Git Review, Teams, Python overview, Installing Python

Info 206

Niall Keleher

29 August 2017

Today's Outline

1. Quiz

2. Command Line and git review

3. Individual assignment - initializing a repository on Git, writing a bash script

4. Course Project - creating project groups

5. Overview of Python

6. Python demo - pygame

7. Python installation

8. Collaborative exercise: exploring Github repositories

Today's Quiz: http://bit.ly/2wENj60

Administrative Items & Announcements

- ISVC access

Administrative Items & Announcements
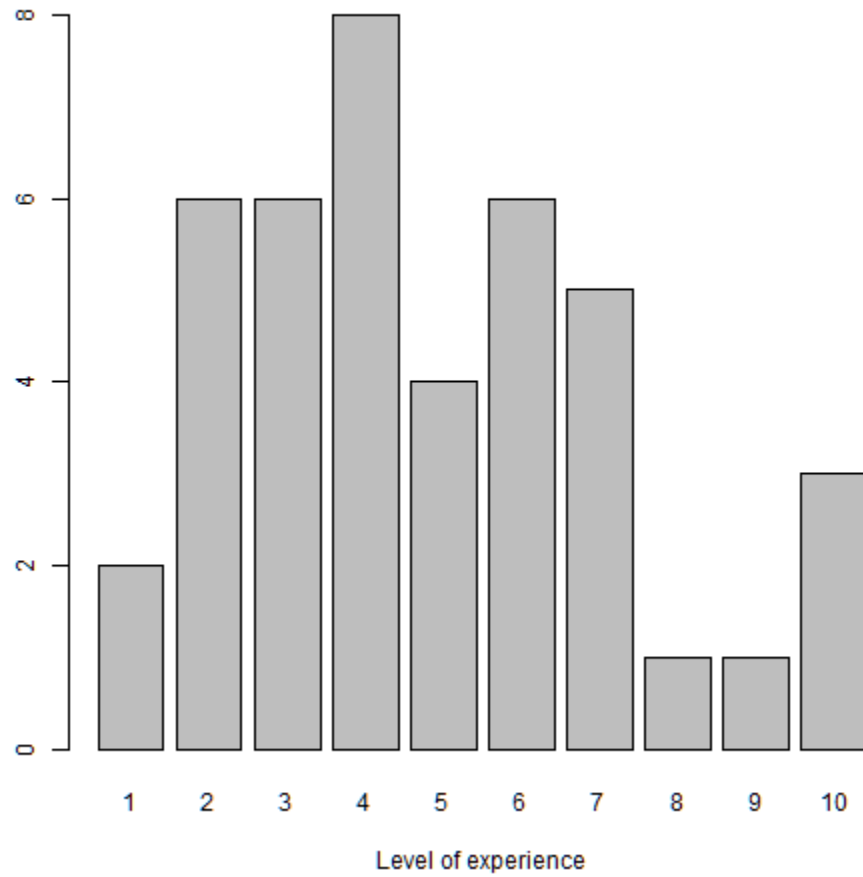
- ISVC access

