Visual Information Design

No screens

Prof. Lydia Chilton
COMS 4170
28 January 2019

Say your name
Homework 1 Review

10 Usability Heuristics
Violation: Consistency and Standards
On Amazon Prime Video, I can’t find “all Horror movies”

Violation: User Control and freedom
Apple Inbox delete mail
Too easy to accidentally flag rather than delete.

Violation: Error Prevention
Xbox live subscription cancellation. Can’t cancel.

Violation: User Control and Freedom
What was the most common violation?

Violation: Aesthetic and minimalist design
No screens

Prof. Lydia Chilton
COMS 4170
28 January 2019
Goal 1

Build websites that suit the needs and abilities of users

The main goal of many websites is to display information users need.
The main goal of many websites is to display information users need.
What information do these sites display?

Ignore the interaction and Focus on the information being displayed.
User Interface Design
COMS 4170 · Spring 2019

Goals
1. Build websites that suit the needs and abilities of users.
2. When the needs and abilities of users are uncertain, design systems by learning from iteration.

INSTRUCTOR
Prof. Lydia Chilton
OH: Wednesday 5:30-6:30, CEPSR 612

Please contact staff through Piazza only

TAS
Angelina Lam OH: Tue 5-6:30, CS TA room
Daniel Li OH: TBA, TBA
Eleanor Murgaia OH: TBA, TBA
Katie Pfleger OH: TBA, TBA
Melanie Sawyer OH: Thurs 5-6, CS TA room

WEEKLY SCHEDULE
Lecture
Monday, Wednesday
4:10-5:25pm
451 CSB
Shop Columbia® Online | Outdoor Apparel & Products
Save at the Official Columbia Site. Free Shipping & More for Members!
Types: Jackets, Vests, Shirts, Pants, Shorts, Footwear, Accessories, Backpacks
35% Off Select Styles · Columbia Apparel & Gear · Waterproof Puffy Jackets · Columbia Gift Cards

Columbia Sportswear: Outdoor Clothing, Outerwear & Accessories
https://www.columbia.com/
Shop direct from Columbia Sportswear. Our Outerwear is Tested Tough in the Pacific Northwest. Shop for Jackets, Pants, Shirts, Shoes & more.
Men · Women · Insulated & Down · Jackets

Columbia University in the City of New York
https://www.columbia.edu/
Centers and Institutes · Students · Manage My UNI · Careers at Columbia

Columbia University Libraries: Libraries Home
library.columbia.edu/
Through the launch of a Shared Collection Service developed in partnership with Princeton University Library and The New York Public Library, Columbia added over seven million items to its catalog this month... Staff Profile: Ben Armitrout Ben Armitrout discusses his role in open source software for libraries, his journey ...
You’ve visited this page 4 times. Last visit: 1/16/18

Columbia - Wikipedia
https://en.wikipedia.org/wiki/Columbia
Windows 95 Video Guide with Matthew Perry & Jennifer Aniston

216,782 views

Favorite Videos
Published on Dec 12, 2016

Watch all about the show Friends in a single playlist - https://www.youtube.com/playlist?list... Subscribe and watch scenes from all seasons of Friends on my channel - https://www.youtube.com/channel/UCA8V...

