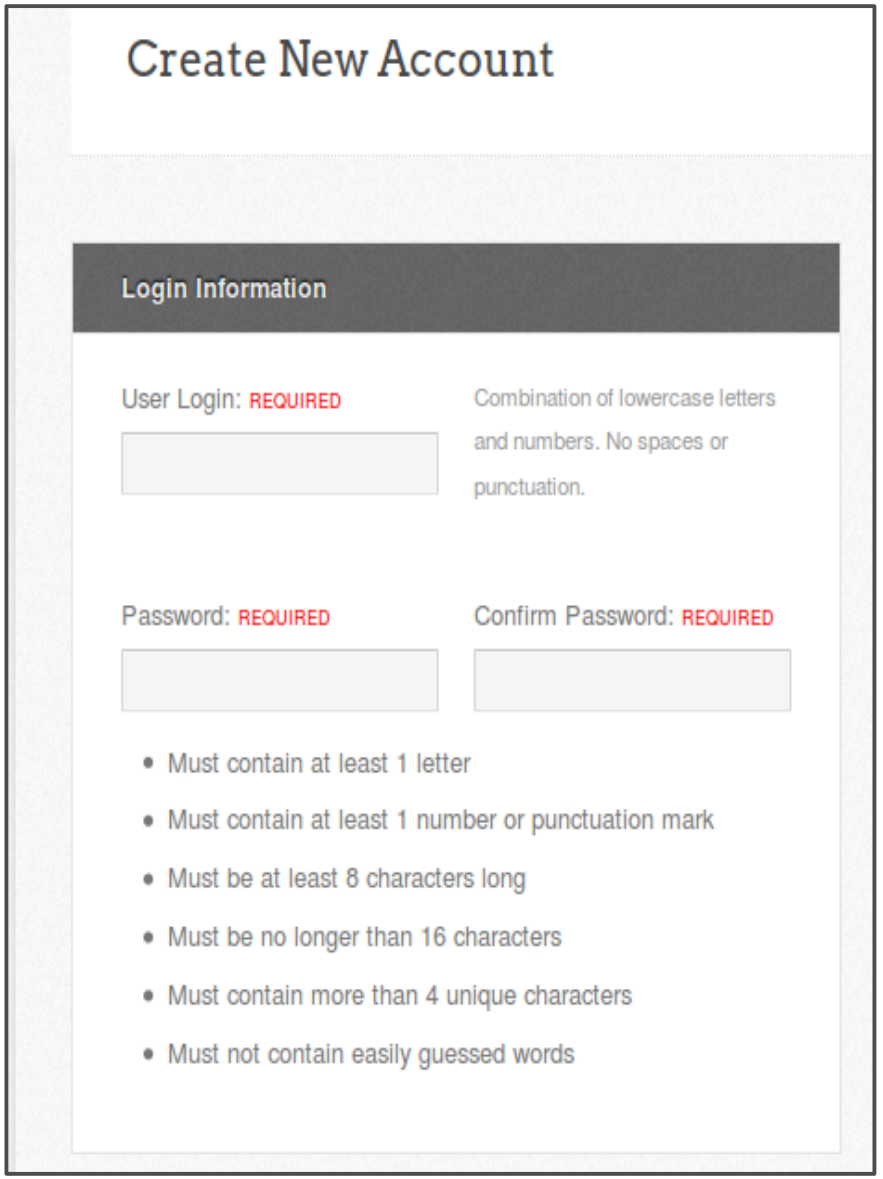
Student workstation
(Firefox browser)

Register on VIDIA

Use email address:
firstname.lastname@workshop.ccr.buffalo.edu

1. On vidia.ccr.buffalo.edu, click Register.
2. Specify your full name; choose username and password; specify email address; submit.
3. We will enable your account.

