

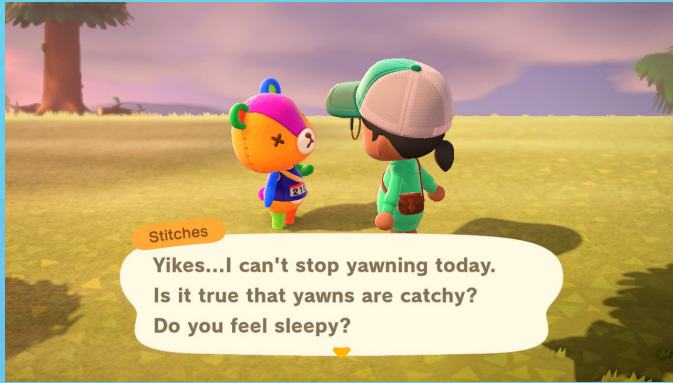
# Vim and VSCode

GPI '20 - Lecture 4  
Kimberly + Shruti



- **SmashLab** due 11:59 pm ET tonight
- Extratation this Saturday: **Tmux + even more on Vim**
- **Course Feedback** thread on [Piazza](#)

# (Virtual) Pet Tax







# Vim

Part 2

# Vim Recap

**Normal mode** for commands

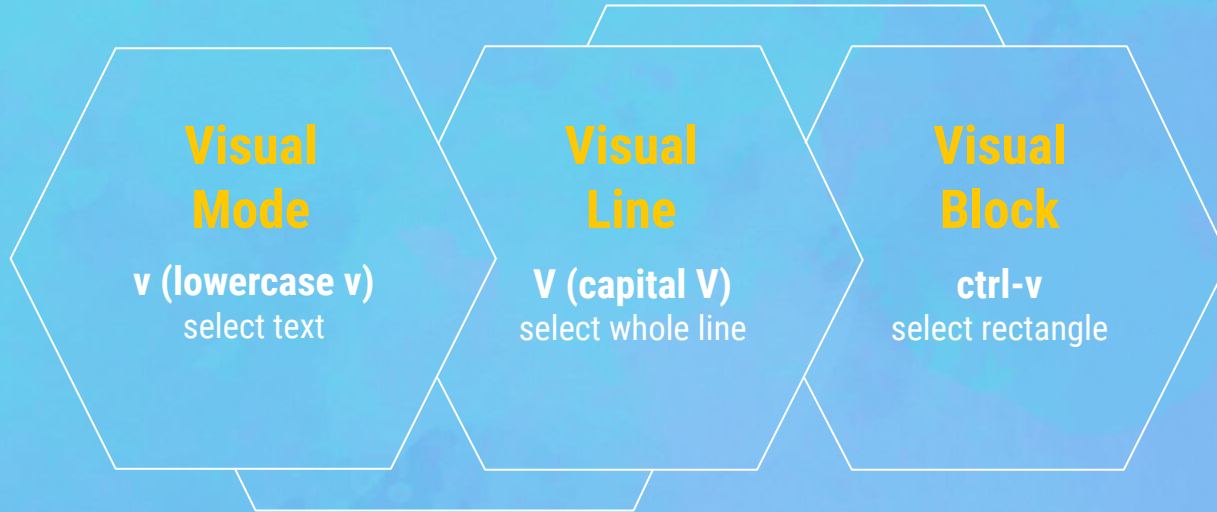
**Insert mode** for editing text

Undo	u
Redo	:redo OR ctrl-R
Save + Exit	:wq OR :x



⬡ ctrl not command on mac!

# More Modes



⬡ ctrl not command on mac!

# Text Objects

<number><command><text object or motion>

**2d**ele**w**ord

- ⬡ **<number>**: how many times to perform <command>
- ⬡ **<command>**: change, delete (cut), yank (copy), etc.
- ⬡ **<text object or motion>**: word, sentence, paragraph, etc.



# More Text Objects

i

**"ci}"**

**c**hanges **i**nside {curly  
braces} and goes into  
**insert mode**

**"da("**

**d**eletes **a**long with  
(parens)

a

- works with most delimiters
  - ◀ " { [ ( ' ` <
- t and p
  - ◀ change/delete html  
tag/paragraph contents



# Substitutions

Find and Replace, but with Vim and regex!

