

# MIS 407

Week 1, Class 2

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# For Today...

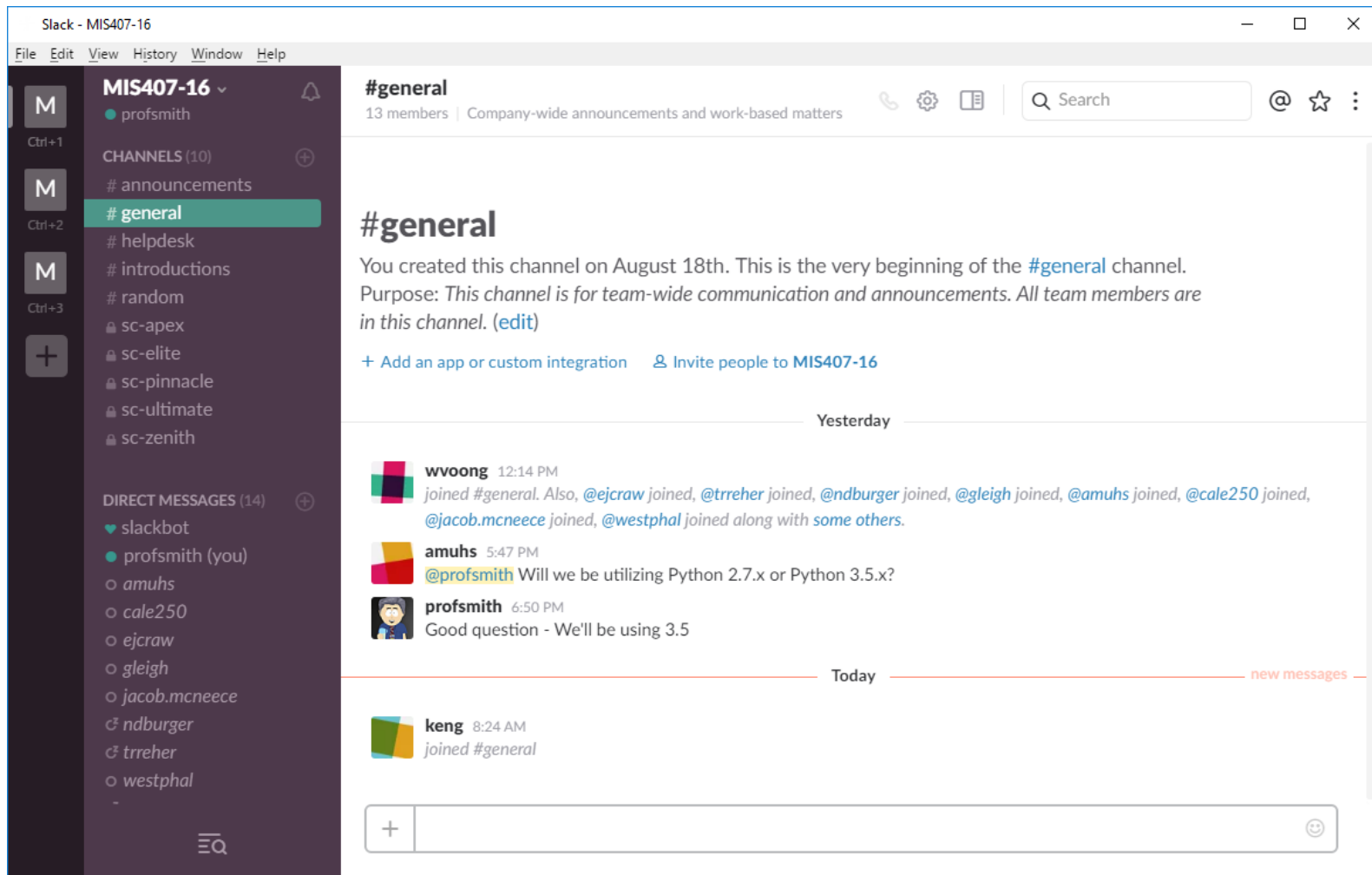
- Python 2.7.x versus 3.5.x
- Revisit: GitHub and Slack accounts.
- Review Slack
- Introduce Git
- Assign teams