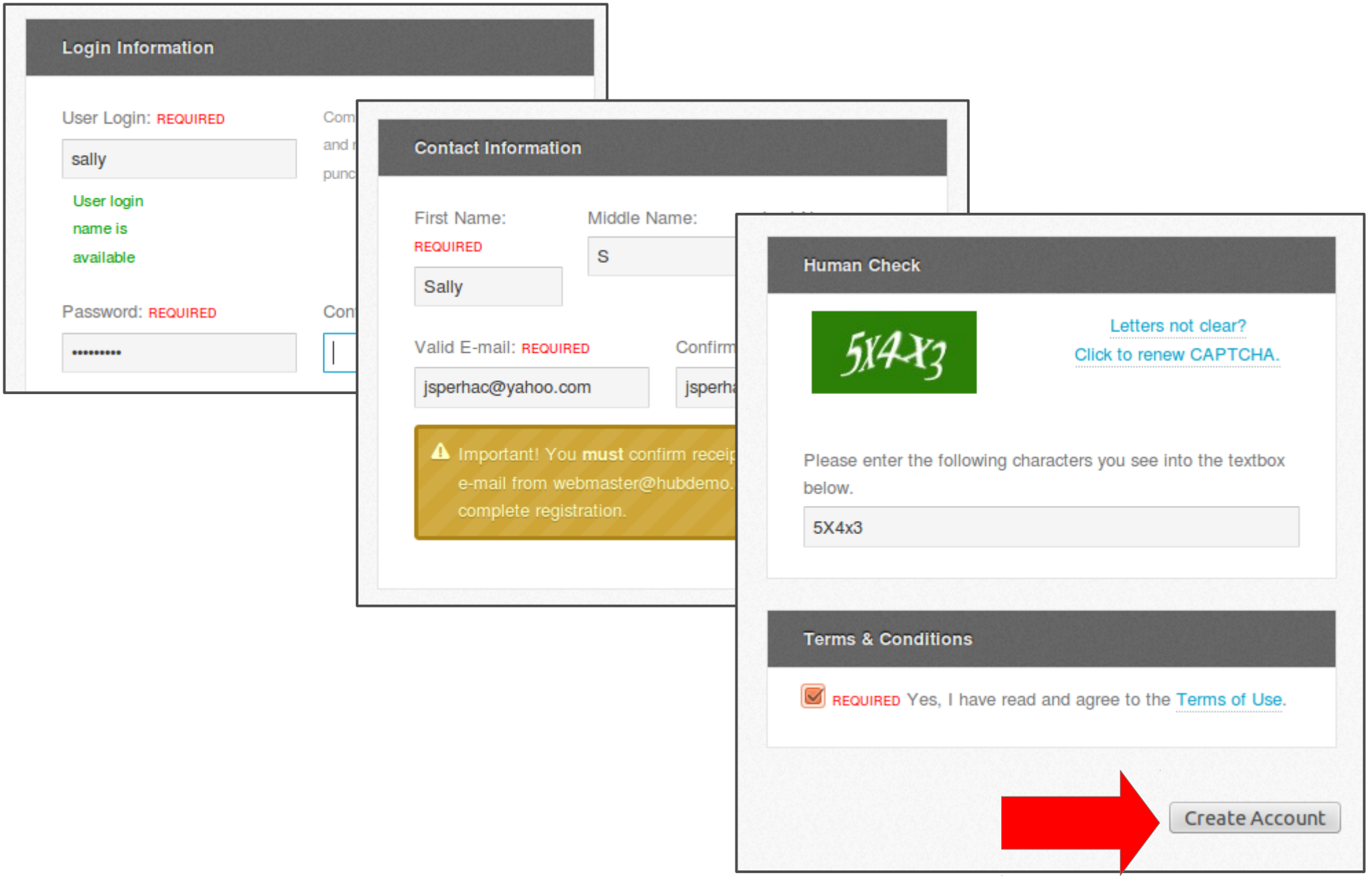
Create New Account screen



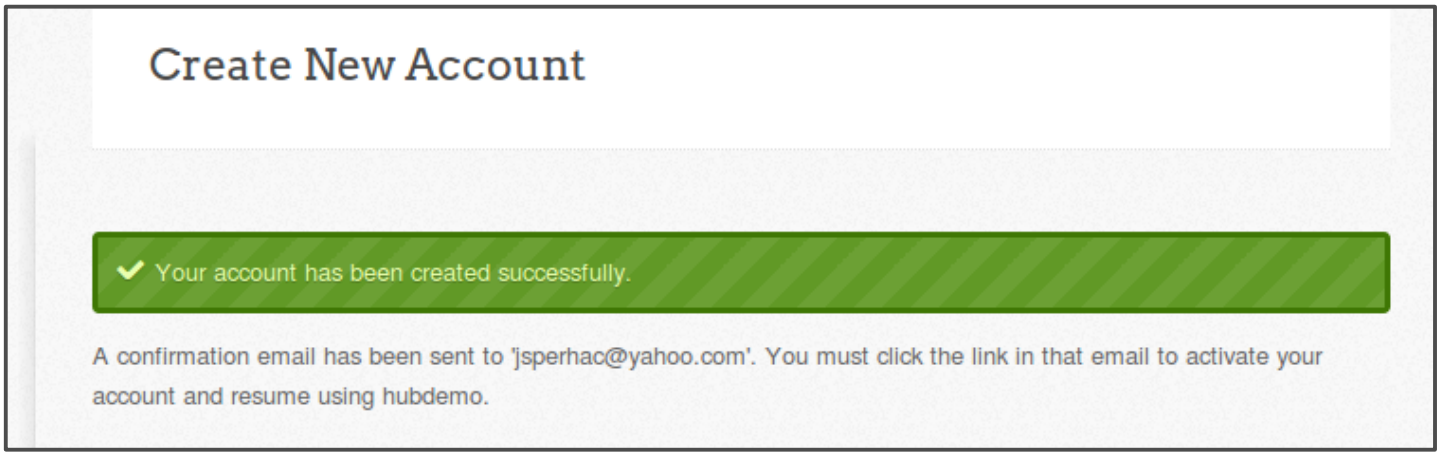
Complete and submit:

- contact information
- username and password
- email address

Fill in required fields and submit

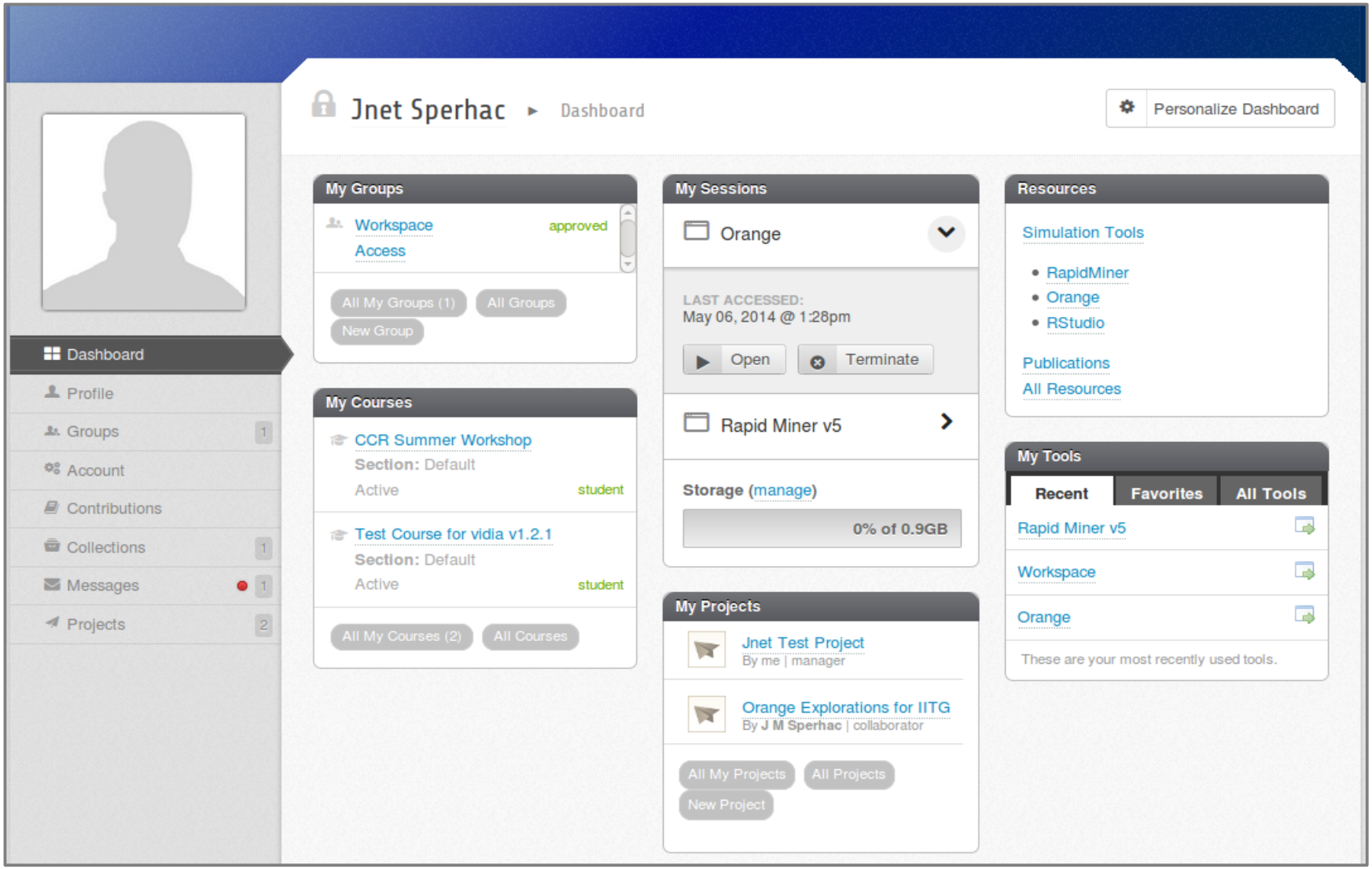


New account created



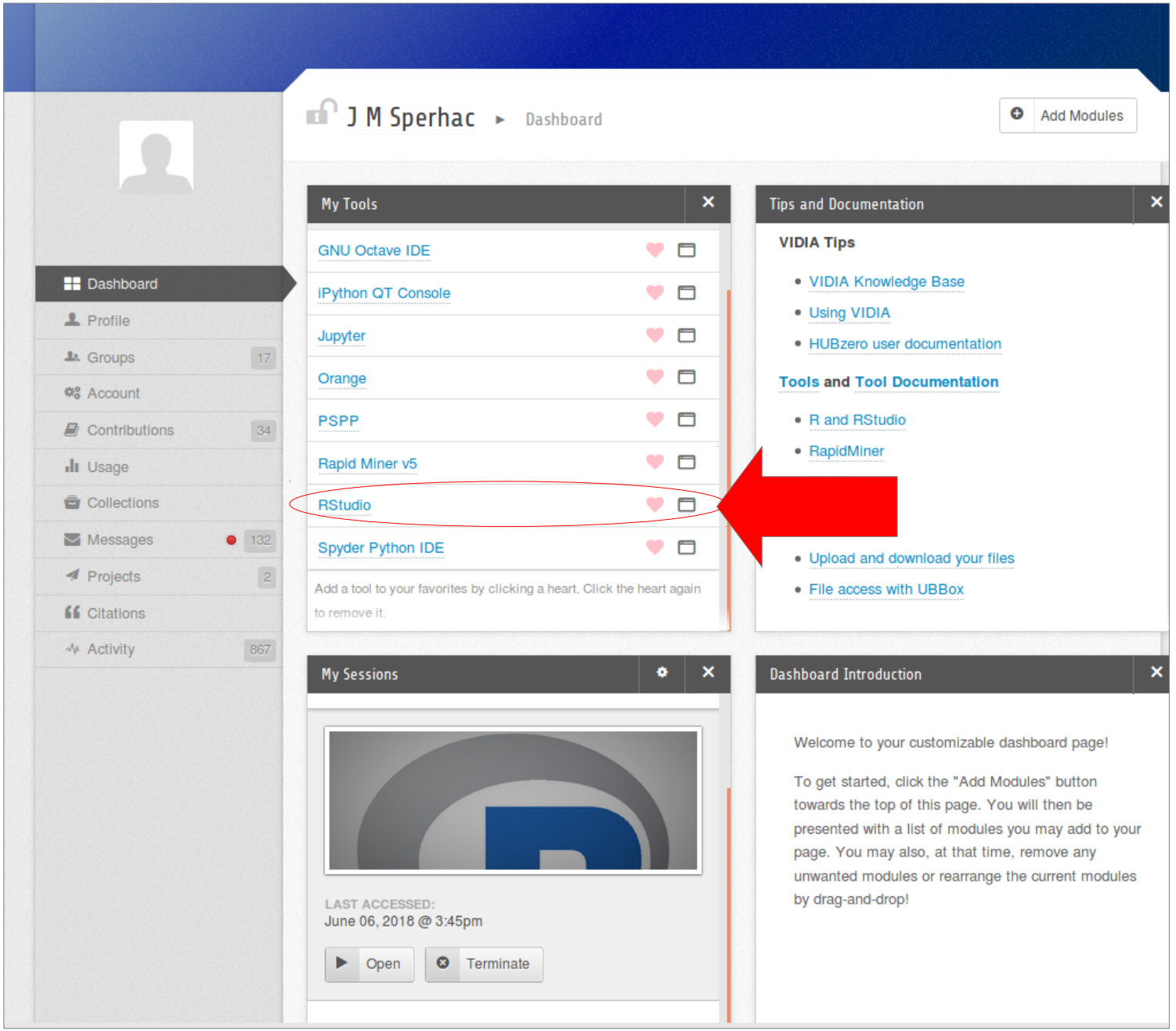
We will enable your account; then, you can sign in to VIDIA.