- Slack

Administrative Items & Announcements

- ISVC access

- Slack

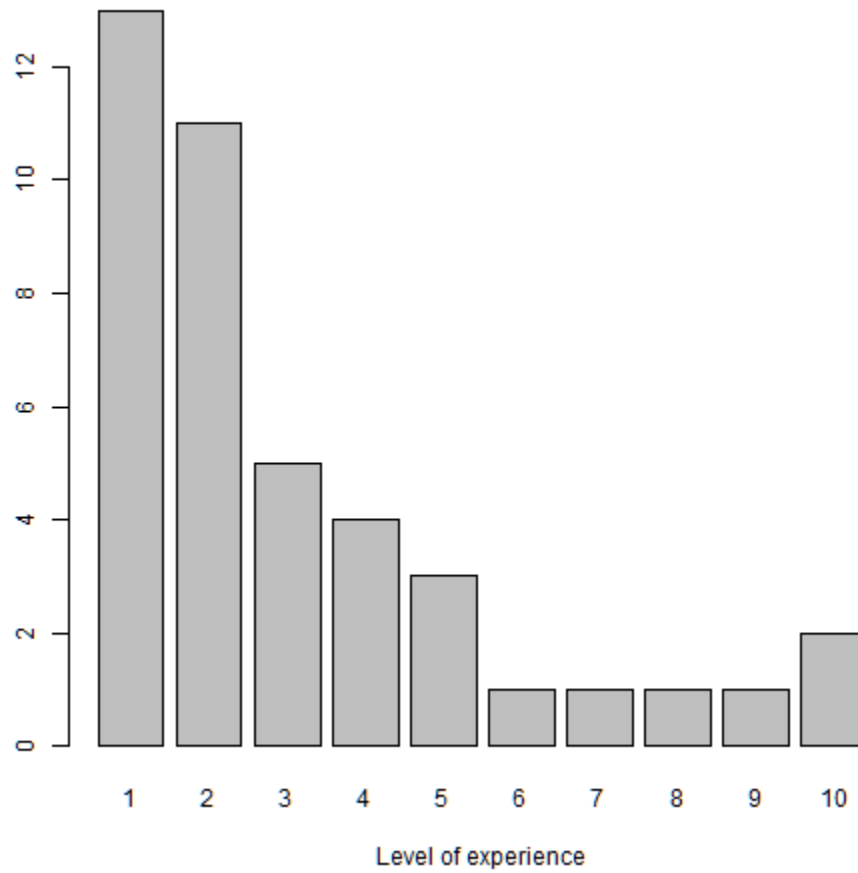- Eve Mwangi - assisting with code review and feedback

Administrative Items & Announcements

- ISVC access

- Slack

- Eve Mwangi - assisting with code review and feedback

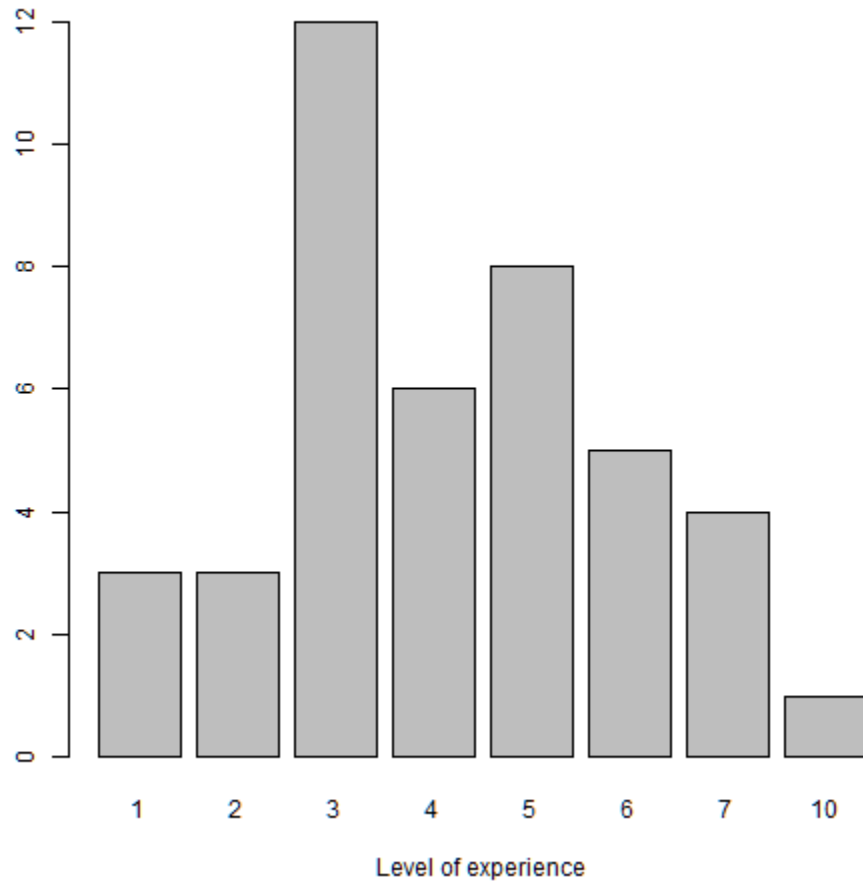- Meeting 1 Quiz - distribution of experience