SHOW MORE
<table>
<thead>
<tr>
<th>Primary</th>
<th>Social</th>
<th>Promotions</th>
<th>Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin, BPS (2)</td>
<td>Bloglovin’ - Not that I know of. Sometimes blocked sites come in on a huge 11:08 am</td>
<td></td>
<td></td>
</tr>
<tr>
<td>me, Lambert (2)</td>
<td>8th Period - Hey, Jeff. I am planning on doing the Mystery Hangout lesson 8:05 am</td>
<td></td>
<td></td>
</tr>
<tr>
<td>me</td>
<td>(no subject) -- Jeffrey Bernadt District Technology Specialist Bellevue Pu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>me, Braasch, Klam (3)</td>
<td>Visitation &amp; Observation Request - Good morning! The second semester is</td>
<td></td>
<td>Jan 12</td>
</tr>
<tr>
<td>me, Cox (2)</td>
<td>Bri Cox - Coaching Doc - Invitation to edit - Jeff, I finally was able to read a</td>
<td></td>
<td>Jan 12</td>
</tr>
<tr>
<td>Triple, Todd</td>
<td>3D Printer - Hello Amy, I received some information from a 3D printing exp</td>
<td></td>
<td>Jan 11</td>
</tr>
<tr>
<td>donotreplay</td>
<td>Education Preview Build Notice - AppleSeed Build Notice Education Pre</td>
<td></td>
<td>Jan 11</td>
</tr>
<tr>
<td>me, Campbell (7)</td>
<td>Khan Academy Issues - It kept repeating that “changed password 7 month</td>
<td></td>
<td>Jan 8</td>
</tr>
<tr>
<td>Toelle, me (3)</td>
<td>6 Word Stories - Hey Jeff! We just returned from lunch, but still have quite</td>
<td></td>
<td>Jan 8</td>
</tr>
<tr>
<td>me, Evon (4)</td>
<td>Request to Visit on Thursday AM - Hi Jeff, Happy New Year! We would lov</td>
<td></td>
<td>Jan 6</td>
</tr>
<tr>
<td>Jeffrey Bernadt</td>
<td>Shared from Twitter: What teachers need to know about multicultural educ</td>
<td></td>
<td>12/23/15</td>
</tr>
</tbody>
</table>
How should we design information to suit the needs and abilities of users?

(forget about interaction for a minute)
You are cordially invited to Robert and Alexandra’s delectable after dinner party. Wine and nibbles will be served. When: February 20th, 2019 at 9:30pm. Where: the pad. If you need directions, ping us. Kindly let us know if you will be attending by February 1st.
You are cordially invited to Robert and Alexandra’s delectable after dinner party. Wine and nibbles will be served. When: February 20\textsuperscript{th}, 2018 at 9:30pm. Where: the pad. If you need directions, ping us. Kindly let us know if you will be attending by February 1\textsuperscript{st}. 

You are cordially invited to Robert and Alexandra’s delectable after dinner party.

Wine and nibbles will be served.

When: February 20\textsuperscript{th}, 2019 at 9:30pm. Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1\textsuperscript{st}. 

Step 1. Group related information into chunks
Step 2. In each chunk, decide what’s important to emphasize.

You are cordially invited to Robert and Alexandra’s delectable after dinner party.

Wine and nibbles will be served.

When: February 20th, 2019 at 9:30pm.
Where: the pad. If you need dir, ping us.

Kindly let us know if you will be attending by February 1st.
You are cordially invited to Robert and Alexandra’s delectable after dinner party.

Wine and nibbles will be served.

When: February 20\textsuperscript{th}, 2019 at 9:30pm.
Where: the pad. If you need dir, ping us.

Kindly let us know if you will be attending by February 1\textsuperscript{st}.
You are cordially invited to
Robert and Alexandra’s delectable after
dinner party.

Wine and nibbles will be served.

When: February 20\textsuperscript{th}, 2019 at 9:30pm.
Where: the pad. If you need dir, ping us.

Kindly let us know if you will be attending
by February 1\textsuperscript{st}.

You are cordially invited to
Robert and Alexandra’s
delectable after dinner party.

Wine and nibbles will be served.

When: February 20\textsuperscript{th}, 2019 at 9:30pm.
Where: the pad. If you need directions, ping us.
You are cordially invited to Robert and Alexandra’s delectable after dinner party.

Wine and nibbles will be served.

When: February 20th, 2019 at 9:30pm.
Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1st.
Step 3. Consolidate into 3 groups.

You are cordially invited to

Robert and Alexandra’s
delectable after dinner party.

Wine and nibbles will be served.

When: February 20\textsuperscript{th}, 2019 at 9:30pm.
Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1\textsuperscript{st}.
Step 3. Consolidate into 3 groups.

You are cordially invited to

Robert and Alexandra’s
delectable after dinner party.
Wine and nibbles will be served.