User Dashboard



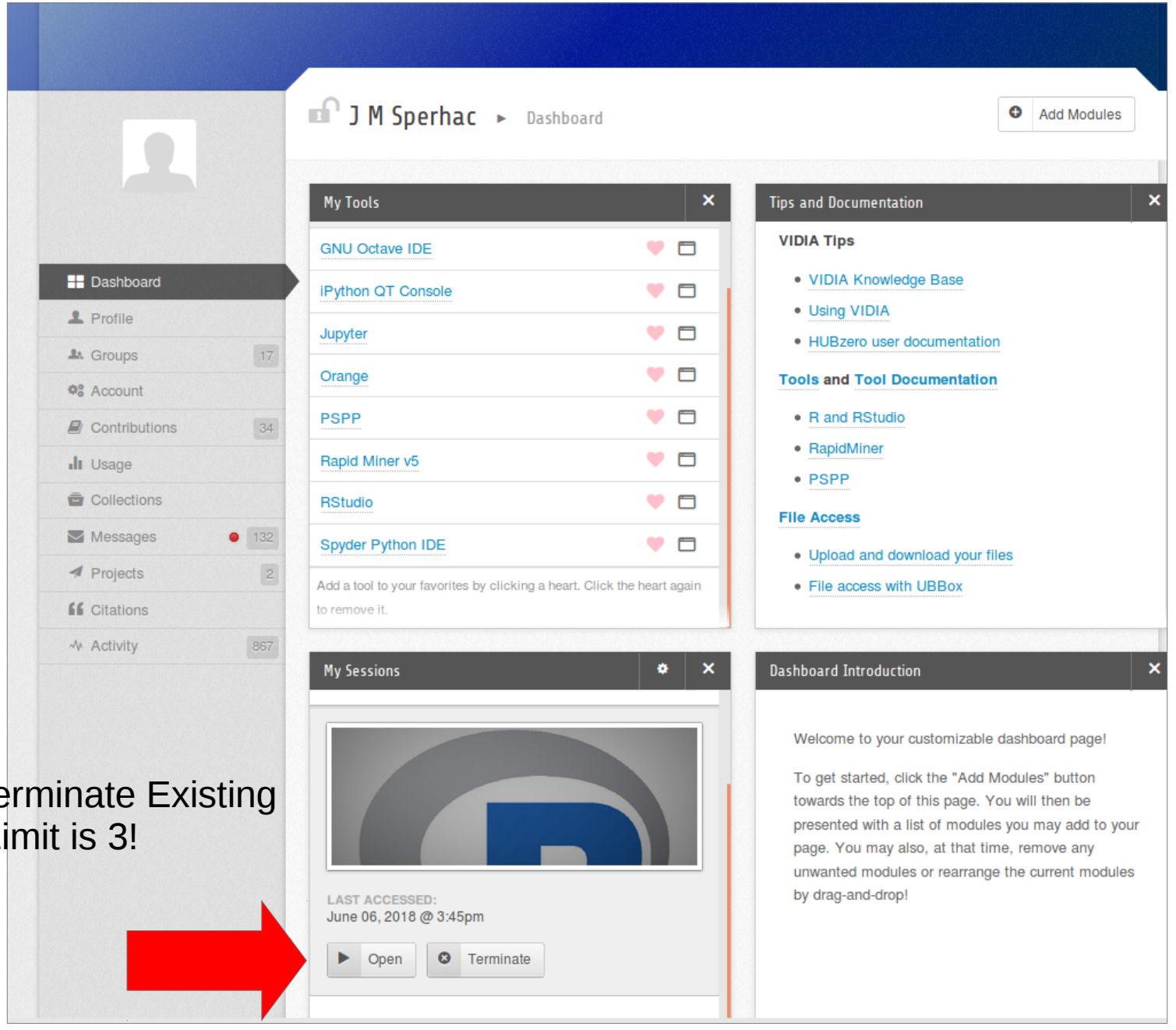
Running Rstudio tool on VIDIA

VIDIA Dashboard: RStudio Tool



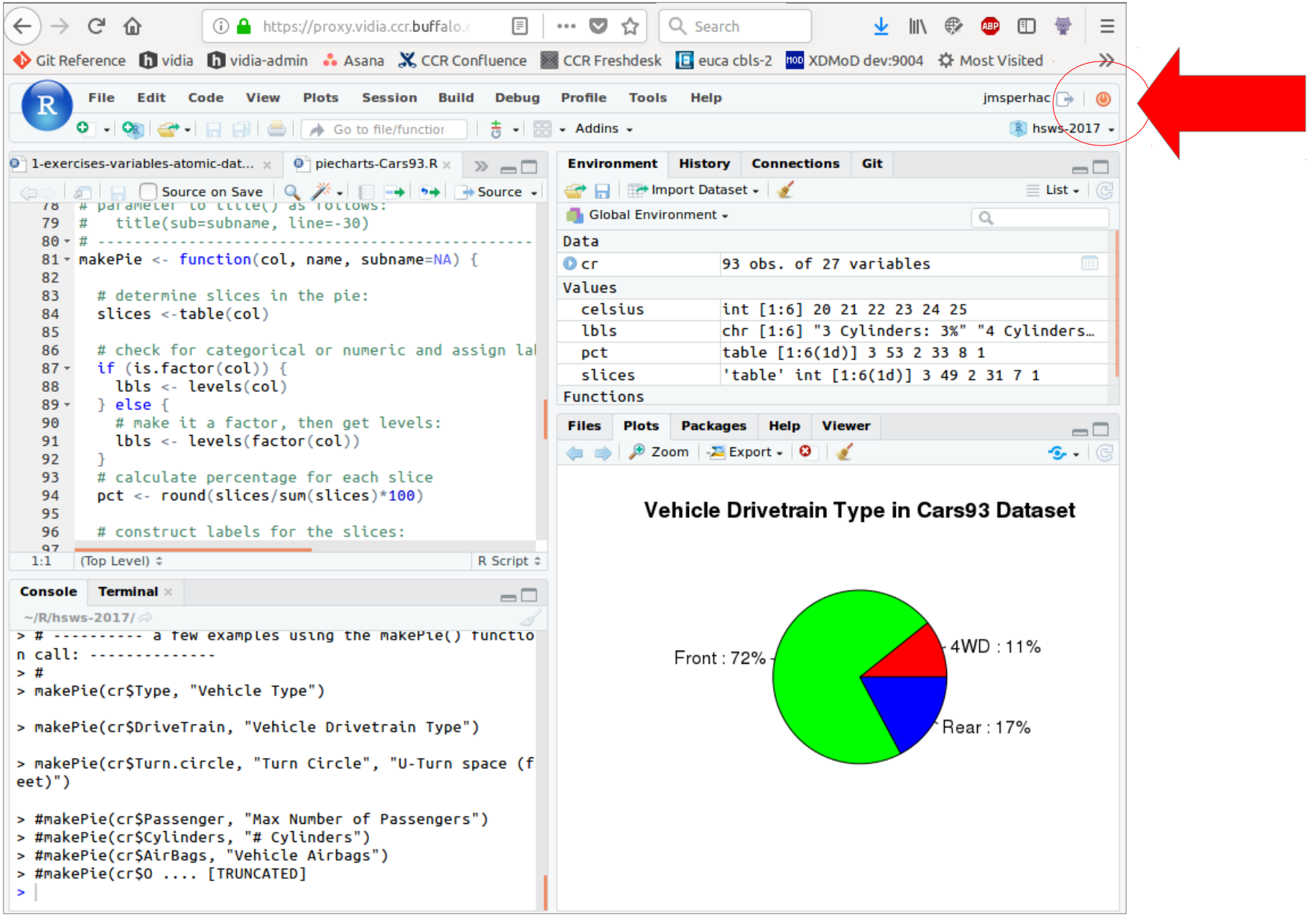
Launch RStudio

Running Rstudio Sessions

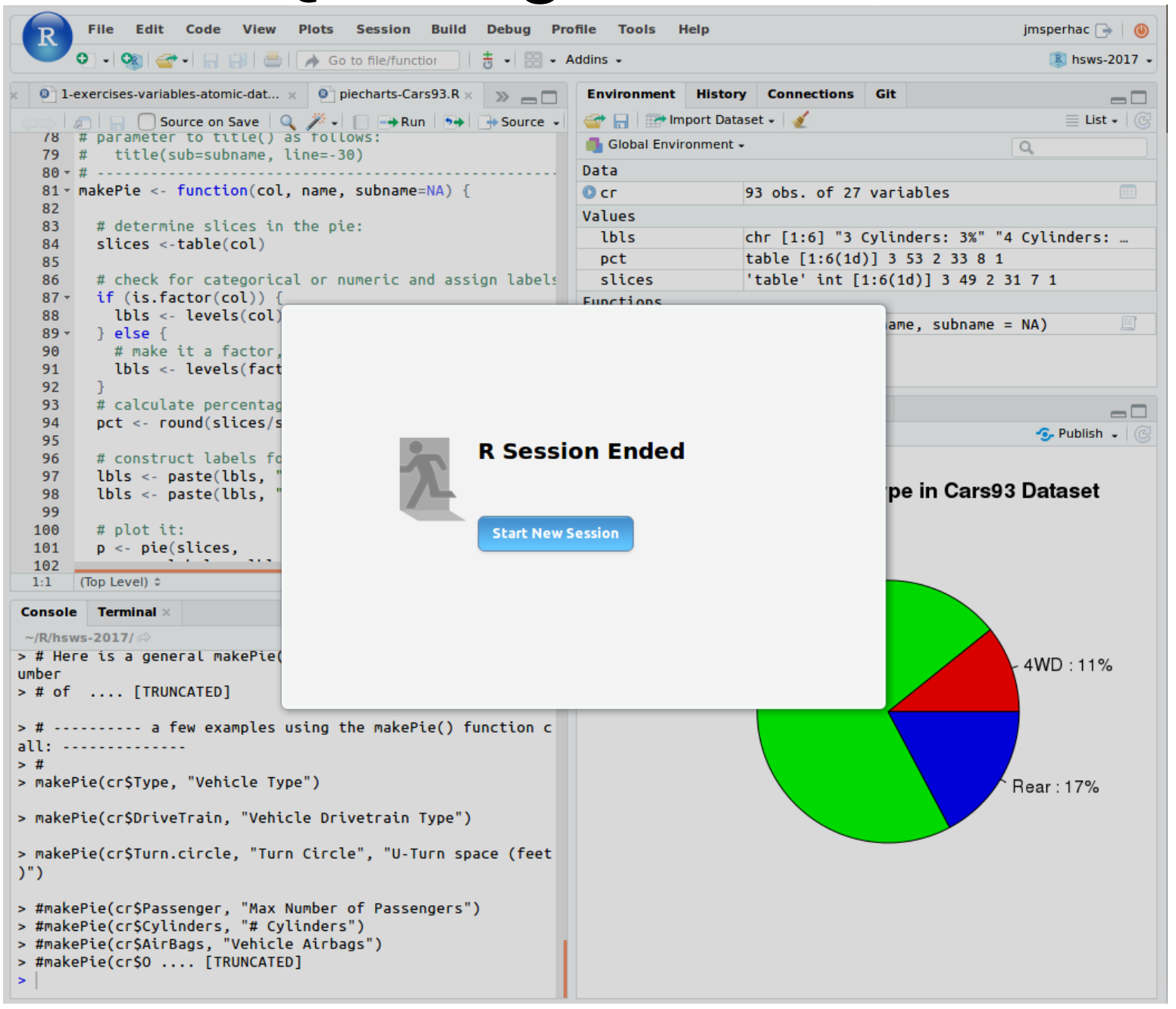


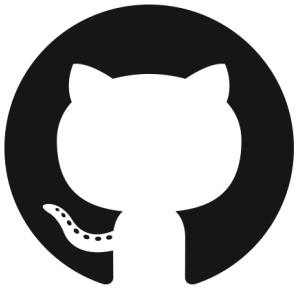
Open or Terminate Existing Session. Limit is 3!

