

Brainstorming Specific Needs

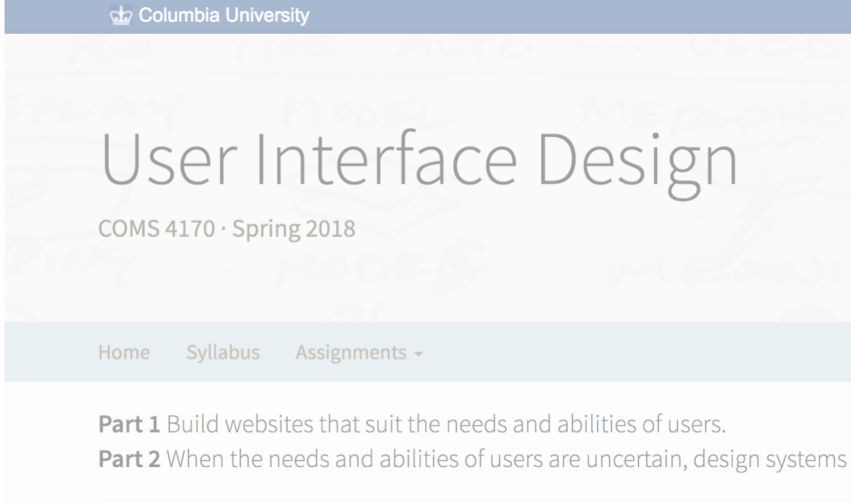
No screens



Prof. Lydia Chilton
COMS 6998
21 September 2018

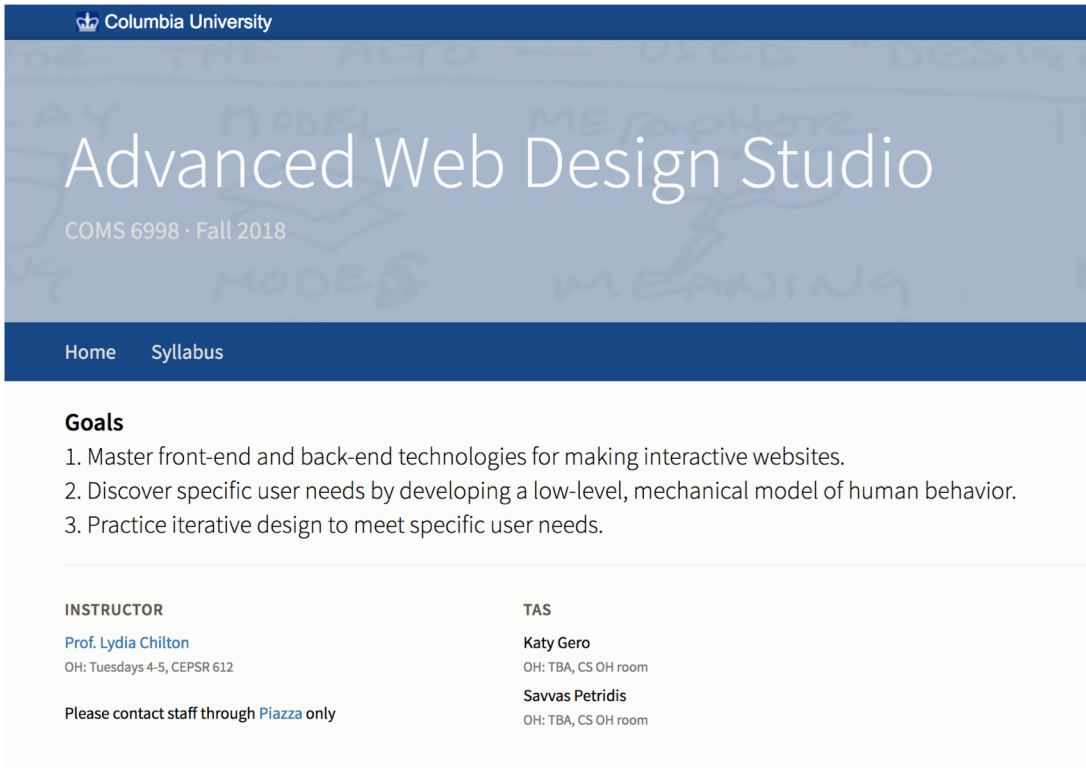
Say your name





You already know front-end web dev:
HTML, JavaScript, Bootstrap, jQuery

And design:
Iterative design, critique



You will learn back-end web dev:

- Server-side programming (Flask),
- **Databases (Sqlite, SQLAlchemy)**
- Real-time Communication (Socket.IO)

And practice web design by:

- **Rebuilding IMDB.com**
- Rebuilding twitter
- Pursuing your own project

Last week's high level goal:

- Remake the basic functionality of IMDB.com:
 - User goal: “Look up what actor was in what movie and then see all the other movies that actor is in.”
- Must store data in a **SQLite database**
- Must query it with **SQLAlchemy**
- Must Enable **CRUD** operations (create, read, update, delete)
 - This is not actually user-facing functionality of IMDB, but it's essential back-end dev)
- Must use at least one **Database Join**

Dictionaries vs. Database Tables

```
movies = {  
    '1': {  
        'title': "Crazy Rich Asians",  
        'rating': "PG-13",  
    },  
    '2': {  
        'title': "Mission Impossible: Fallout",  
        'rating': "G",  
    }  
}
```

```
actors = {  
    '1': {  
        'name': "Henry Golding",  
        'year_of_birth': "1987",  
    },  
}
```

“Movie” table

id	title	rating	year
1	Crazy Rich Asians	PG-13	2018
2	MI: Fallout	G	2018

“Actor” table

id	title	Year_of_birth
1	Henry Golding	1987
2	Constance Wu	1982

Join tables

“Movie” table

id	title	rating	year	Actors_backref
1	Crazy Rich Asians	PG-13	2018	(automatic)
2	MI: Fallout	G	2018	

“Actor” table

id	title	Year_of_birth	Movie_backref
1	Henry Golding	1987	(automatic)
2	Constance Wu	1982	
3	Tom Cruise	1962	

Movie_actor_join

Movie_id	Actor_id
1	1
1	2
2	3
3	3
4	3
5	3

`Actors.query.get(3).movie_backref`

`Movies.query.get(1).actors_backref`

10-min Partners Discussions:

- Show your partner your interface and how a user navigates it.
- Share one thing you learned
- Show them your code for how you insert things in the join table.
- What other information would you like to include in the database?
 - How would you store it and query it?

Next week:

Build a web app that meets a
**specific user need in the
movie data domain**

(That is not a specific need that IMDB supports well)

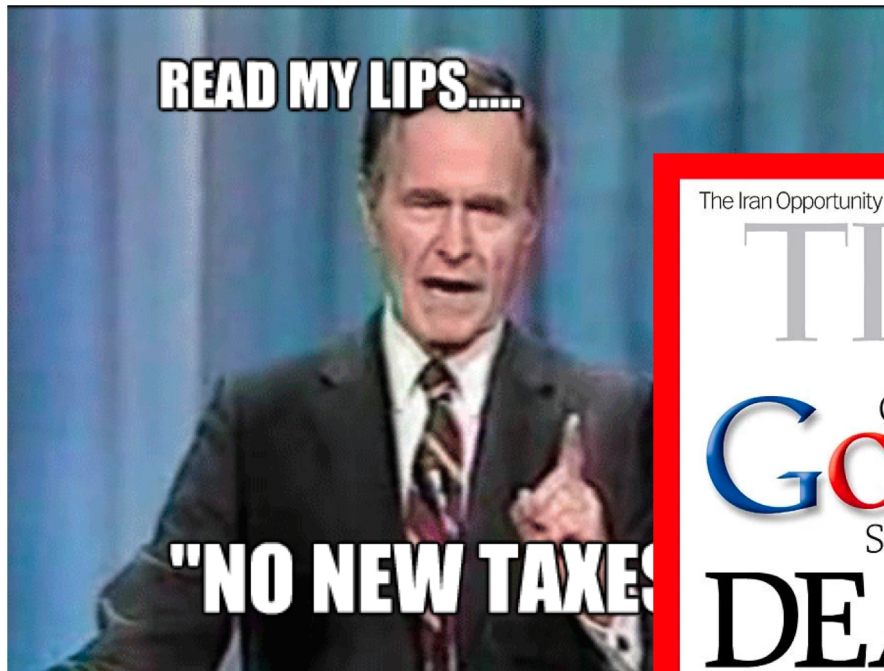
Specific User Needs

Review!

General goals vs. Specific user needs

1. Help people find stuff
2. Help people find movies they like
3. Help people look up actors in films
4. Help people figure out who the leading actor in a movie.

What's appealing about general goals?