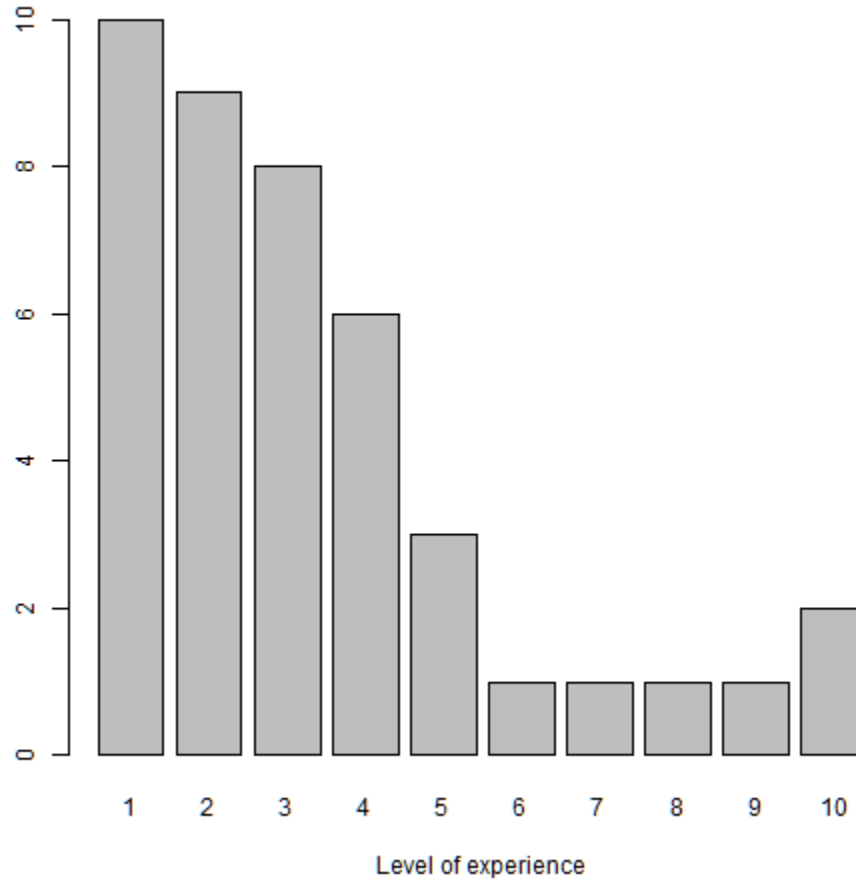How much experience do you have using the command line?

How much experience do you have using git?

How much experience do you have using Github?

How much experience do you have using Python as a programming language?

Git and Command Line review

Source Control

- A system for organizing different versions of a project under development

    - It could be a document, a picture file, almost anything.
    - In our case, we want to keep track of different versions of the Python code we're writing.

- Version Control Systems are ubiquitous in the software development industry
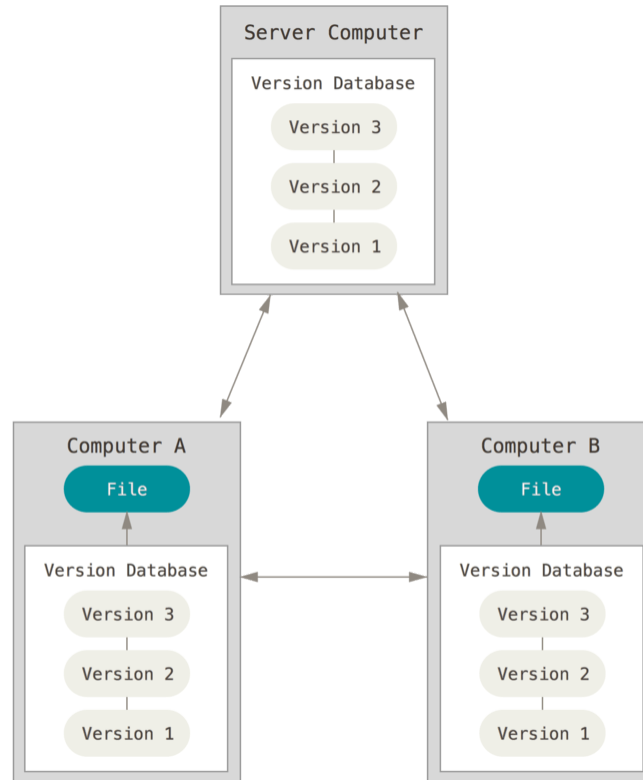
Source Control