**:s/<find>/<replace>/<flags>**

- In **normal mode**
- Specify **ranges** before the s
  - **:10,30s/foo/bar**
  - **:%s/foo/bar/g**
- Example **flags**
  - **g** = every occurrence
  - **c** = confirm before applying

current line: **s**  
whole file: **%s**  
lines a-b: **a,b**  
line a to end: **a,\$s**  
selected  
region: **'<,'>s**

- regex = regular expression / pattern that matches against certain strings



# Vim

Demo!



**VSCode**

# VSCode

# Code editing. Redefined.

Free. Built on open source. Runs everywhere.

Lightweight, streamlined version of Visual Studio

**Highly** configurable + customizable

Install [here](#)



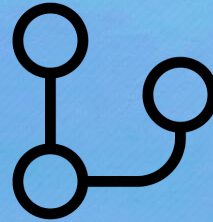
# Major Features



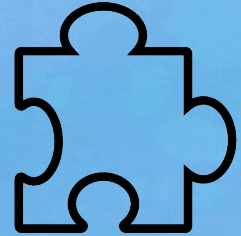
IntelliSense



Run + Debug



Built-in Git Integration



Extensions

# Extensions

- ⬡ Make VSCode more powerful!
- ⬡ Thousands of extensions
  - Language support
  - Workflow tools
  - Productivity
  - Appearance
- ⬡ Find the VSCode Extension Marketplace [here](#)

# Remote - SSH Extension

- ⬡ Allows you to work on a remote machine while taking advantage of VSCode features
- ⬡ Super useful for classes that require you to work on the andrew machines
- ⬡ Frees you from the limitations of Vim

Install/Get Started [here](#)

# The Best of Both Worlds: Vim + VSCode

- ⬡ Vim keybindings + VSCode capabilities
- ⬡ You can use your mouse :)
  - No more set mouse=a



# LaTeX Workshop

- ⬡ Build LaTeX and preview PDF all within VSCode

# Gitlens

- ⬡ Git = version control software (more to come soon)
- ⬡ Extensive git capabilities on top of VSCode's
- ⬡ Line-by-line blame (i.e. who wrote what)
- ⬡ Collaboration is important!

... and so much more!

- FiraCode | Monospaced font with ligatures (e.g.  $\neq$  vs.  $\neq$  or  $\geq$  vs.  $\geq$  etc.)
- TODO Highlight | Highlight any TODO's/README's/keywords to make them pop
- Live Share | Collaboratively code in real-time
- Code Spell Checker | Especially useful when latex-ing
- Path Intellisense | Autocomplete filenames
- CodeSnap | Capture screenshots of your code
- Random Everything | Generate random numbers, strings, dates, etc.
- SFTP | Remote file exploration, upload/download

# Personalization

Give your editor a glow up with  
color themes and icon themes

Find a lot of ~aesthetic~ themes [here](#)

No one:  
People who use the light  
IDE theme:



dark themes >> light themes



# Productivity

- ⬡ Keyboard shortcuts are your best friend
  - Here are the keyboard shortcuts for each platform
  - You can even change key bindings to your heart's content
- ⬡ Command palette: ⌘/ctrl + Shift P

# settings.json

## ⬡ Controls workspace and global settings (shocker)

- Language specific or project specific settings
- Examples: line length, formatting on save, extension settings

# Resources

- ⬡ We've barely scratched the surface - there's still so much more you can do!
- ⬡ Useful sources of info:
  - The VSCode welcome page (what you see when VSCode opens)
  - The Official VSCode Tips and Tricks
  - Curated list of useful VSCode packages/resources
  - The VSCode website



### ○ **fix-typos**

- ◀ don't swap the names in the header

### ○ **hogwarts**

- ◀ leave TWO spaces between books and MORE
- ◀ deleting inside the <container> tag leaves the closing tag on a new line, which is not considered correct. the tags should be next to each other (vim version dependent)
- ◀ after deleting paragraphs there should be ONE line in between them