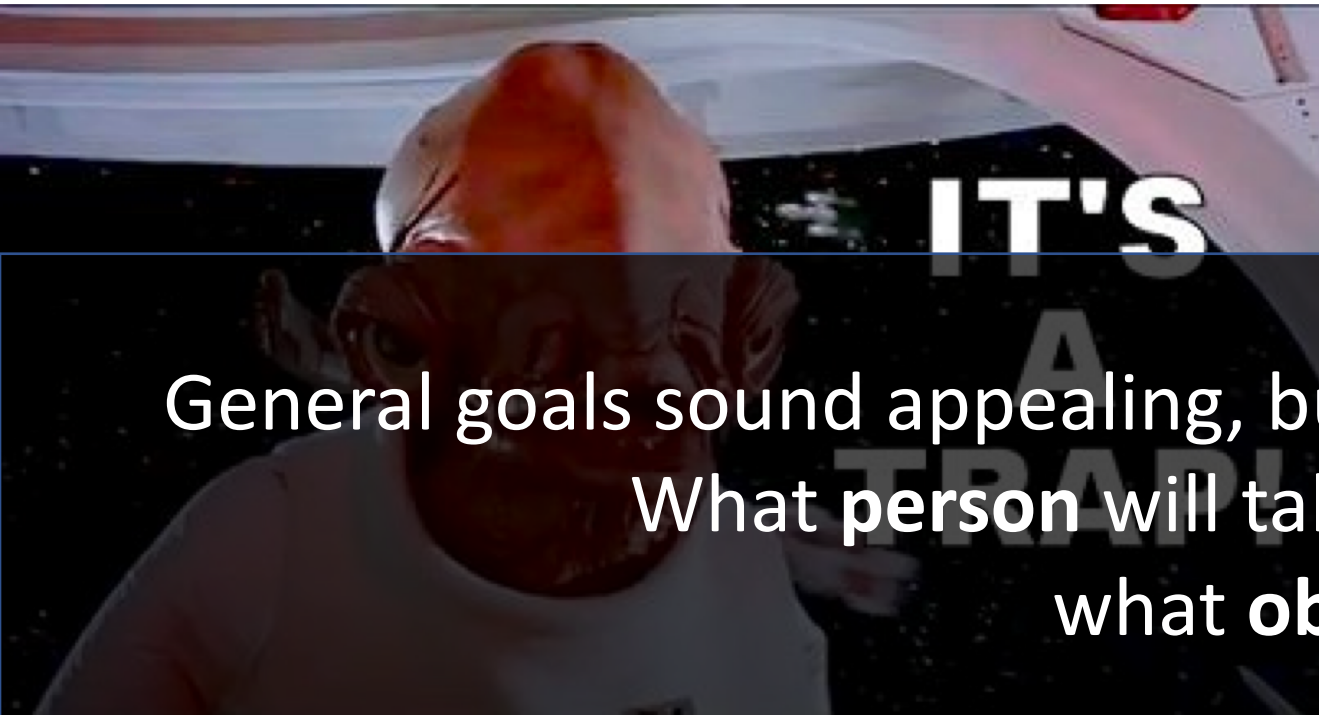
General Vs. Specific Goals

Goal 1:

“Clean the house.”

Goal 2:

“Fold that basket of laundry.”



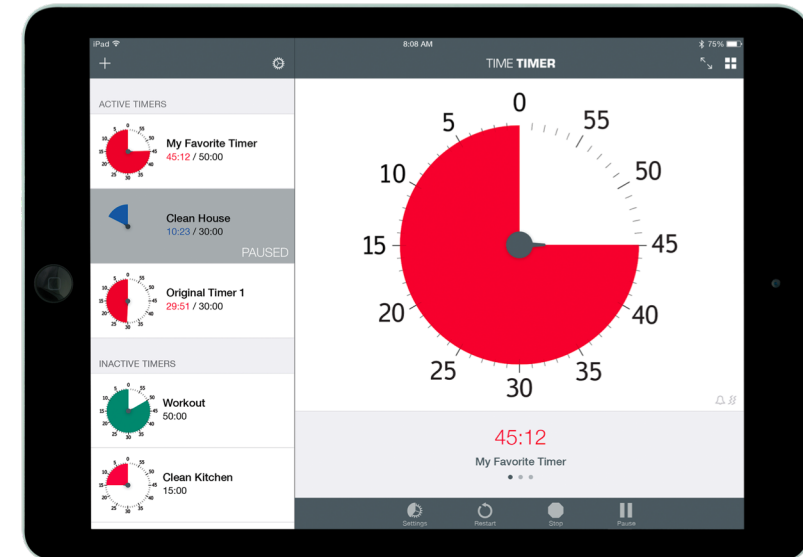
General goals sound appealing, but specific goals are actionable:
What **person** will take what **action** on
what **object**?

Example: Domain and Specific Need

Domain: conference talks



Specific need: A timer that first counts down the talk time, then counts down the q&a time so the speaker knows if they are on track