Git vocabulary

- repository (repo)

Git vocabulary

- repository (repo)

- branch

Git vocabulary

- repository (repo)

- branch

- pull request

Git vocabulary

- repository (repo)

- branch

- pull request

- fork

Git vocabulary

- repository (repo)

- branch

- pull request

- fork

- pull

Git vocabulary

- repository (repo)

- branch

- pull request

- fork

- pull

- merge

Git vocabulary

- repository (repo)

- branch

- pull request

- fork

- pull

- merge

- push

Git vocabulary

- repository (repo)

- branch

- pull request

- fork

- pull

- merge

- push

- commit

Git vocabulary

- repository (repo)

- branch

- pull request

- fork

- pull

- merge

- push

- commit

- checkout

Git vocabulary

- repository (repo)

- branch

- pull request

- fork

- pull

- merge

- push

- commit

- checkout

- clone

Installing Git

- Most Mac and Linux users should have git preinstalled.

- Windows users are less likely to have Git preinstalled

    - download Github Desktop: https://desktop.github.com/

- In the terminal emulator, run:

```
which git # Shows where git binary/executable is stored

git --help # Help information for git command
```

GitHub

Github education pack

https://education.github.com/pack

Allows you to have unlimited private repositories.

Git demo

Github organization

Organizations

https://help.github.com/articles/collaborating-with-groups-in-organizations/

Teams

https://help.github.com/articles/about-teams/

Organization for Info 206

https://github.com/INFO206-Fall2017

Request to be added, if not a member.

Individual assignment:

initializing a repository on Github

&

bash scripting

Create an individual repository

- Add a repository to the INFO206-Fall2017 Organization

- Name the repository - {github-username}_info206

- On your local machine perform the following tasks:

  - Create a *README.md* file with the following header:

    ```
    # Working repository for Info 206
    ## {FULLNAME}
    ## {github-username}
    ```

  - Create a file named *make_directory.sh*

    - See instructions in https://github.com/INFO206-Fall2017/course-materials/exercises

Course Project:

creating project groups

Project outline

- The objective is to identify a challenge/problem that can be addressed through a program.

Project outline

- The objective is to identify a challenge/problem that can be addressed through a program.

- The problem and the approach to addressing it will be identified by teams.

Project outline

- The objective is to identify a challenge/problem that can be addressed through a program.

- The problem and the approach to addressing it will be identified by teams.

- Teams will consist of approximately 4 individuals.

Project outline

- The objective is to identify a challenge/problem that can be addressed through a program.

- The problem and the approach to addressing it will be identified by teams.

- Teams will consist of approximately 4 individuals.

- Between now and August 31, find one partner to work with on your team. [*]

Project outline

- The objective is to identify a challenge/problem that can be addressed through a program.

- The problem and the approach to addressing it will be identified by teams.

- Teams will consist of approximately 4 individuals.

- Between now and August 31, find one partner to work with on your team. [*]

- Pairs will be randomly grouped with another pairing to form teams of 4. Teams will be announced by September 5.

Project outline

- The objective is to identify a challenge/problem that can be addressed through a program.

- The problem and the approach to addressing it will be identified by teams.

- Teams will consist of approximately 4 individuals.

- Between now and August 31, find one partner to work with on your team. [*]

- Pairs will be randomly grouped with another pairing to form teams of 4. Teams will be announced by September 5.

- The project will require contributions (observed through Github commits) to a team project. On October 17th, teams will present their work to the entire class.

[*] If you do not have or choose not to identify an initial partner, you will be randomly assigned to a team.

Key dates for project

- Project Status Update #1 - Problem statement (*UPDATE:* 12 September)

- Project Status Update #2 - Codebase outline (26 September)

- Final Project Presentations (17 October)

End of Meeting #2

For next meeting

- Install Python 3.3+ (Recommended Installation: www.python.org or Anaconda Python)

- Identify one partner for course project

- Videos:

    1. Objects (4 mins)
    2. Objects and Types (11 mins)
    3. Representing Numbers (3 mins)
    4. Numbers (7 mins)
    5. Variables, Part 1 (9 mins)
    6. Variables, Part 2 (3 mins)
    7. Strings (19 mins)

- Readings:

    ○ Lutz Chapter 5: Numeric Types
    ○ Lutz Chapter 7: String Fundamentals