When: February 20\textsuperscript{th}, 2019 at 9:30pm.
Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending
by February 1\textsuperscript{st}. 
Use the squint test to verify the Hierarchy of Information

Robert and Sandra’s delectable dinner party.
Wine and nibbles will be served.
When: February 20th, 2023, 9:30pm.
Where: the pad. If you need directions, ping us.
Kindly let us know if you will be attending by February 1st.
Users can’t focus on everything at once. They have a spotlight of attention.

A visual hierarchy of information allows designers to guide users’ attention.
7 Tools for *visually* conveying importance
1. Conceptual Grouping:
A few high-level visual groups (3)
1. Conceptual Grouping:
A few high-level visual groups
1. Conceptual Grouping:
A few high-level visual groups

Content

Metadata:
  title, description

Watch it next
2. **Location** indicates Importance
2. Location indicates importance
3. **Whitespace indicates importance**

User Interface Design

COMS 4170 - Spring 2018

**Part 1** Build websites that suit the needs and abilities of users.

**Part 2** When the needs and abilities of users are uncertain, design systems by learning from iteration and experimentation.

**INSTRUCTOR**
Prof. Lydia Chilton
Office: Tuesday 3-4 pm, CEPSR 612
Please contact staff through Plazza only

**TAS**
Tessa Harr
Eleanor Murgia
Lucille Sui

**WEEKLY SCHEDULE**
Lecture
Mon, Wed 4:10-5:25pm, 413 Kent Hall
Whitespace vs. No Whitespace

User Interface Design
COMS 4170 · Spring 2018

Part 1 Build websites that suit the needs and abilities of users.
Part 2 When the needs and abilities of users are uncertain, design systems by learning experimentation.

INSTRUCTOR
Prof. Lydia Chilton
OH: Tuesday 3-4 pm, CEPSR 612
Please contact staff through Piazza only

TAS
Tessa Hurr
Eleanor Murgula
Lucille Sui

WEEKLY
Lecture
Mon, Wed
3. **Whitespace** indicates importance
3. **Whitespace** indicates importance

Random Art

Mona Lisa
4. **Size** indicates importance
4. **Size** indicates importance
5. Images indicate importance
4. **Images** indicate importance
You are cordially invited to
Robert and Alexandra’s
delicious after dinner party.
Wine and nibbles will be served.

When: February 20th, 2018 at 9:30pm.
Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1st.
6. **Contrast** indicates importance
7. **Color** indicates importance
Seven tools for visually indicating importance

Conceptual grouping
Location
Whitespace
Size
Images
Contrast
Color
Using the tools together
What tools does the compose button use?

1. Conceptual Groupings? Grouped with “menu”
2. Position? Top and left
3. Whitespace? Top and right
4. Size? Big
5. Images? No
6. Contrast? Dark box
7. Color? Red
What tools does the unread message use?

1. Conceptual Groupings? All messages
2. Position? Top
3. Whitespace? left
4. Size? No
5. Images? No
6. Contrast? Bold
7. Color? No
Only use color in addition to other tools.

1. Conceptual Groupings?
   - Grouped with “menu”
2. Position?
   - Top and left
3. Whitespace?
   - Top and right
4. Size?
   - Big
5. Images?
   - No
6. Contrast?
   - Dark box
7. Color?
   - No

Use multiple tools to indicate importance. Use color last – only in addition to another tool.
If you are tempted to use color, use size, whitespace and contrast instead.

You are cordially invited to Robert and Alexandra’s delectable after dinner party. Wine and nibbles will be served. When: February 20th, 2019 at 9:30pm. Where: the pad. If you need directions, ping us. Kindly let us know if you will be attending by February 1st.
HTML Warm-up: Remake the invitation

You are cordially invited to

**Robert and Alexandra's**
delectable after dinner party

Wine and nibbles will be served

*When:* February 20th, 2018 at 9:30pm
*Where:* the pad. If you need directions, ping us.

Kindly let us know if you will be attending by **February 1st**.
Step 1. Just run it.