Quitting RStudio



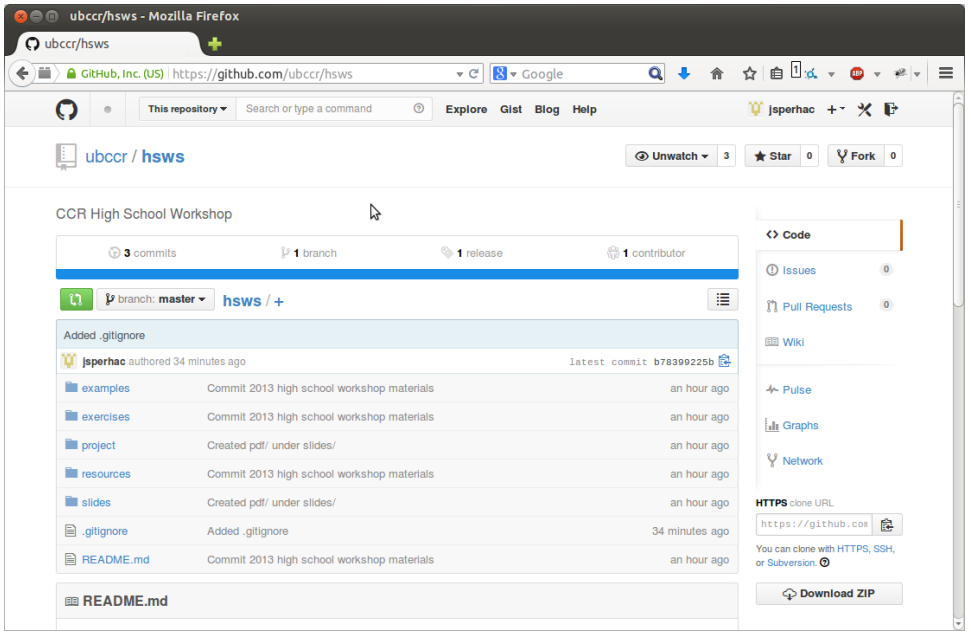
Quitting RStudio





Using Github

GitHub

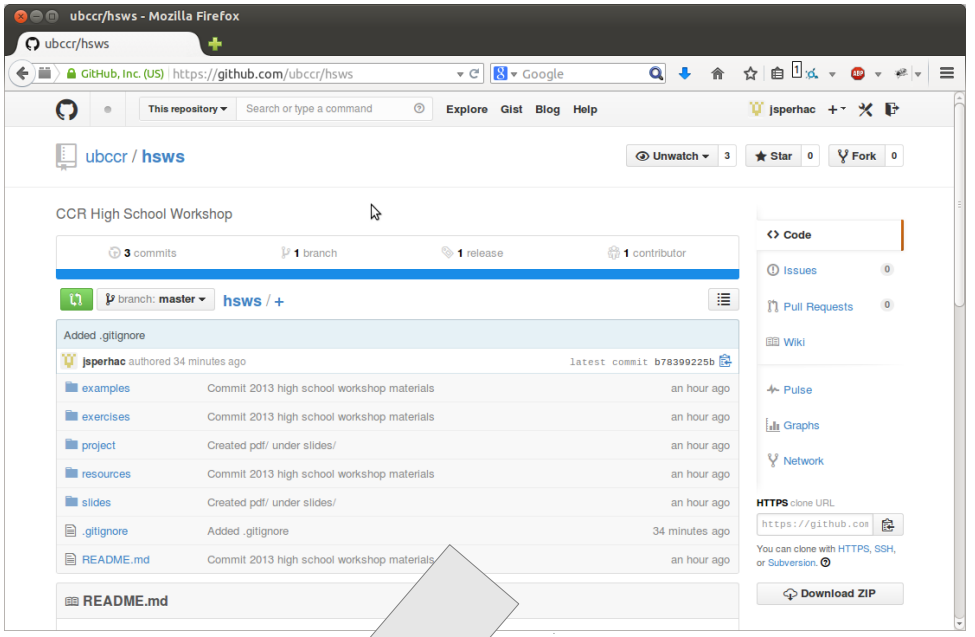


Git is a version control system for tracking changes in computer files and coordinating work on those files among multiple people. It is primarily used for source code management in software development.

GitHub is a web-based hosting service for version control using Git. It is mostly used for computer code.

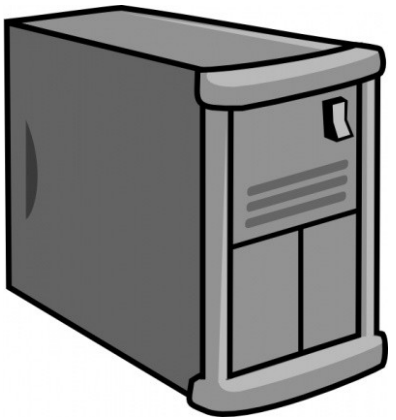
On June 4, 2018, Microsoft announced its intent to acquire GitHub for US$7.5 billion.

hsws Workshop Repo



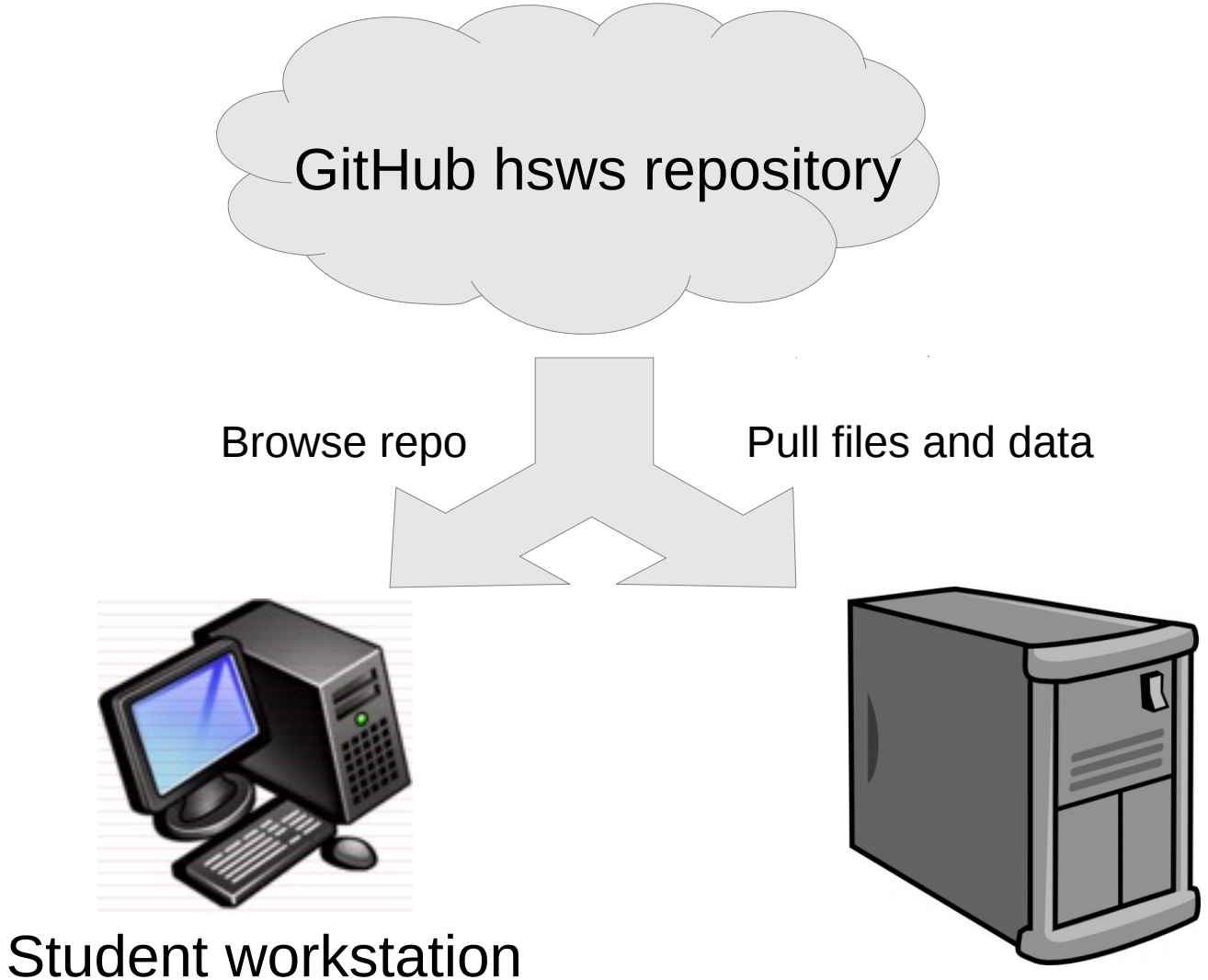
Browse repo

Student workstation



VIDIA server

GitHub

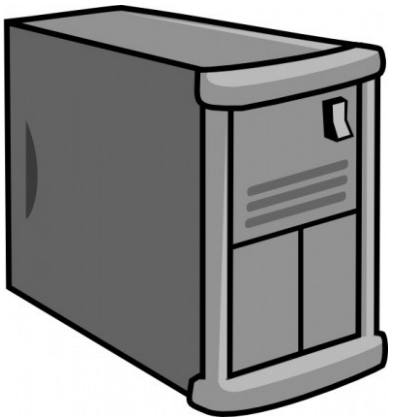

GitHub hsws repository
Browse repo
Pull files and data
Student workstation
VIDIA server

