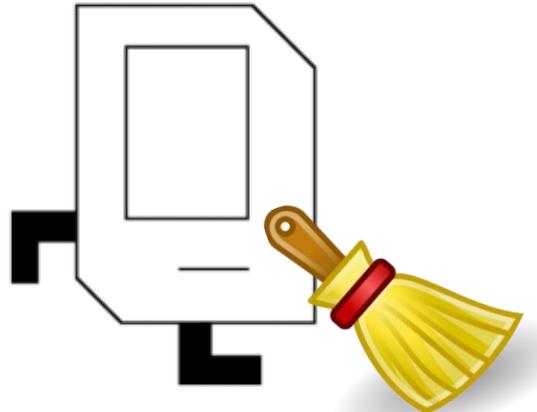




Overview

CS106A, Stanford University

Housekeeping

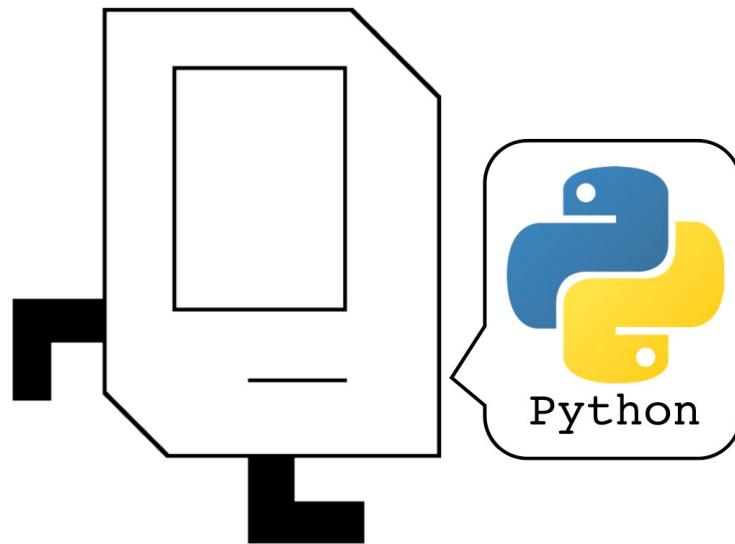


- Assignment #7 due today
- Final exam is Friday, June 3rd at 8:30-11:30am
- Location of the final exam is by first letter of your last name:
 - A-H: Bishop Auditorium (in Lathrop)
 - I-Z: CEMEX Auditorium (in Knight Management Center)
- OAE students should have received email with exam logistics
- Final exam is open book/note, but only printed materials
 - You cannot access the internet or files on your computer (similar to midterm)
- You will use BlueBook software to take the final exam
- Practice final exam and solutions are posted on website
- Final Review Session: Thursday at 1:30pm in Nvidia Auditorium