Domain

Specific Need

Generalized to



Online shopping

Uncommon books

Clothes,
Food,
Amazon Fresh
Other sellers



facebook

Social Network

Harvard students to
look up each other's
classes

Ivy League
US Colleges
Everybody



Email client

Web-based
No page reload
Never Delete

Chat
GDrive

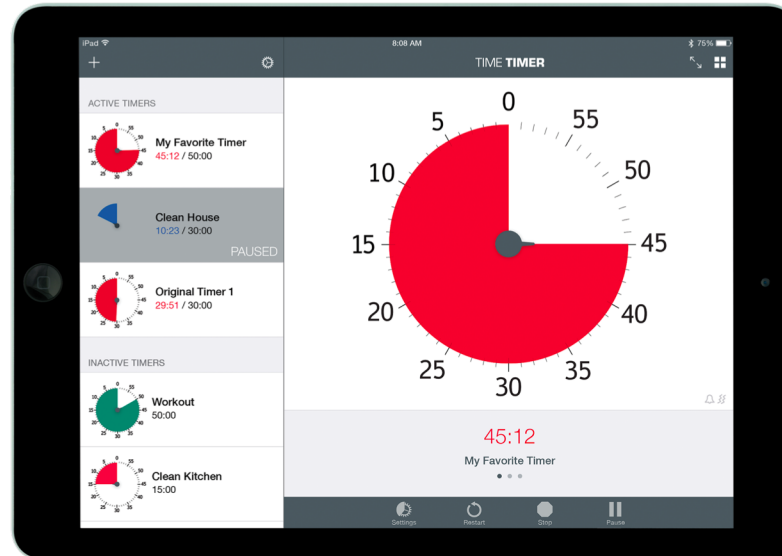


Every application starts with a specific need then **generalizes**.

Domain: conference talks



Specific need: A timer that first counts down the talk time and q&a



Generalization:

Medium talks (20 min)

Short talks (1 min)

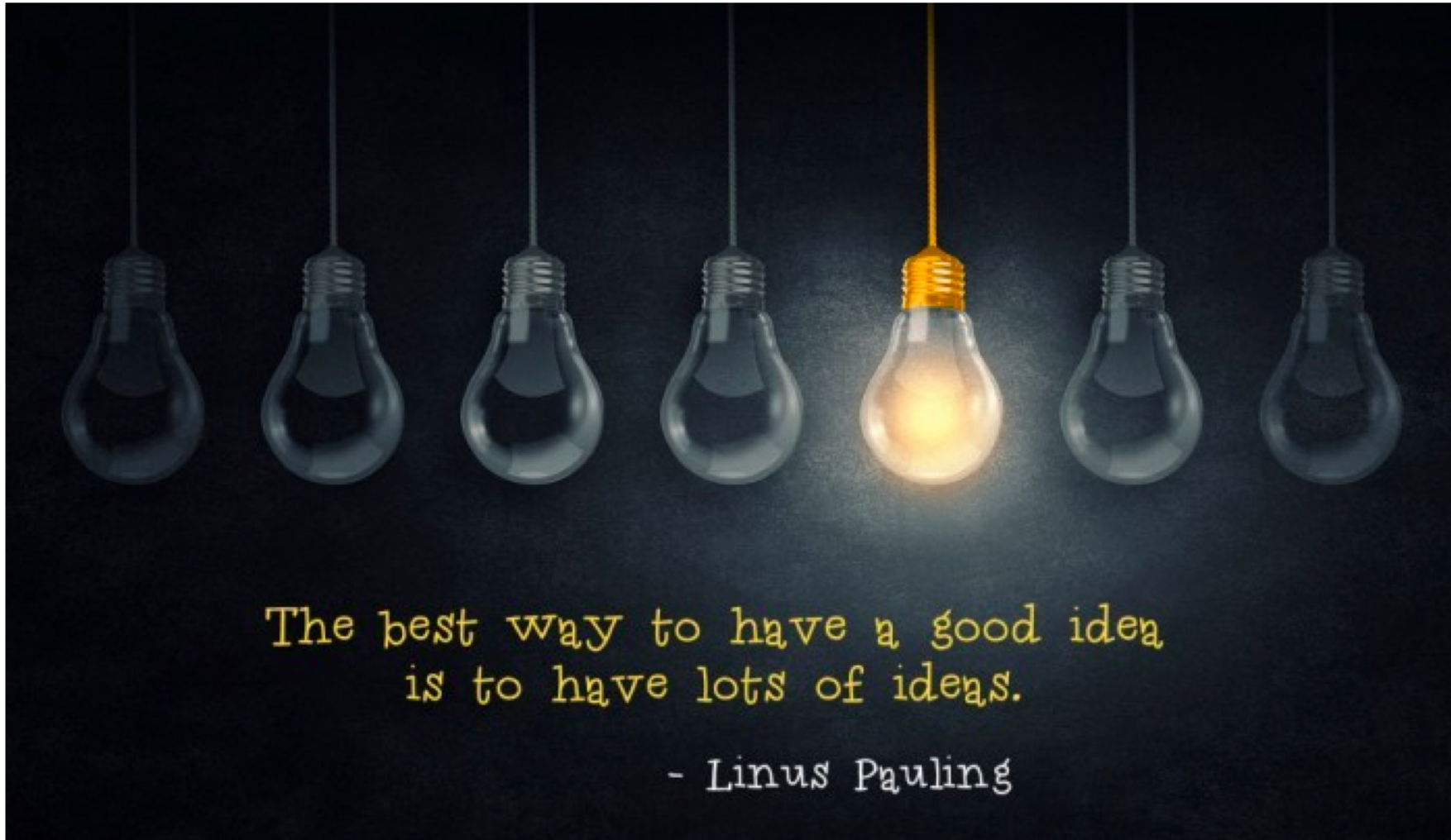
* 40 1-min intros in 1 hr

Long talks (1 hr)

* Might take questions during the talk.

