

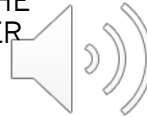
User Interface Design Session #1

Designing for people and organizing
the content

Design for people



YOU ARE NOT THE
AUDIENCE...EVER



WHAT ARE THEY
TRYING TO DO?

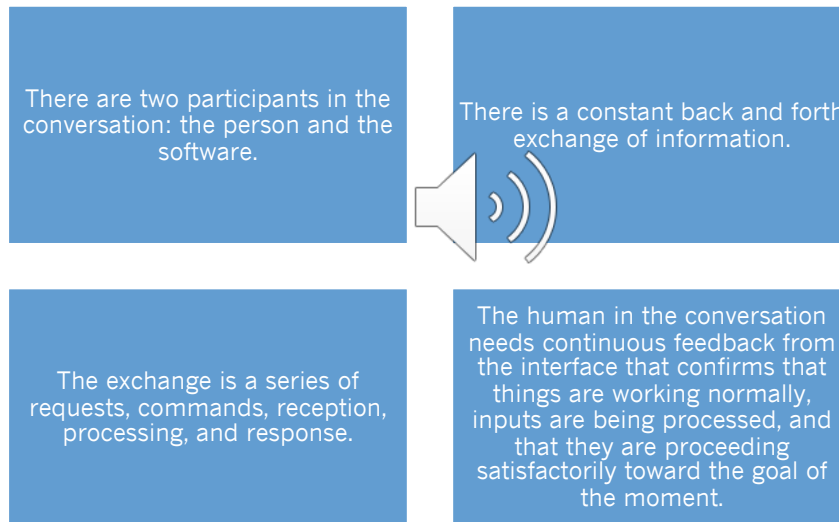


WAYS TO
UNDERSTAND USER
GOALS

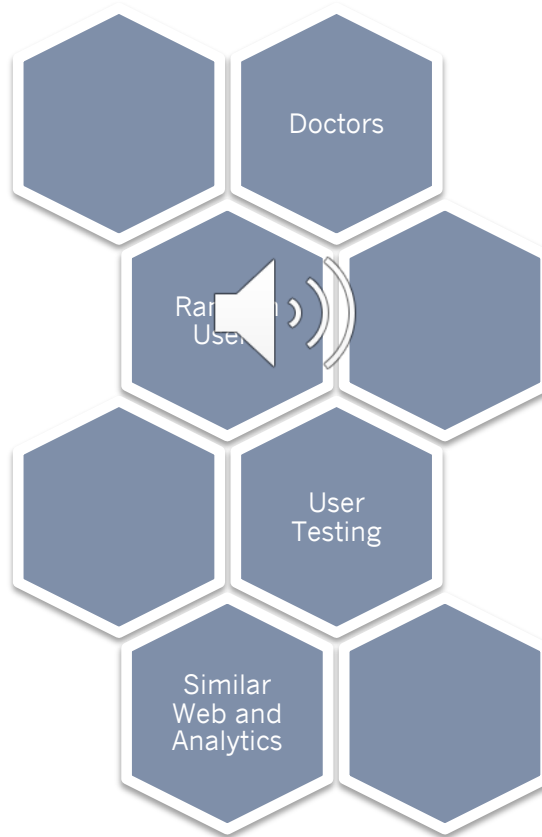


COGNITION AND
BEHAVIOR AND ITS
RELATIONSHIP WITH
USER INTERFACE
DESIGN

Interactions are Conversations



Consider the User's Skill Level



Goals





It is so important to our design choices



Why are users here?
What do they want?



eCommerce choices



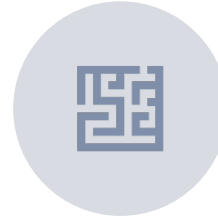
All projects are
eCommerce

Asking Why

Solving Problems



HOW IS YOUR USER
COMMUNICATING WITH
YOU? ARE THERE
OTHER, MORE MODER
METHODS OF
COMMUNICATION?



CAN YOU SOLVE
SOMETHING WITH
MINIMIZED FORMS?



CAN YOU REMOVE THE
FORM ENTIRELY?