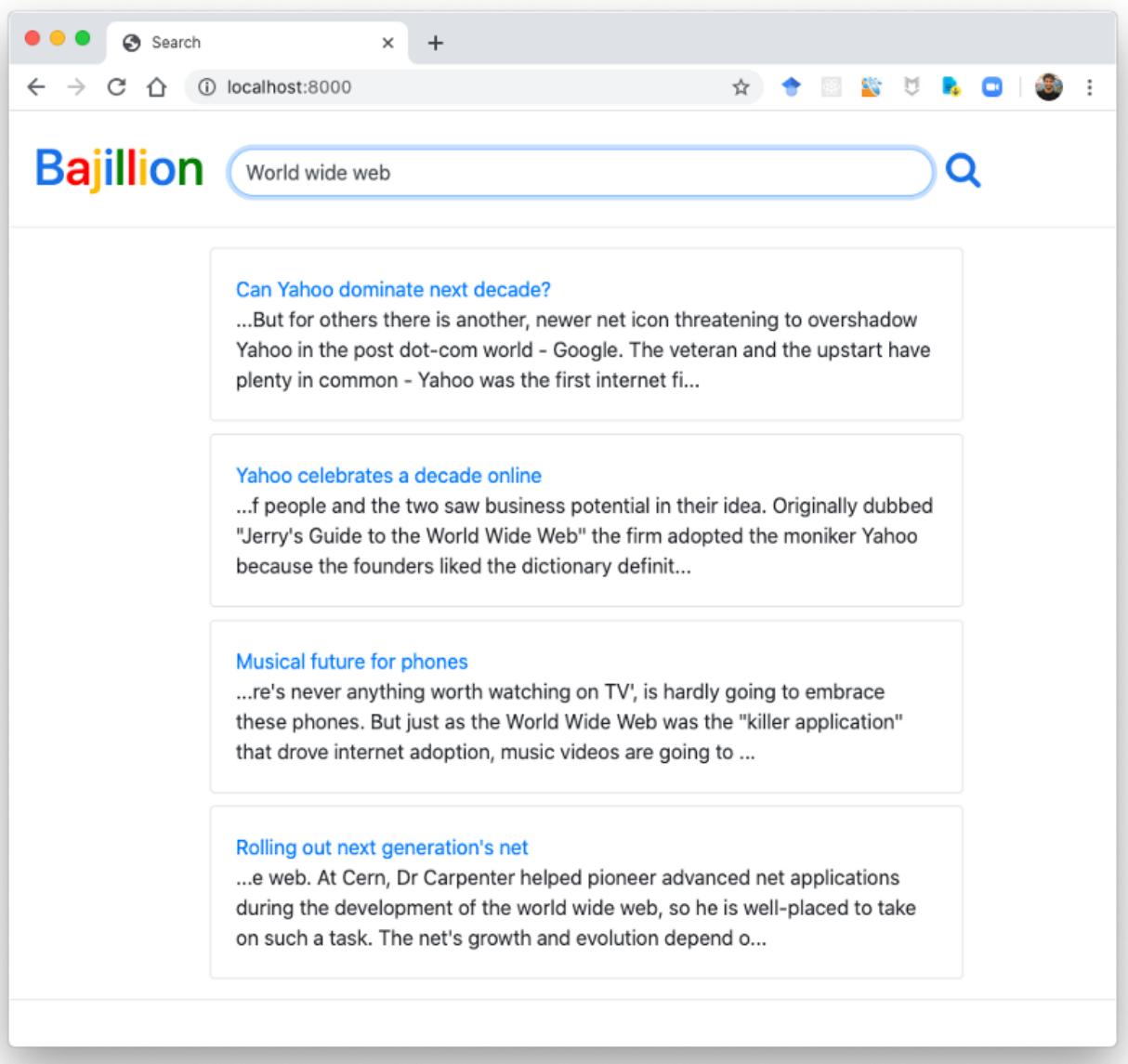


You have come a long way

I Missed You



I've Been Busy, Karel



Search localhost:8000

Bajillion World wide web

[Can Yahoo dominate next decade?](#)
...But for others there is another, newer net icon threatening to overshadow Yahoo in the post dot-com world - Google. The veteran and the upstart have plenty in common - Yahoo was the first internet fi...

[Yahoo celebrates a decade online](#)
...f people and the two saw business potential in their idea. Originally dubbed "Jerry's Guide to the World Wide Web" the firm adopted the moniker Yahoo because the founders liked the dictionary definit...

[Musical future for phones](#)
...re's never anything worth watching on TV', is hardly going to embrace these phones. But just as the World Wide Web was the "killer application" that drove internet adoption, music videos are going to ...

[Rolling out next generation's net](#)
...e web. At Cern, Dr Carpenter helped pioneer advanced net applications during the development of the world wide web, so he is well-placed to take on such a task. The net's growth and evolution depend o...

A Sampling of Where You've Been...

- Karel
- Core Python
 - Variables, expressions, control flow
- Functions and parameters
- Lists (including 2-dimensional)
- Random numbers
- Images
- Graphics
- Strings
- Files
- Dictionaries
- Nested structures
- Tuples
- Classes and objects
- The internet and servers
- List comprehensions and `plotly`

So what is (NOT) on the Final?