Brainstorming Specific Needs for
IMDB data

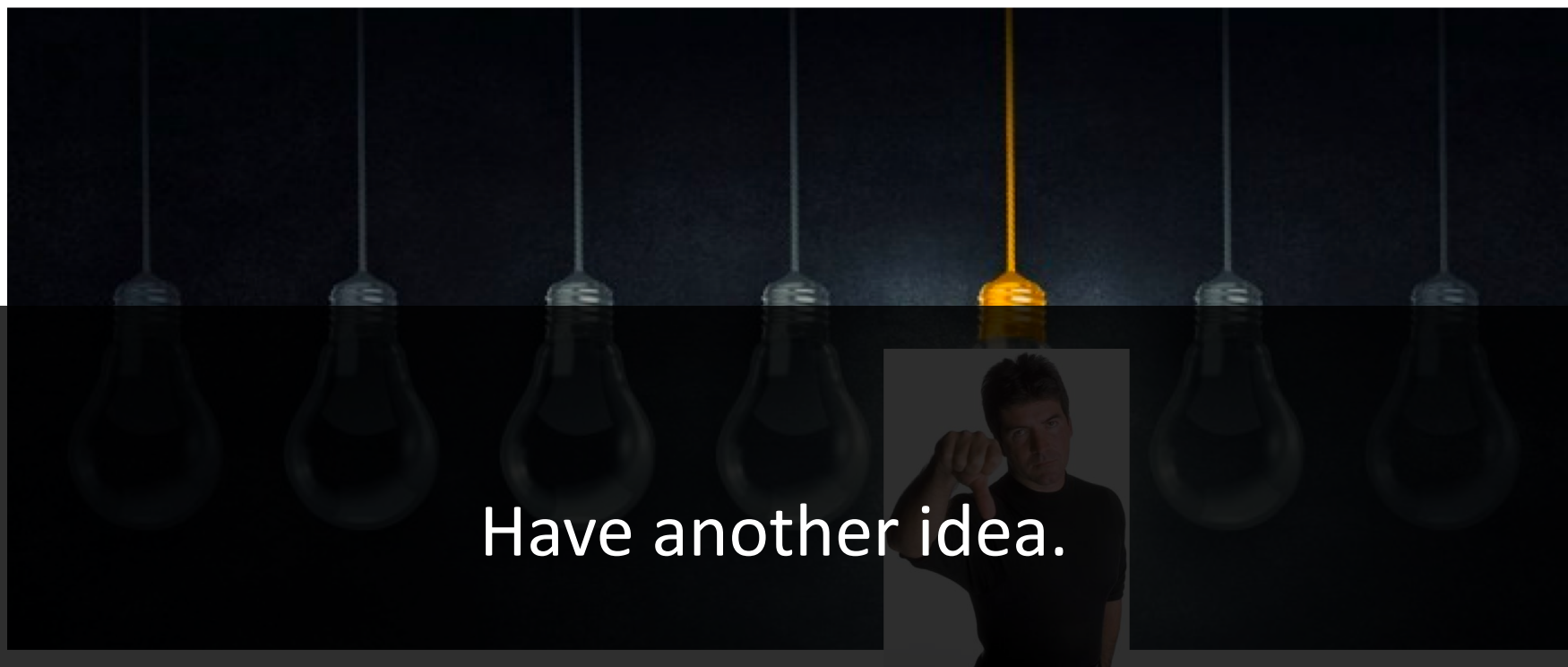
Coming up with the perfect idea can be intimidating



Only rule of brainstorming: **No criticism**



If you HATE someone's idea, what should you do?



Have another idea.

“But IMDB does everything already.”

What are specific user needs of Craigslist that other companies serve better?