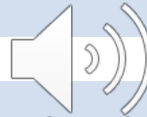
Research



Their goals in using the software or site



The specific tasks they undertake in pursuit of those goals



The language and words they use to describe what they're doing



Their skill at using software similar to what you're designing

Direct Observation

- Live
- Phone
- Internet
- Screencasting





Deep, Detailed views
of all participants in
the interaction



Heavy on Contextual
Inquiry

Case Studies



Testing before and
after changes



The need to discover
the actual context of
use

Surveys



Statistically significant



Questions need to be well formed



Quantitative vs. Qualitative



Careful Survey Design is imperative



Marketing Research is Different

Now for Patterns

- This course is very much focused on patterns
- What is a pattern?
- The first patterns  are NOT design patterns...they are behavioral patterns
- Behaviors are predictable and repetitious



"Let me explore without getting lost or in trouble"



Visibility of system status



Match between the system and the real world



User control and freedom

Safe Exploration



"I want to accomplish something now, not later."



Use informative loaders



Give immediate responses



Don't hide pertinent information



Anticipate their need, provide an obvious entry point, provide value to the customer first before asking for something valuable (email address, a sale) in return.

Instant Gratification

Satisficing

"This is good enough. I don't want to spend more time learning to do it better."

Use "calls to action" in the interface.

Give directions on what to do first: type here, drag an image here, tap here to begin, and so forth.

Make labels short, plainly worded, and quick to read. (This includes menu items, buttons, links, and anything else identified by text.) They'll be scanned and guessed about;

Write them so that a user's first guess about meaning is correct. If he guesses wrong several times, he'll be frustrated, and you'll both be off to a bad start.



Use the layout of the interface to communicate meaning. Users "parse" color and form on sight, and they follow these cues more efficiently than labels that must be read.

Make it easy to move around the interface, especially for going back to where a wrong choice might have been made hastily.

Keep in mind that a complicated interface imposes a large cognitive cost on new users. Visual complexity will often tempt nonexperts to satisfice: they look for the first thing that might work.

Changes in Midstream



“I changed my mind about what I was doing.”



Very common in eCommerce – Pogosticking



Provide Choices so that users don't leave



See the wizard pattern in this lecture



Capture their attention with Sales

Deferred Choices

- *“I don’t want to answer that now; just let me finish!”*
- Don’t accost the user with too many upfront choices in the first place.
- On the forms that they do need to use, clearly indicate required versus optional fields  and don’t make too many of them required.
- Let them move on without answering the optional ones.
- Sometimes you can separate the few important questions or options from others that are less important. Present the short list; hide the long list.

Incremental Construction



"Let me change this. That doesn't look right; let me change it again. That's better."

Make it easy for users to build small pieces.

Keep the interface responsive to quick changes and saves.

Feedback is critical: constantly show the user what the entire thing looks and behaves like while the user works.

Show instant results to user changes

Habituation

“That gesture works everywhere else; why doesn’t it work here, too?”



Think ctrl+s, ctrl+c, ctrl+v

Have an x in the upper right of a dialog box

Similar to Recognition, not Recall

You should NOT have to read buttons to figure out what to click!



"I'm waiting for the train. Let me do something useful for two minutes."



Specifically for mobile



Emails, Videos, Sports Scores, Weather, Social

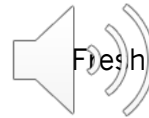
Microbreaks



Give the user what they want immediately



Fast and Easy to reach



Fresh Content



Pull down to reload



"I swear that button was here a minute ago. Where did it go?"



When people manipulate objects and documents, they often find them again later by remembering where they are, not what they're named.

Spatial Memory



Keep your utility navs, search bars and other elements where people expect them.

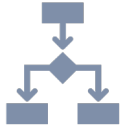


Not doing so is like switching the furniture on a person who is visually challenged.

- *“I’m putting this here to remind myself to deal with it later”*
- Notes to oneself, like virtual “sticky notes”
- Windows left on-screen
- Annotations put directly into documents (such as “Finish me!”)
- Browser bookmarks, for websites to be viewed later
- Documents stored on the desktop rather than in the usual places in the filesystem
- Email kept in an inbox (and maybe flagged) instead of filed away

Prospective Memory





*"I have to repeat this
how many times?"*



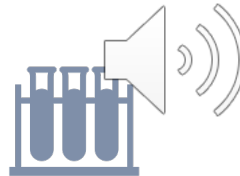
Try to find methods to
prevent this as it
causes obvious
frustration



Examples include
"Find and Replace"
dialogues



Multiple Uploads



User Testing can show
repetitive behaviors
the might be
prevented.