~~Karel~~

- Core Python
 - Variables, expressions, control flow
- Functions and parameters
- Lists (including 2-dimensional)
- Random numbers
- Images
- Graphics
- Strings
- Files
- Dictionaries
- Nested structures

~~Tuples~~

- Classes and objects

~~The internet and servers~~

~~List comprehensions and plotly~~

Let's Do An Example Problem

- Write a function `compile_dict(dict)` that is:
 - Given a dictionary of dictionaries where the *inner* dictionaries may have some matching keys
 - It should return a dictionary that contains all the keys of all the *inner* dictionaries where the value for each key is the *sum* over all the values in the inner dictionary with the same key.
- For example:

```
dict1 = {  
    'Mehran': {  
        'age': 52,  
        'height': 70,  
        'goatees': 1  
    },  
    'Juliette': {  
        'age': 23,  
        'height': 68  
    },  
}
```

Calling: `compile_dict(dict1)`
should return:

```
{  
    'age': 75,  
    'height': 138,  
    'goatees': 1  
}
```

Show me the code:
`compiledict.py`

Where You Could Be Going



Valor

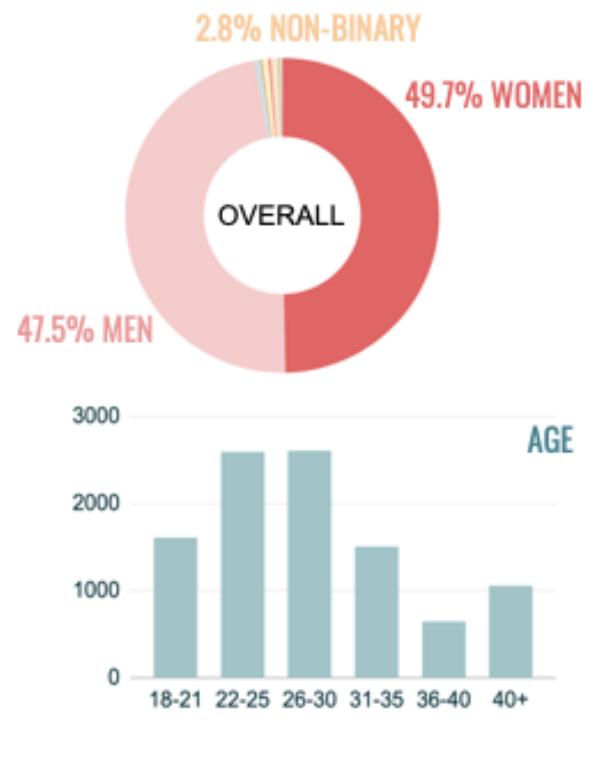
Where You Could Be Going



Code in Place



**905 section leaders teach
10,000 students from around the world
First half of Stanford CS106A**



**20% experienced job loss or home loss
10x retention vs baseline MOOC
99% wanted more (after first section)
6k hours of live teaching
60k hours of lecture watched
Helped make CS106A better
for Stanford students**

By the numbers

10 weeks

7 assignments

27 lectures

50+ key concepts



25,000+ person hours
of programming
(collectively)

1 class

You have our respect

Why study CS?

Joy of Building



Interdisciplinary



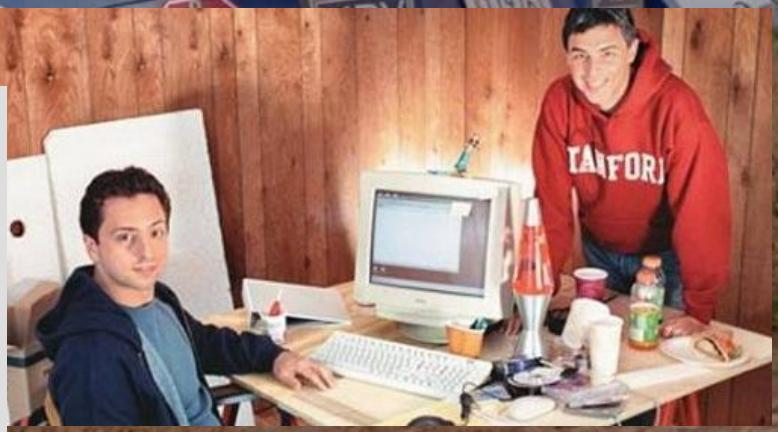
Empowerment



Now is the Time



Sex Cells
David Byrne on Today's Gadgets
Rethinking the Skills Gap



Everyone is Welcome



Thank you for taking
the journey!