[craigslist](#)

[post to classifieds](#)

[my account](#)

search craigslist

event calendar

M	T	W	T	F	S	S
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7
8	9	10	11	12	13	14

[help, faq, abuse, legal](#)

[avoid scams & fraud](#)

[personal safety tips](#)

[terms of use](#) [new](#)

[privacy policy](#)

[system status](#)

[about craigslist](#)

[craigslist is hiring in sf](#)

[craigslist open source](#)

[craigslist blog](#)

[best-of-craigslist](#)

[craigslist TV](#)

["craigslist joe"](#)

[craig connects](#)

new york city

[mnh](#) [brk](#) [que](#) [brx](#) [stn](#) [jsy](#) [lgi](#) [wch](#) [fct](#)

community

activities

artists

childcare

classes

events

general

groups

local news

lost+found

missed

connections

musicians

pets

politics

rants & raves

rideshare

volunteers

services

automotive

beauty

cell/mobile

computer

creative

cycle

event

farm+garden

financial

household

labor/move

legal

lessons

marine

pet

real estate

skilled trade

sm biz ads

travel/vac

write/ed/tran

discussion forums

android

apple

arts

atheist

autos

beauty

bikes

celebs

comp

cosmos

diet

divorce

dying

eco

feedback

film

fixit

food

frugal

gaming

garden

haiku

help

history

housing

jobs

jokes

legal

linux

manners

marriage

money

music

open

outdoor

parent

pets

philos

photo

politics

psych

recover

religion

rofo

science

spirit

sports

super

tax

travel

tv

vegan

words

writing

housing

apts / housing

housing swap

housing wanted

office / commercial

parking / storage

real estate for sale

rooms / shared

rooms wanted

sublets / temporary

vacation rentals

for sale

antiques

appliances

arts+crafts

atv/utv/sno

auto parts

aviation

baby+kid

barter

beauty+hlth

bike parts

bikes

boat parts

boats

books

business

cars+trucks

cds/dvd/vhs

cell phones

clothes+acc

collectibles

computer parts

computers

electronics

farm+garden

free

furniture

garage sale

general

heavy equip

household

jewelry

materials

motorcycle parts

motorcycles

music instr

photo+video

rvs+camp

sporting

tickets

tools

toys+games

trailers

video gaming

wanted

wheels+tires

jobs

accounting+finance

admin / office

arch / engineering

art / media / design

biotech / science

business / mgmt

customer service

education

etc / misc

food / bev / hosp

general labor

government

human resources

legal / paralegal

manufacturing

marketing / pr / ad

medical / health

nonprofit sector

real estate

retail / wholesale

sales / biz dev

salon / spa / fitness

security

skilled trade / craft

software / qa / dba

systems / network

technical support

transport

tv / film / video

web / info design

writing / editing

gigs

computer

creative

crew

domestic

event

labor

talent

writing

resumes

english

nearby cl

albany

allentown

baltimore

binghamton

catskills

central nj

delaware

eastern ct

eastern shore

harrisburg

hartford

hudson valley

jersey shore

lancaster

long island

new haven

north jersey

northwest ct

oneonta

philadelphia

poconos

reading

rhode island

scranton

south coast

south jersey

western mass

williamsport

worcester

york

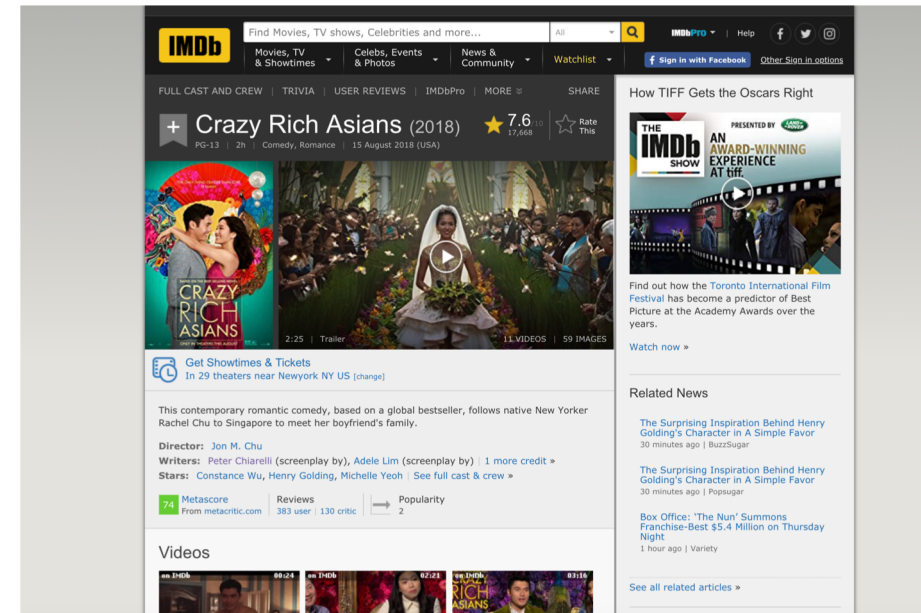
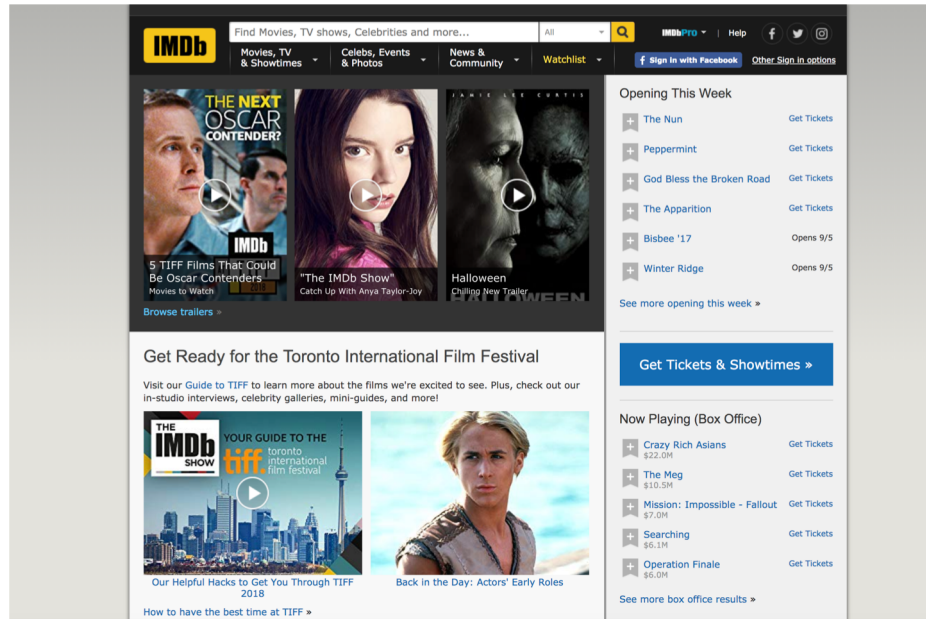
us cities