Streamlined Repetition

Keyboard Only

- *“Please don’t make me use a mouse”*
- For people who are uncomfortable with either a mouse or a trackpad
- Utilization of Tab Key for movement of cursor
- Utilization of popular, well known hot keys like ctrl + s, ctrl + c, ctrl + v



Social Media, Social Proof, and Collaboration

- *“What did everyone else say about this?”*
- User-generated reviews and comments
- These allow individuals to get a sense of the wisdom of the crowd. Reviews can be rated, and participants can gain fame or other rewards for being rated as a good reviewer. Everything is a social object
- Text posts, images, video, check-ins, almost anything that users create in social media becomes an object that people can virtually gather around. Anything can be shared, rated, have a discussion thread attached to it, and similar activities.
- Collaboration Business productivity and communication software has been transformed by software that allows people separated by space and time to come together in discussion threads, document reviews, video conferencing, tracking status, live and asynchronous communications, and many other activities.



Organizing Information (Chapter 2)

A definition of
information
architecture

How to design the
information and
task space for
comprehension and
navigation

Different methods
of organizing
content and data
for use

How to organize
tools and features
for efficient work

Developing a
system of
repeatable
frameworks or
screen types

Patterns for
displaying,
accessing, and
navigating content
and functionality

Feature, Search and Browse

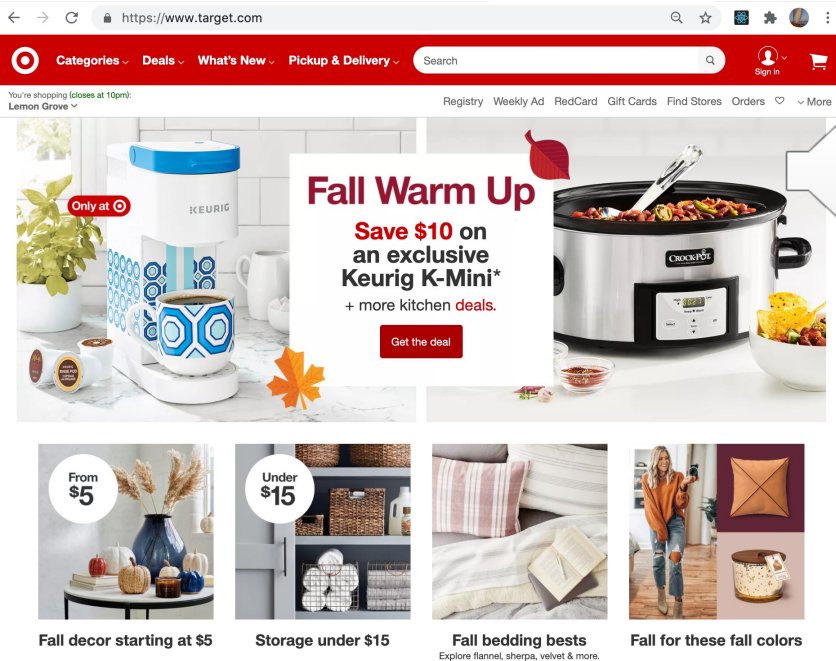
- Commerce –centric example

A three-element combination on the main page of the site or app: a featured item, article, or product; a search box (expanded by default, or collapsed); and a list of items or categories that can be browsed.

For Large Content Sites

Recognition not Recall again

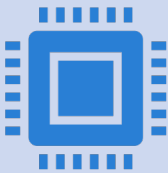
Give them what they want



Mobile Direct Access



The first screen presents actionable information without requiring any input or action from the user.



The app makes assumptions about any settings or queries (such as location or time) related to its primary function, and presents the output for immediate response.

Weatherbug



- Weatherbug does one thing well and needs to show it.





News Content/Streams



Social Streams



Business Collaboration



Your site or app has frequently updated content and the user checks it often, often dozens of times a day.

Streams and Feeds

Huffington Post

/ IN THE NEWS /



CORONAVIRUS

Trump Campaign Aide Defends First Family's Refusal To Wear Masks At Debate



CORONAVIRUS

Corporate Polluters Got Millions In Federal COVID-19 Aid



POLITICS

Sen. Ron Johnson Took COVID Test En Route To Wisconsin Fundraising Dinner. It Was Positive.