Workshop Files and Data: GitHub

GitHub hsws repository

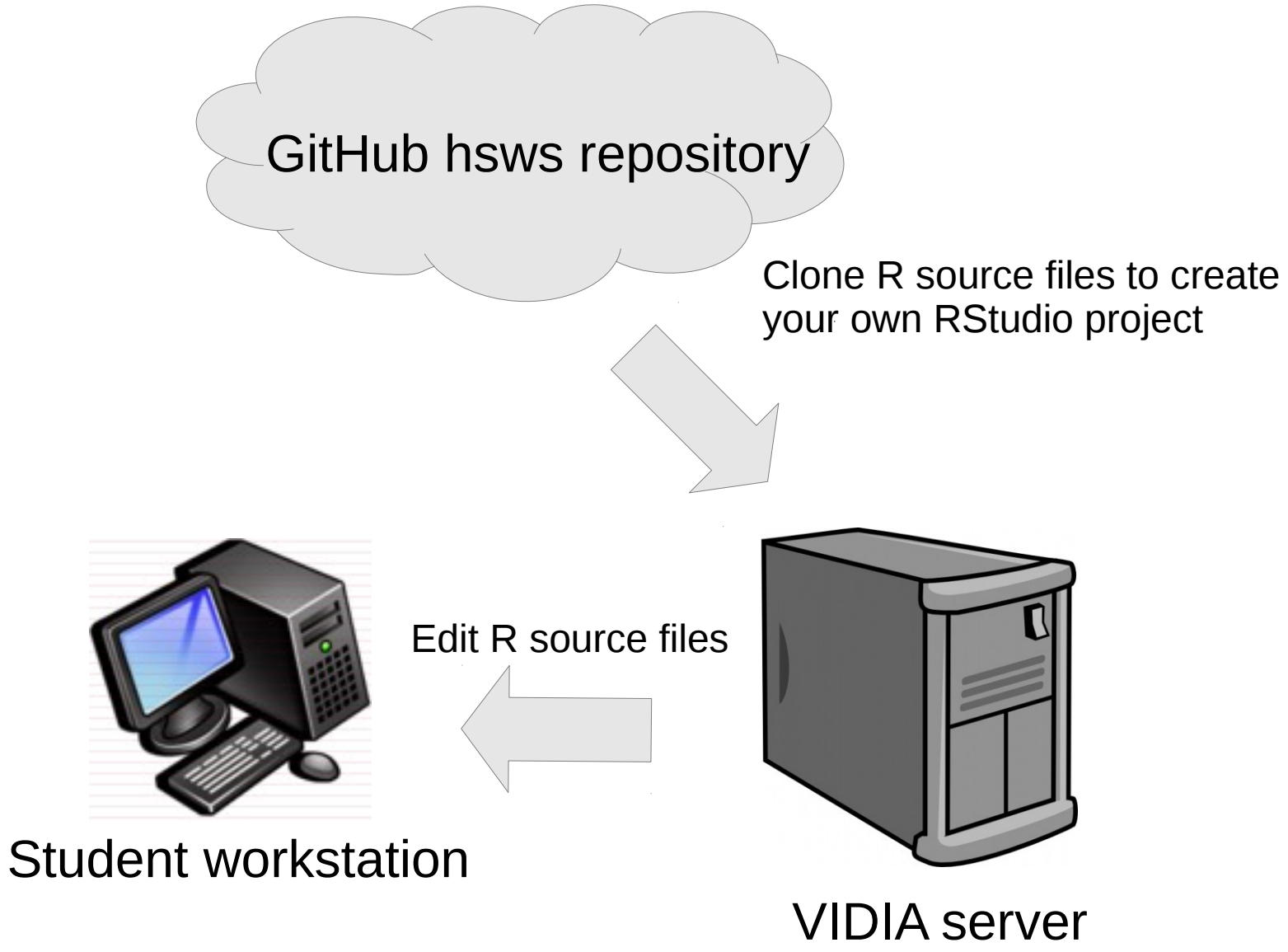
Clone R source files to create your own RStudio project