us states

canada

cl worldwide

IMDB has lots of data just waiting to meet a specific user need



Cast			Edit
Cast overview, first billed only:			
	Constance Wu	...	Rachel Chu
	Henry Golding	...	Nick Young
	Michelle Yeoh	...	Eleanor Young
	Gemma Chan	...	Astrid Young Teo
	Lisa Lu	...	Ah Ma
	Awkwafina	...	Peik Lin Goh
	Harry Shum Jr.	...	Charlie Wu
	Ken Jeong	...	Wye Mun Goh
	Sonoya Mizuno	...	Araminta Lee
	Chris Pang	...	Colin Khoo
	Jimmy O. Yang	...	Bernard Tai
	Ronny Chieng	...	Eddie Cheng

Storyline

The story follows Rachel Chu (Wu), an American-born Chinese economics professor, who travels to her boyfriend Nick's (Golding) hometown of Singapore for his best friend's wedding. Before long, his secret is out: Nick is from a family that is impossibly wealthy, he's perhaps the most eligible bachelor in Asia, and every single woman in his ultra-rarefied social class is incredibly jealous of Rachel and wants to bring her down. *Written by JAP*

[Plot Summary](#) | [Plot Synopsis](#)

Plot Keywords: [nouveau riche](#) | [materialism](#) | [gold digging](#) | [aeroplane](#) | [chinaman](#) | [See All \(75\)](#) »

Taglines: The only thing crazier than love is family

Genres: [Comedy](#) | [Romance](#)

Motion Picture Rating (MPAA)

rated PG-13 for some suggestive content and language | [See all certifications](#) »

Parents Guide: [View content advisory](#) »

Details

Official Sites: [Official Facebook](#) | [Official Instagram](#) | [See more](#) »

Country: [USA](#)

Language: [English](#) | [Mandarin](#) | [Cantonese](#) | [Hokkien](#) | [Tamil](#) | [French](#)

Release Date: 15 August 2018 (USA) [See more](#) »

Also Known As: [Crazy Rich Asians](#) [See more](#) »

Filming Locations: [Langkawi, Malaysia](#) [See more](#) »

Box Office

Budget: \$30,000,000 (estimated)

Opening Weekend USA: \$26,510,140, 19 August 2018, Wide Release

Gross USA: \$152,233,071, 19 September 2018

Cumulative Worldwide Gross: \$187,451,904, 17 September 2018

[See more on IMDbPro](#) »

Company Credits

Production Co: [Color Force](#), [SK Global](#), [Warner Bros.](#) [See more](#) »

Show more on [IMDbPro](#) »

Technical Specs

Runtime: 120 min

Sound Mix: [Dolby Digital](#) | [DTS \(DTS: X\)](#) | [SDDS](#) | [Sonics-DDP](#)

Color: [Color](#)

Studio Time: 45 minutes



Brainstorm until each of you have 10 specific needs you'd be interested in pursuing

Must mostly use IMDB data to provide additional value to what IMDB already does.
(IMDB already looks up actors and movies.)

What data does IMDB have?

What specific needs do people have around movies?

- Think about different specific groups of people, not just yourself.

Think about the whole experience around movies, not just watching them.

