Git-hub Exercise

Business Data Analytics and Prediction (Foundations and Advanced) 2264. Part 1, Lesson 1

What is github

Github is used for code source sharing: both open source social sharing, as well as Joint group coding.

1. See the movie on what is Github in: https://www.youtube.com/watch?v=w3jLJU7DT5E
2. Go to Github.com and search all github to open source solutions related to the business questions you are addressing
    a. What was your search term? _____
    b. How many open source repository you found? _____
    c. How many of the repositories are in R? _____
    d. How many of the repositories are in Python (and Jupyter notebook)? _____

Github online

To work with github you'll need a github account (like your Facebook or LinkedIn account) and to install locally Git Bash to manage the connectivity of your desktop to github online.

3. Create your github account (if you don't have one yet)
    a. Go to www.github.com and login, or create your profile if you don't have one yet.
    b. What is your user name for your git account? _____
    c. What is the email for your git account? _____
    d. Update your user profile (e.g., add your photo)
4. Create a github repository named 'hello-wprld'
    a. Click **New Repository**. (Green button on the right)
    b. Name your repository 'hello-world'.
    c. Write a short description.
    d. Select initialize this repository with a README.
    e. Click **Create Repository**.
5. Edit your new repository README file
    a. Click on the hello-world repository
    b. Click on README.md (a text will appear below the files list)
    c. Click on the **Edit** button (pencil icon)
    d. Make a change in the text
    e. Click **Commit changes**
    f. Go Back (or click on 'helo-world' in the top path)
6. Format the text
    a. Edit README file
    b. Format the text using formatting characters:
        i. ========= makes the line above a title format with a line beneath
        ii. # on beginning of line is heading 1
        iii. ## on beginning of line is heading 2
    c. See more formatting tips in: https://help.github.com/articles/basic-writing-and-formatting-syntax/#styling-text

7. Add an Excel file to your repository
    a. Click **Upload Files** (top button)
    b. Drag the file you choose to upload
    c. Click **Commit changes**
    d. Go Back (or click on 'helo-world' in the top path)
8. Start the group project
    a. Create one repository for your group
        i. Share the repository link with all team members, and save it on your favorite links
        ii. What is the repository link? _____
    b. Edit the README for this repository with all group members names
    c. Upload your data file(s) to this repository

Setup your desktop to communicate with github – one time actions

Each group member will have a copy of your project's repository on his desktop.

9. Install Git Bash from https://git-scm.com/downloads
    a. If you had already git bash install, then update to latest version
10. Create a folder on your computer called GitHub, and below it create a folder with your group's name
11. Go to this new folder, right-click and select Git-Bash Here
    a. If you have a command window opened you are all set.
12. Type the command: **git --version**
    a. Which git version are you using? _____
13. Configure your user name and email, with the commands:
    a. git config --global user.name "type_here_your_user_name"
    b. git config --global user.email "type_here_your_email"
14. Clone the group project repository
    a. Open your repository online
    b. Select **Clone or download**
    c. Select **Copy to repo**
    d. Go to your computer to the folder to which you would like to clone this repository. Right click and select **Git bash here**
    e. Check that the prompt on the git bash is on the correct folder (you can change folders with the cd command)
    f. Type the command **git clone** and then paste the address
    g. Check that the repo appears as a folder where you cloned it

Ongoing wok on your project

The setup commands are done once. In ongoing you wish to get code from others, and to contribute your changes.

15. On the git bash command line check that you are on the project's directory
16. Each time you'll continue working on a project perform git pull to make sure you work on the latest version
    a. Run the command **git pull**
17. Make your changes on your folder
    a. For example, edit the README file with notepad, and save the changes into the file
18. Contribute your changes in the following order
    a. **git status** #See all your changes and others changes
    b. **git add --all** #or git add .
    c. **git commit -m** "My message" #Make meaningful description
    d. **git push** #Youll need to sign with your user name and password