Student workstation



VIDIA server

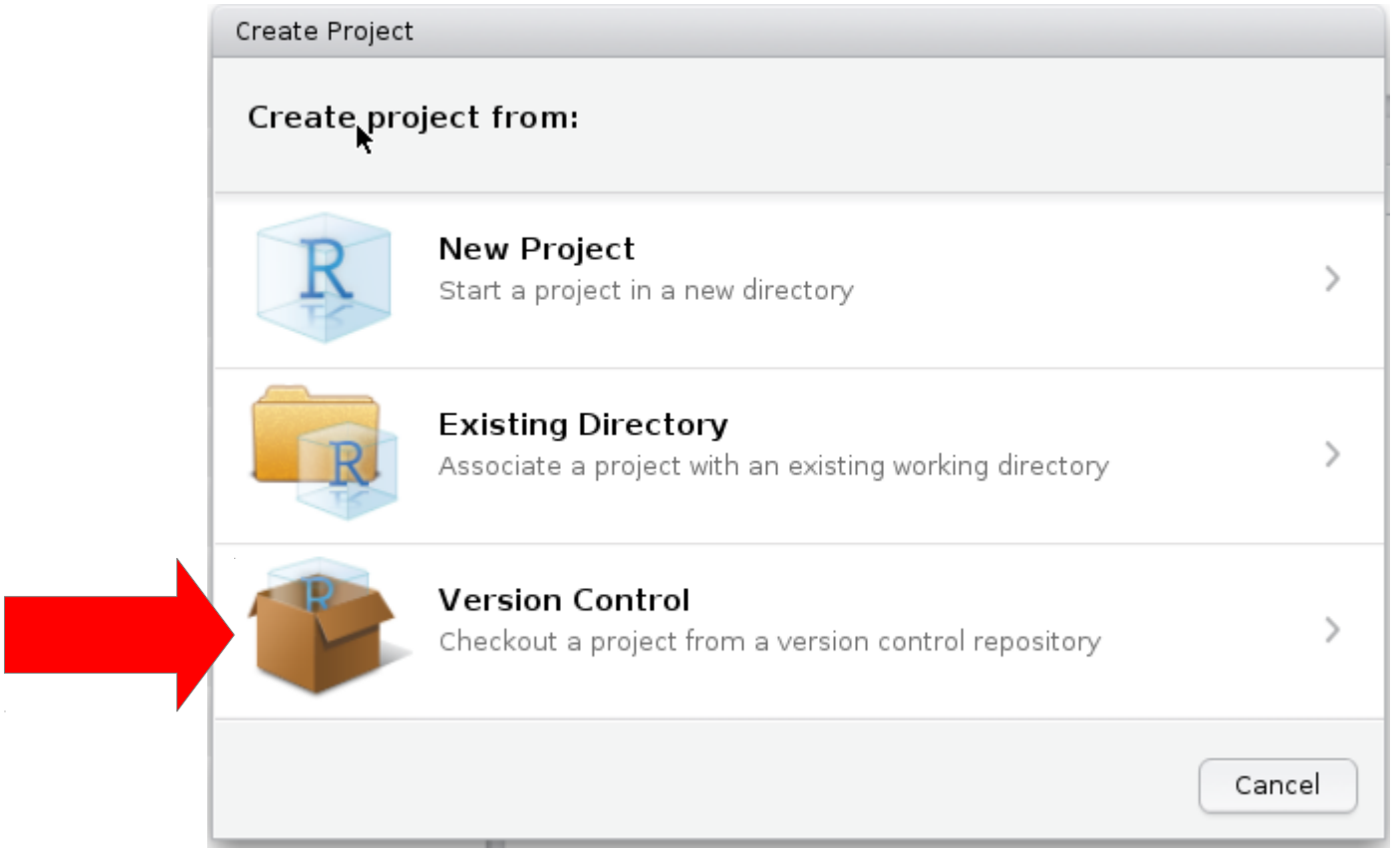
Workshop Files and Data: GitHub



Rstudio Project management

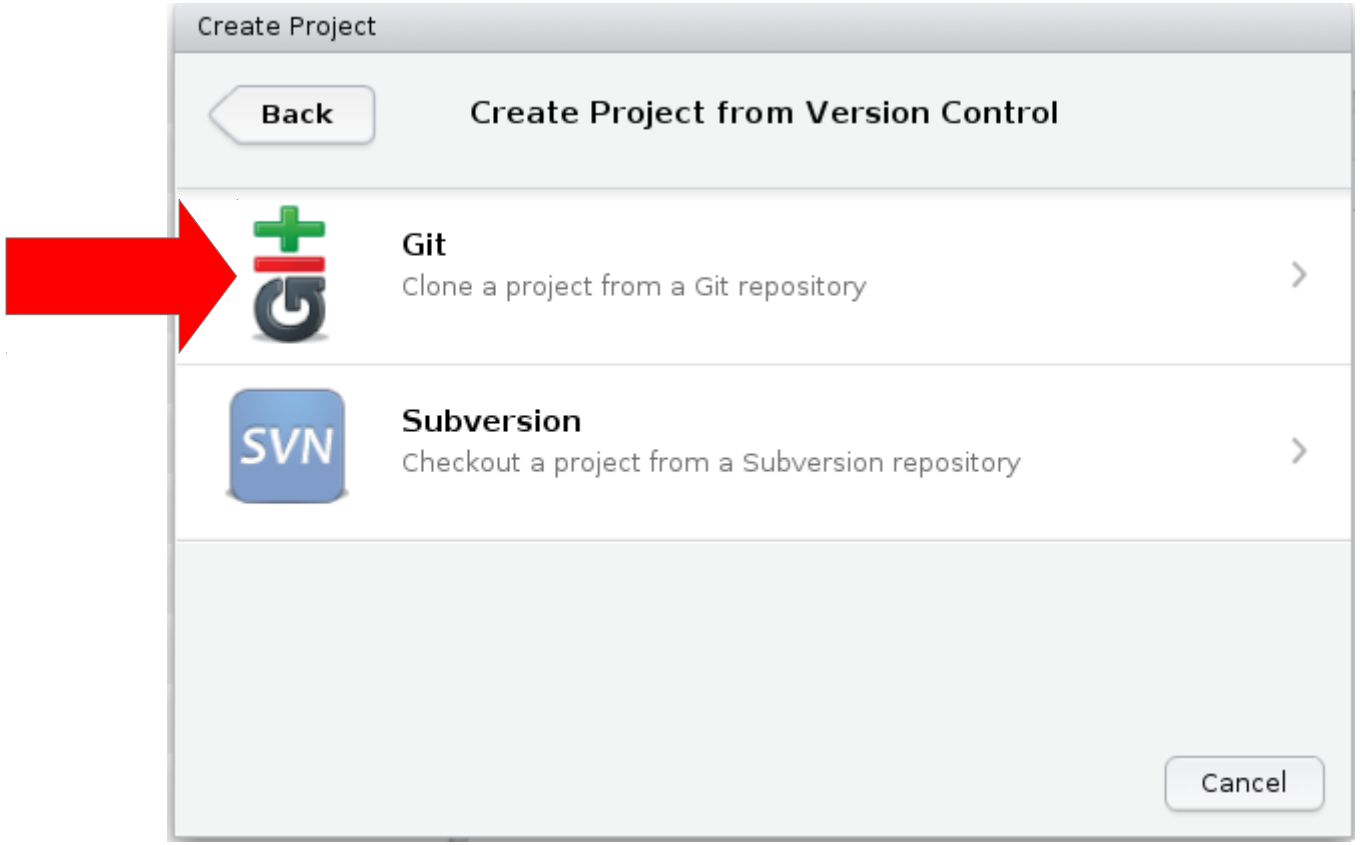
Create Project in RStudio

1. In the RStudio menu:
- Select Project: Create Project
- Select Version Control



Create Project in RStudio

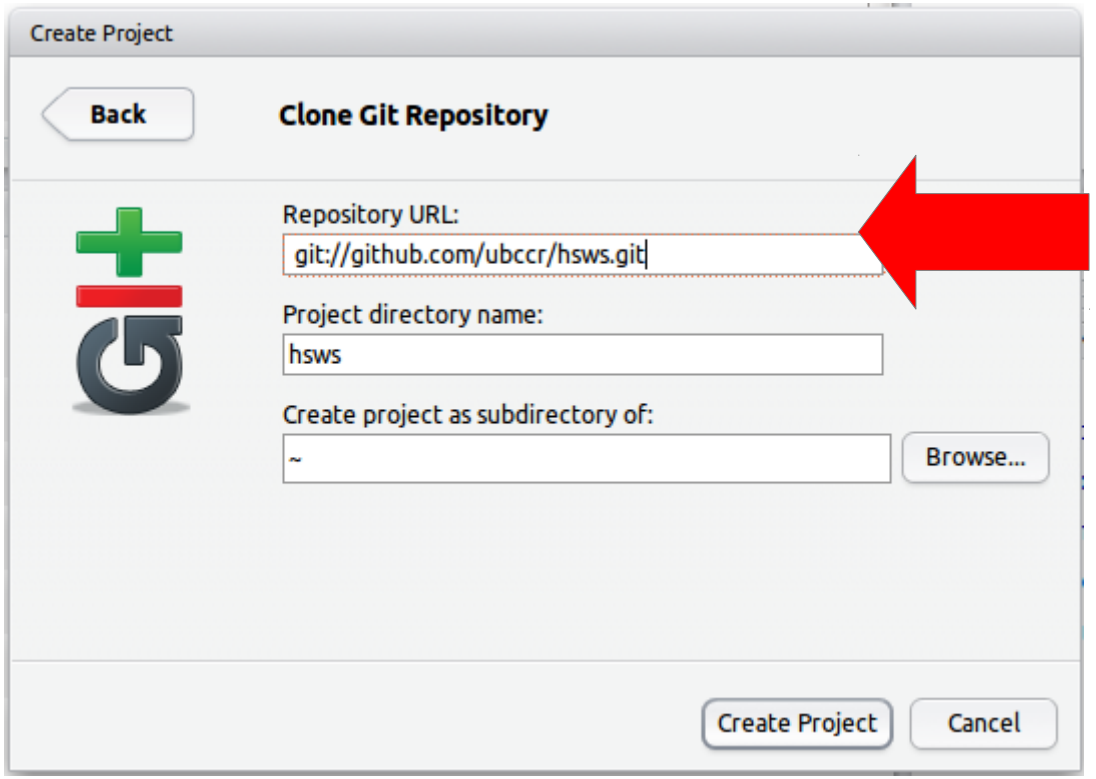
2. In RStudio:
   Next, select Git



Create Project in RStudio

3. In RStudio:

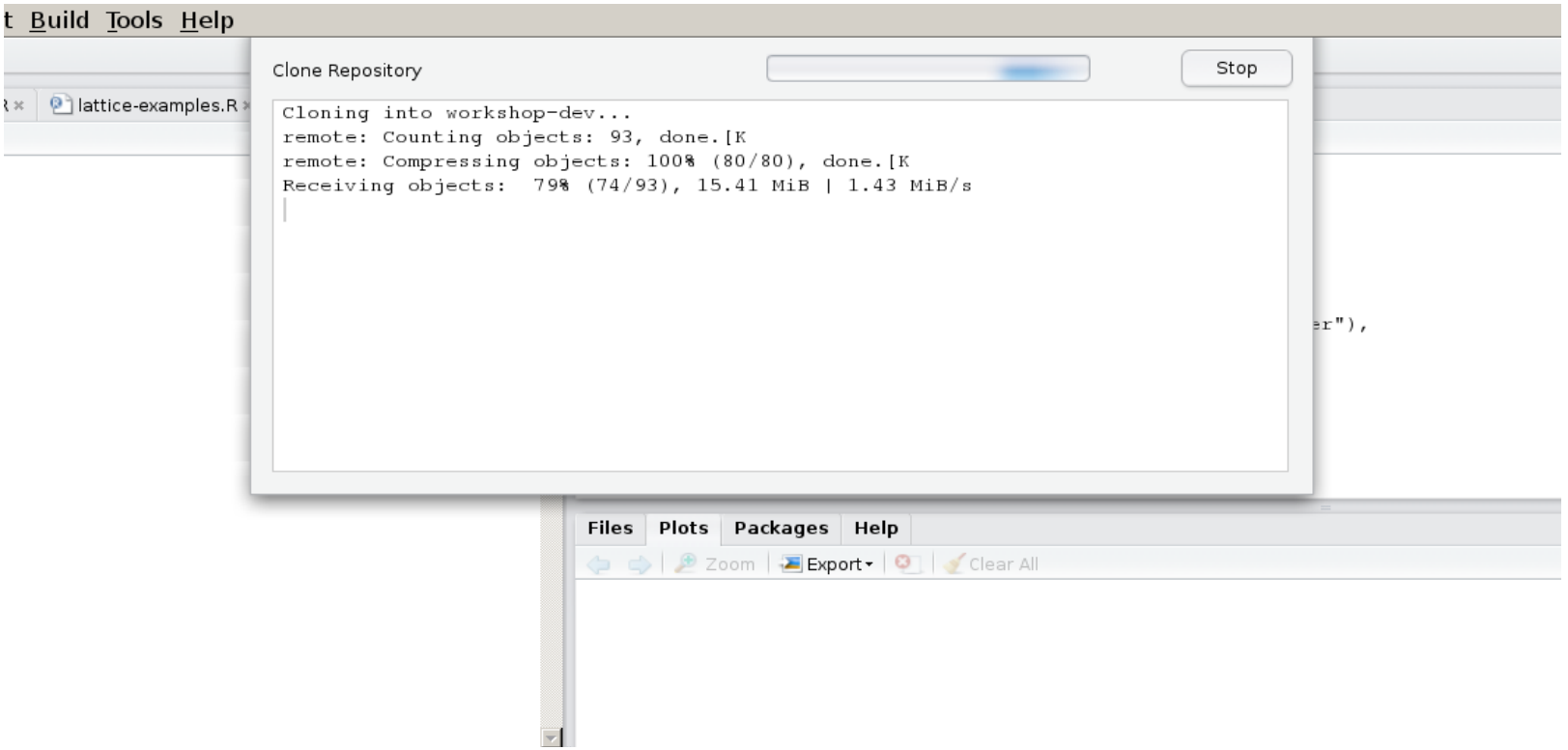
- Type the Repository URL as shown
- Use a unique project directory name



git://github.com/ubccr/hsws.git

Create Project in RStudio

4. RStudio copies the files from GitHub to your home directory on VIDIA.

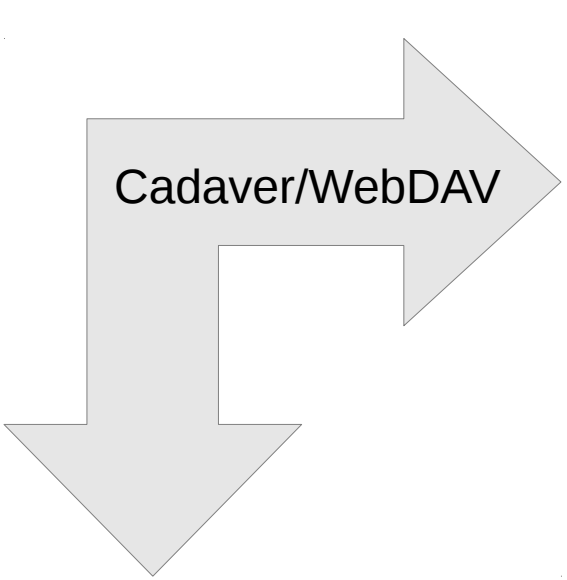


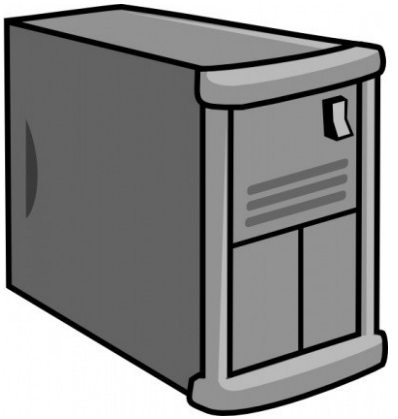
Create Project in RStudio

- Selecting the project sets the working directory