- Finding a movies near you, trying to remember a movie line,

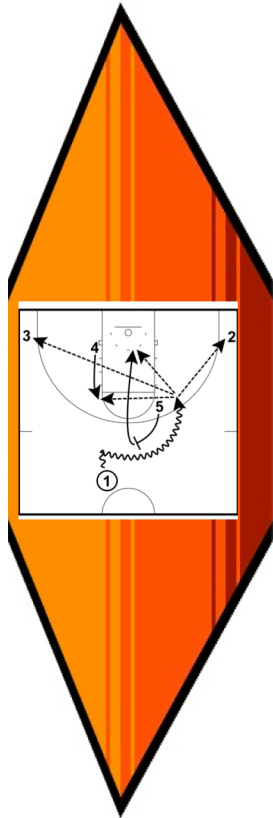
Today by 9pm - post 10 specific user need ideas on Piazza

Next's weeks goal

- Make your own application using IMDB data and CRUD operations.
 - Define your own high level goal: a specific user need to solve
 - Define 7-10 low level goals you will need to achieve this.
 - Functionality is the most important thing.
- Must use **Flask, SQLite**. You **don't have to use SQLAlchemy**
- We have not talked about users yet or session yet. Stay tuned!

We use iteration to minimize risk by prototyping the riskiest elements first.

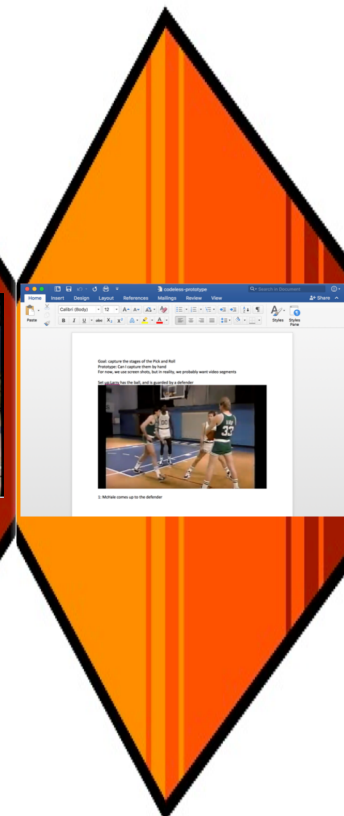
Idea:
Help NBA fans
Recognize the
strategy
during games



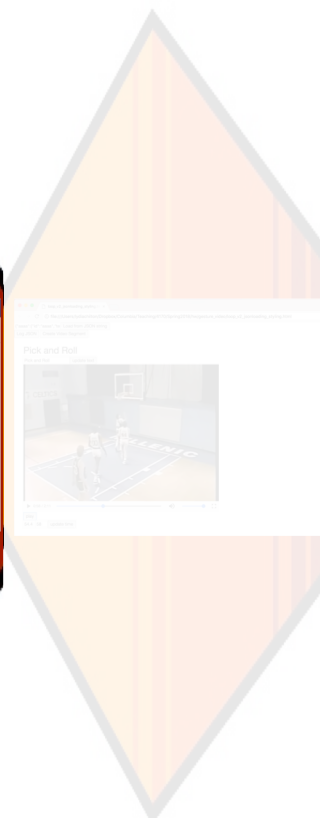
Idea



Resources



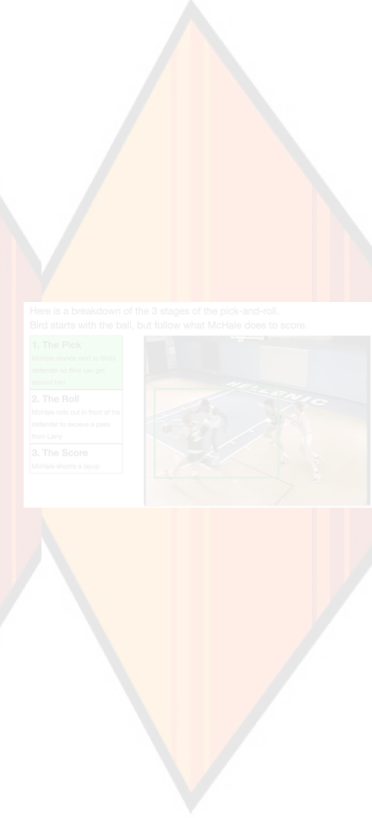
Design



Technical



Design



Idea



Design

Paper! Google it! User test!

Next's weeks goal

- Make your own application using IMDB data and CRUD operations.
 - Define your own high level goal: a specific user need to solve
 - Define 7-10 low level goals you will need to achieve this.
 - Functionality is the most important thing.
 - Create at least 1 paper prototype – test it on at least 1 person.
 - Report one thing you learned from it
 - Graphic design should be GOOD ENOUGH to not repulse people in user tests.
 - Test it on at least 1 person
 - Report on thing you learned
- Must use Flask, SQLite. You don't have to use SQLAlchemy
- We have not talked about users yet or sessions yet. Stay tuned!