Github_tutorial

This tutorial will enable students have hands-on experience about how to create their own project using GitHub

Introduction

- This repository provides the data and R code associated to Chapter 11: Part 2.
- The Documentation used as practice examples is found in https://rpubs.com/Phebie/682307
- This study aims at providing a Git and GitHub Tutorial for EEB603, Reproducible Science Class during the Fall 2020 Semester.

Collaborators

The authors of this tutorial are Ann Wozniak, Phebian Odufuwa and Annie Taylor.

Dependencies

- RStudio 3.0.1 or later (https://download1.rstudio.org/desktop/windows/RStudio-1.3.1093.exe) (to write and test code in)
- Visual Studio Code (https://code.visualstudio.com/download) (For editing code, used as text editor)
- Install the following extensions on Visual Studio Code:
  - Git Extension Pack
  - Start git bash
  - Git Lens
  - Git History
  - Git automator
  - Git merger
  - R Markdown all in one

Project structure

The repository contains:

1. Dataset used as examples in class. This dataset was from an Advanced Ecology class Ann Wozniak had during the Fall 2020 Semester taught by Dr Leonara Bittlestone at Boise State University.
   - The Dataset is data collected from a local survey of Idaho Biodiversity.
   - The Dataset is a csv file (in folder 'Data')
2. The folder 'Figures' consist of figures obtained after running R Function for obtaining alpha and beta diversities of Idaho biodiversity
   - The folder also consists of screen shots of instructions on how to use Git and GitHub to ensure reproducible science.

3. The documentation used as practice, and explaining the results obtained after running the R code is contained in the folder 'Documentation' in pdf and html formats and has been published as both R publication on https://rpubs.com/Phebie/682307 and as a GitHub page on https://rpubs.com/Phebie/682307.

4. The Tutorial Document is also available in the folder 'Chapter_11_part_2' and is available in pdf, html, and word formats

5. R markdown scripts to:

- Produce a Git and GitHub tutorial, located in the folder 'Chapter_11_part_2.Rmd'
- Produce the Documentation associated with the 'Data' folder is located in the folder 'Documentation.Rmd'

The authors have written a pseudocode to enable users seamlessly install the packages to be used during practice in class