- Your RStudio project contains directories:
  - examples
  - exercises
  - project
  - resources

File transfer to and from VIDIA

File Transfer



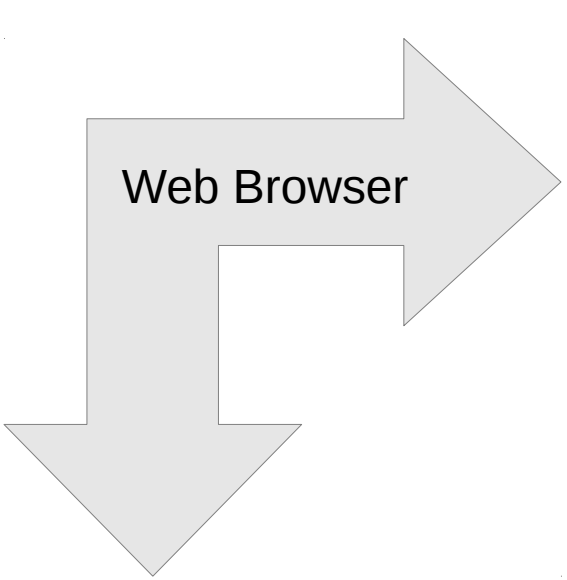


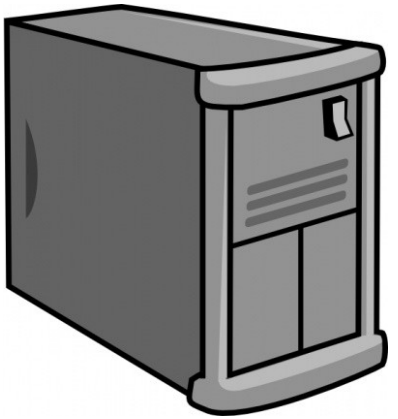
VIDIA server

Student workstation

You'll need file transfer for adding graphics files to your presentation slides

View/Browse your Files





VIDIA server

Student workstation

To browse your directory on VIDIA:

1. Start a web browser

2. Enter URL:
https://vidia.ccr.buffalo.edu/webdav

3. Authenticate when prompted

File Transfer: WebDAV

```
$ cadaver https://vidia.ccr.buffalo.edu:443/webdav
```

Student workstation

To transfer files to/from VIDIA:

1. Start a terminal window

2. Issue cadaver command

3. Sign in with your VIDIA user credentials when prompted

4. Use ‘ls’, ‘cd’, ‘get’, ‘put’

Much like typical ftp commands

HUBzero Resources