You are cordially invited to Robert and Alexandra's Dinner Party
Wine and nibbles will be served

When: February 28th, 2019 at 9:30pm
Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1st.
Step 2. Add `<div>` elements to create groups

```html
<html>
  <body>
    <div>
      You are cordially invited to 
      Robert and Alexandra's Dinner Party 
      Wine and nibbles will be served
    </div>
    <div>
      When: February 20th, 2019 at 9:30pm 
      Where: the pad. If you need directions, ping us.
    </div>
    <div>
      Kindly let us know if you will be attending 
      Kindly let us know if you will be attending by February 1st.
    </div>
  </body>
</html>
```
Step 3. Add style header, and padding to divs

You are cordially invited to Robert and Alexandra's Dinner Party Wine and nibbles will be served

When: February 20th, 2019 at 9:30pm Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1st.
Step 4. Add spans and more styles by class

You are cordially invited to **Robert and Alexandra's delectable after dinner party** Wine and nibbles will be served

When: February 20th, 2019 at 9:30pm Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1st.
Step 5. Add `<br>` elements to break lines.

You are cordially invited to

**Robert and Alexandra's delectable after dinner party**

Wine and nibbles will be served

When: February 20th, 2019 at 9:30pm Where: the pad. If you need directions, ping us.

Kindly let us know if you will be attending by February 1st.
If you are new to HTML and CSS....

Try it

Google it

Ask the staff

You are cordially invited to Robert and Alexandra's Dinner Party. Wine and nibbles will be served.

Where: February 28th, 2018 at 8:00 pm

Prof. Lydia Chilton

OH: Wednesday 5:30-6:30, CEPSR 612

Angelina Lam OH: Tue 5-6:30, CS TA room

Daniel Li OH: Thur 4-5, CSB 536

Eleanor Murguia OH: Tue 10-11, 502 Milstein

Katie Pfleger OH: Tue 4:15-5:15, CEPSR 6th floor lounge

Melanie Sawyer OH: Thurs 5-6, CS TA room
Reminder: Good Minimalism takes time.

You are cordially invited to

**Robert and Alexandra's delectable after dinner party**

Wine and nibbles will be served

When: **February 20th, 2018 at 9:30pm**
Where: **the pad**. If you need directions, ping us.

Kindly let us know if you will be attending by **February 1st**.
Information Foraging Theory
Information Hierarchy guides attention at a high level...

But often users need to find something very specific.
You want to find buy a used guitar. Where would you look?

- Good conceptual groups
- Simple labels
Information Foraging Theory says users follow visual or textual clues to sense if they are on the right track.
Caveat 1: Use simple text labels
BUT some data don’t need labels.
Caveat 1: Use simple text labels BUT some data don’t need labels.
Caveat 2: Use Familiar Icons

BUT....
Don’t use unfamiliar icons
But not unfamiliar icons
But not unfamiliar icons
But not unfamiliar icons
Icons are useful when users don’t know the word for the object.
Aesthetics Matters to finding information

CHI 2012 Housing

The housing bureau is now closed. If you need to arrange your own accommodation near the conference, the address of the convention center is:

500 East Cesar Chavez Street Austin, TX 78701.

CHI 2012 Housing is open! Make your housing reservation.

Location

CHI 2012 is being held at the Austin Convention Center in downtown Austin, near...
Aesthetics Matters to finding information

Users work harder to find information when sites are more aesthetic.
Summary
Goal 1

Build websites that suit the needs and abilities of users

The main goal of many websites is to display information users need.
All sites display information (in addition to interaction)
Users have a spotlight of attention. Designers use a visual information hierarchy to guide users’ attention.
Seven tools for visually indicating importance

Conceptual grouping  Location  Whitespace  Size

Images  Contrast  Color
Use multiple tools. Use color last. Use **size, whitespace** and **contrast** instead.

You are cordially invited to Robert and Alexandra’s delectable after dinner party. Wine and nibbles will be served. When: February 20\textsuperscript{th}, 2019 at 9:30pm. Where: the pad. If you need directions, ping us. Kindly let us know if you will be attending by February 1\textsuperscript{st}.
Information Foraging Theory says users follow visual or textual clues to sense if they are on the right track.

- Conceptual groupings
- Simple text labels
- Familiar Icons
- Aesthetic Design
Homework 2

• Out now
• Due Friday 2/1 @ 4pm

Participation

• What did you say in class?
• What is something you learned or remember (in your own words)?

On piazza there is a link to a Google Form.