Using RStudio and GithUb

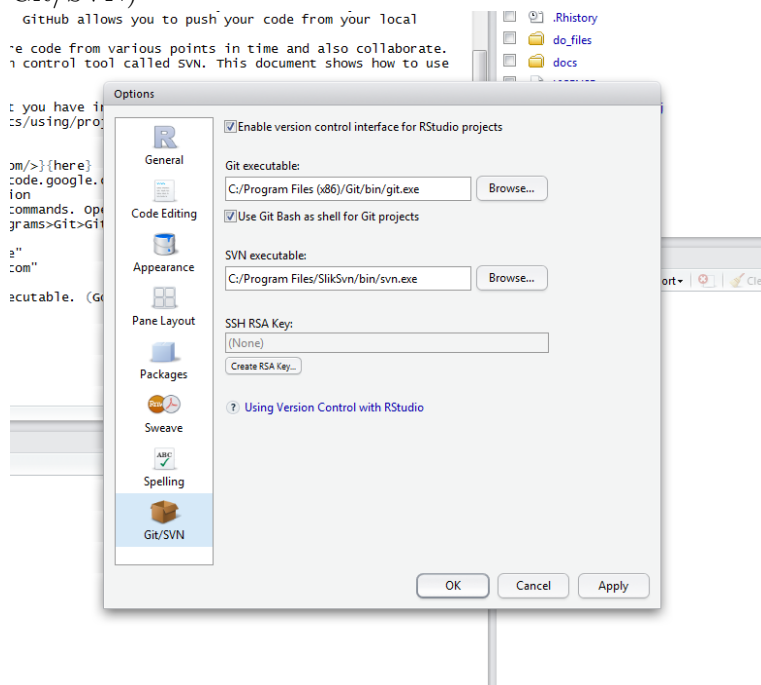November 29, 2013

RStudio and Git

1 Overview

RStudio is an integrated development environment (IDE) for R and Git is a version control system and allows you to save copies of your code throughout the entire developmental process. GitHub allows you to push your code from your local workspace to be hosted online. GitHub, which seamlessly integrates with Git, allows us to compare code from various points in time and also collaborate. RStudio contains version control for Git and also another version control tool called SVN. This document shows how to use GitHub and RStudio since our project is on GitHub.

2 Setup Requirements

To use version control with RStudio, you should first ensure that you have installed Git. Yo must also ensure you have famialiarised yourself with RStudio Projects

2.1 Setup Process for Windows

1. Ensure you have a GitHub account here

2. Download and install Git **NB: NOT Github** for windows from here - Download the latest version and use the default options during installation

3. After installation configure your local Git with global commands. Open the the bash version of Git and type the following global commands for your Github account (Start>All Programs>Git>GitBash)

    a) git config - global user.name "your GitHub account name"

    b) git config - global user.email "GitHubEmail@something.com"

4. Open R Studio: this step ensures we set the path to Git Executable. (Go to Tools > Options > Git/SVN)

5. Restart R Studio. . .

2.2 Setup Process for Mac

1. Ensure you have a GitHub account here

2. Download and install Git for Mac **NB: NOT Github** from here - Download the latest version and use the default options during installation

3. After installation configure your local Git with global commands.
   a) git config –global –add user.name "your GitHub account name"
   b) git config –global –add user.email "GitHubEmail@something.com"

4. Open R Studio: this step ensures we set the path to Git Executable. (Go to Tools > Options > Git/SVN)

5. Restart R Studio. . .

2.3 Setup Process for Linux

1. Ensure you have a GitHub account here

2. Run sudo apt-get install git-core

3. After installation configure your local Git with global commands.
   a) Run: git config –global user.name your GitHub account name"
   b) Run: git config –global user.email "GitHubEmail@something.com"

4. Open R Studio: this step ensures we set the path to Git Executable. (Go to Tools > Options > Git/SVN)

5. Restart R Studio. . .

3 Set up our Pwani Repository

There some terms associated with Git which will ve most useful to learn: repository, commit, push, and pull. A repository equals the location or folder and name for all the files associated with a particular project. In this case our repository is Gfegan/Pwani Tab Stats

1. Open Rstudio and go to Project > Create Project > Version Control > Git

   a) Under Repository URL; put your Github repository. In this case our URL is
      https://github.com/gfegan/pwani_tab_stats

   b) Automatically the project directory name is filled with the repository name

   c) Under create project as subdirectory of; select where your files will be stored locally

2. Then click on create project. Automatically RStudio links with the remote repository and clones the folder on the directory you specified and RStudio's version control features will then be available for that directory.

3. Open the project under Project > Open Project

References

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