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| **Topic** | **Category** | **Details** |
| Github | Introduction | Account Name: SeaSmith1018  **Definitions (**[**link**](https://help.github.com/articles/github-glossary/)**):**   * Repository – most basic element of GitHub; like a project’s folder; contains all project files including documentation; stores each file’s revision history   + Fork – personal copy of another user’s repo that lives on your account; freely make changes to a project without affecting the original   + Clone – copy of a repo on the local computer (from the remote/server) * Branch – a parallel version of a repository; way to work on different parts of a repository at one time; each repository has a default branch (master); contained within the repository but does not affect the primary or master branch   + Upstream – the primary branch on the original repo   + Downstream – the branch/fork being worked on * Merge – takes the changes from one branch (in the same repo or from a fork) and applies them into another; often happens as a pull request * Fetch – way to get latest changes without merging them; for comparison * Pull – fetching ***in*** changes ***and*** merging them   + Pull Request – proposed changes to a repo submitted by a user and accepted or rejected by a repos collaborators (i.e. merge them into their branch); have their own discussion forum; shown in green (additions) and red (subtractions) and are called diffs * Push – sending changes to a remote repo (from a local machine to GitHub) * Issue – suggested improvements, tasks, or questions related to a repo; can be created by anyone (for public repos); moderated by repo collaborators; contains its own forum * Commit – a saved change to a file; creates a unique ID (project history) each commit has an associated commit message |
| Git Bash | Introduction | **NOTE:** version control system; developed by the Linux people; command line tool; runs on Git  **Git Commands:**   * pwd – print working directory; prints the working directory * clear – clears out everything in the command line interface * ls – list current folders and files in the current directory   + -a – lists hidden and unhidden folders and files; can be combined   + -l – lists details; can be combined * mkdir – make directory; takes as an argument the name of the directory you’re creating (within the CURRENT directory) * cp – copy;   + -r – recursive; i.e. cp –r Documents More\_Docs (copies and pastes Documents into the More\_Docs folder) * rm – remove; deletes file or entire directory; THERE IS NO UNDUE!!! * Echo – prints out the argument; can be used to print out the contents of variables |
| Project | Project 1 | **Due Date:** 12/27/15 11:30 PM UTC  **Submitted:** 12/15/15 2:10 PM UTC  **Github:**  Intro:   * <https://guides.github.com/activities/hello-world/>   Creating a repo:   * <https://help.github.com/articles/create-a-repo/>   How to fork:   * <https://help.github.com/articles/fork-a-repo/> * <https://www.youtube.com/watch?v=f5grYMXbAV0&list=LLTvTbaHeFGJdB4wJMQMT3oQ&index=1> |
| References | All | **Course:**   * [Data Science Specialization – Main Page](https://www.coursera.org/specializations/jhudatascience) * [Syllabus](https://class.coursera.org/datascitoolbox-035/wiki/Syllabus) * [Announcements](https://class.coursera.org/datascitoolbox-035) * [Video Lectures](https://class.coursera.org/datascitoolbox-035/lecture) * [Quizzes](https://class.coursera.org/datascitoolbox-035/quiz) * [Project](https://class.coursera.org/datascitoolbox-035/human_grading)   **Community:**   * [Forum](https://class.coursera.org/datascitoolbox-035/forum) * [Student created material](http://datasciencespecialization.github.io/) * [Curated Knowledge](http://datasciencespecialization.github.io/curated/) * [How to contribute](https://github.com/DataScienceSpecialization/DataScienceSpecialization.github.io#contributing)   **Other:**   * [How to Ask Questions the Smart Way](http://www.catb.org/esr/faqs/smart-questions.html) |
| RStudio | Introduction | [Download Link](https://www.rstudio.com/products/rstudio/download/)  **Help Commands:**   * ?norm *retrieves help file* * help.search(“norm”) *retrieves help file* * args(“rnorm”) *retrieves arguments of a function; can also type bare function (i.e. rnorm instead of ?rnorm)* |
| R | Introduction | [Download Link (includes download link of RTools)](https://cran.r-project.org/) |