# Python versions

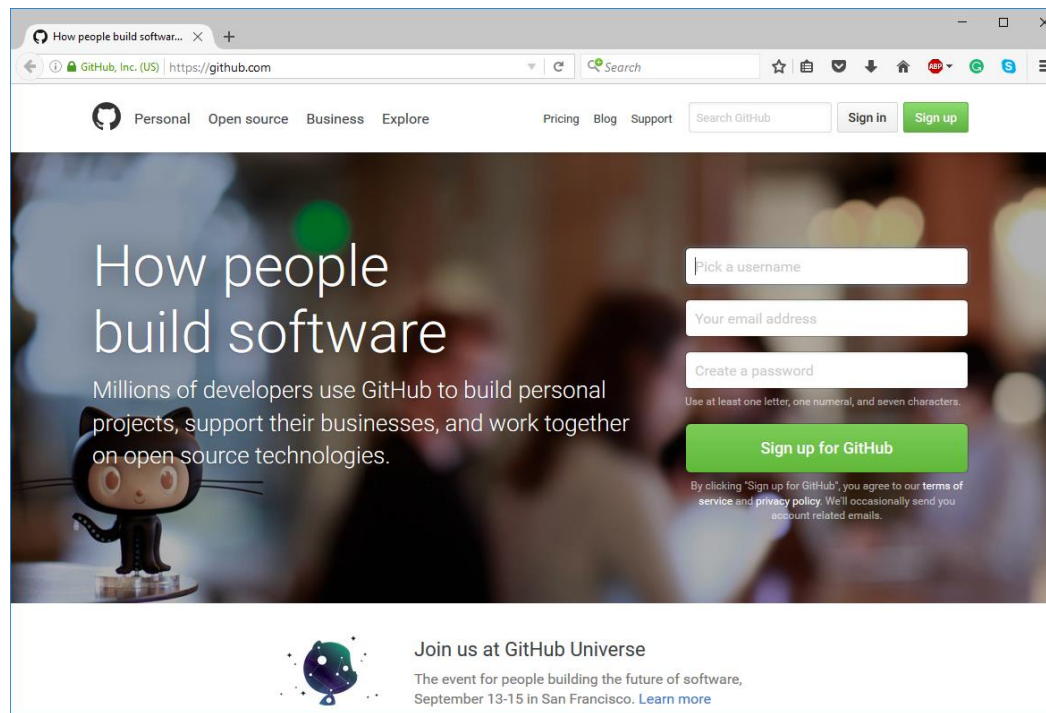
In MIS407 - We will only use Python 3.5.x

- There are two current versions of Python 2.7.x and 3.5.x.
- Why is this?
  - In Python 3 broke backward compatibility.
    - This was necessary to clean up and advance the language.
    - The downside, the huge code base of version 2 python would need to be rewritten (updated really).
    - Thus, Python 2 lives on much longer that it probably should have.
- Python 2
  - now only receives security and bug fixes – no new functionality will be added.
  - EOL Date (End of Life) for 2.7 is 2020. No fixed/updates after that.

# Let's all get Slack...



# Get your GitHub account!



The screenshot shows the GitHub homepage in a web browser. The browser's address bar displays "https://github.com". The page features a navigation bar with links for "Personal", "Open source", "Business", "Explore", "Pricing", "Blog", and "Support". A search bar and "Sign in" / "Sign up" buttons are also present. The main content area has a large heading "How people build software" and a subheading "Millions of developers use GitHub to build personal projects, support their businesses, and work together on open source technologies." To the left of this text is a small illustration of the GitHub mascot, Octocat. On the right side, there is a sign-up form with three input fields: "Pick a username", "Your email address", and "Create a password". Below the password field, a note states "Use at least one letter, one numeral, and seven characters." A green "Sign up for GitHub" button is positioned below the form. At the bottom of the page, there is a section titled "Join us at GitHub Universe" with a small globe icon and text indicating the event dates and location.

How people build software

Millions of developers use GitHub to build personal projects, support their businesses, and work together on open source technologies.

Pick a username

Your email address

Create a password

Use at least one letter, one numeral, and seven characters.

Sign up for GitHub

By clicking "Sign up for GitHub", you agree to our [terms of service](#) and [privacy policy](#). We'll occasionally send you account related emails.

Join us at GitHub Universe

The event for people building the future of software, September 13-15 in San Francisco. [Learn more](#)

If you haven't already done so **You must create your account, and send me your username ASAP!**

# Intro to Git

- Git is a VCS (version control system).
- Most large, multi-member, group projects will use some form of VCS
- Git is one of the most popular.

# History of Git

- Developed by Linus Torvalds (Linux Fame)
  - He wasn't happy with existing VCS's
  - They had a number of problems, and were generally slow and cumbersome.
  - He hated existing VCS so much that he didn't even use them in his Linux Kernel project
    - He used tar balls and patches – a rather “manual” method.

# Why Git

- Our projects really won't be that large, so why?
  - Group work
  - The power of “versioning”
  - MOST importantly, it's a key means through which to participate in a programming community.

See 7:13 onward of ... <https://www.youtube.com/watch?v=Vo9KPk-gqKk>



# Intro Concepts

- A “repo” is a repository of your code who’s state is managed by Git.
- Files are tracked, untracked, or ignored.
- There are multiple Git clients out there, we will use the official release from [www.git-scm.com](http://www.git-scm.com).

NOTE: We will only be using the command land version. Knowing the command line version will allow you to more fully understand and control Git.

# General Process

- Initialize a repo
- Add .gitignore file – if necessary
- Add any untracked files to the “staging area”.
- Commit changes to the repo when you’re satisfied with changes.

# Let's try this now...

- Got to our GitHub team site...
- Work through the following:
  - git\_basic\_local\_workflow.md
  - git\_experimental\_branch.md
  - git\_rollback.md

# Let's now assign teams...

- Team building skill is an essential part of being an effective employee.
- In the “real world” you rarely get to choose who you work with on a team.

<<bring up spreadsheet... and randomize the list to choose team members>>

- By next class...
  - If haven't already...
    - Create a GitHub account, and email me your userID
    - Join our MIS407 "Slack" team and introduce yourself to the class and to your team
- During Next class...
  - We'll work on using Git and GitHub
  - I'll spend time introducing our Python programming environment and workflow