U.S. NEWS

Pence Ordered U.S. Borders Closed After CDC Experts Refused



CORONAVIRUS

Here's What Trump Did In The Week Leading Up To His COVID-19 Diagnosis

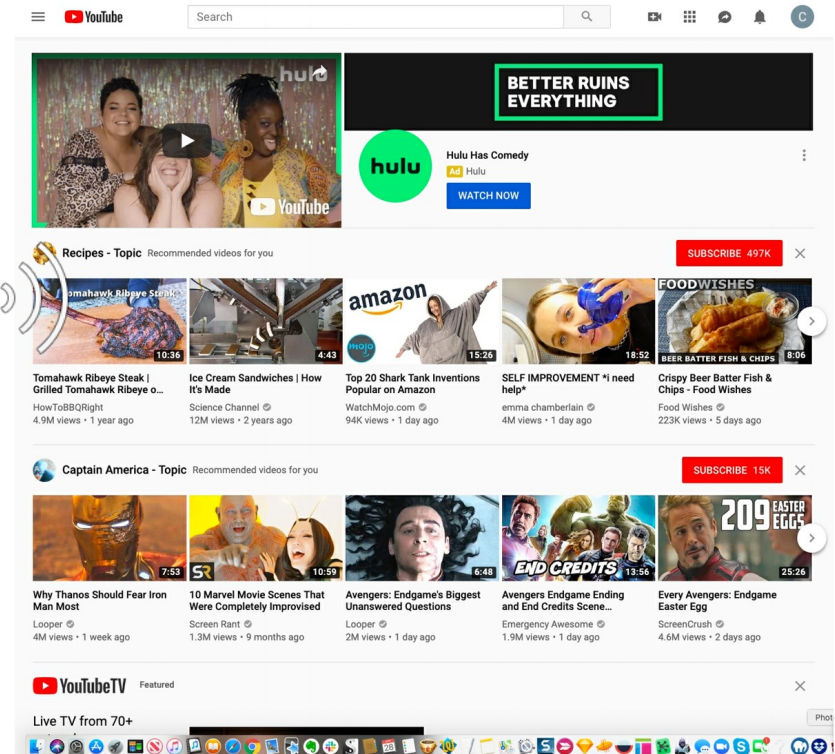


WORLD NEWS

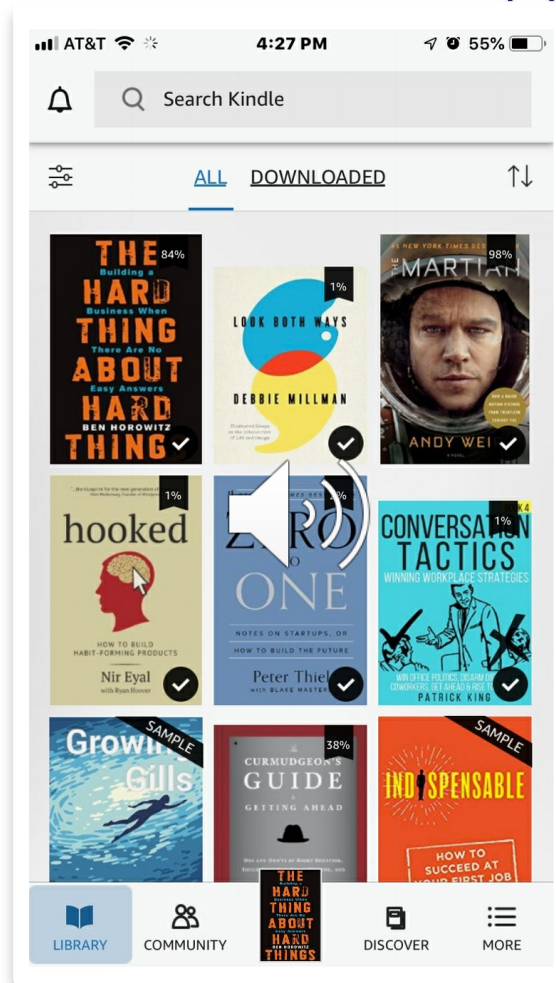
Thousands Protest Anti-Coronavirus Restrictions In Germany Over Weekend

Media Browser

- A “grid of objects” structure is for browsing and selecting from a group of objects. The objects are presented in rows and columns. It uses thumbnails, item views, and a browsing interface, such as a scrolling list.



Kindle Mobile App





A dashboard is often the first screen a customer will see when logging in to a consumer or business platform.

Dashboard

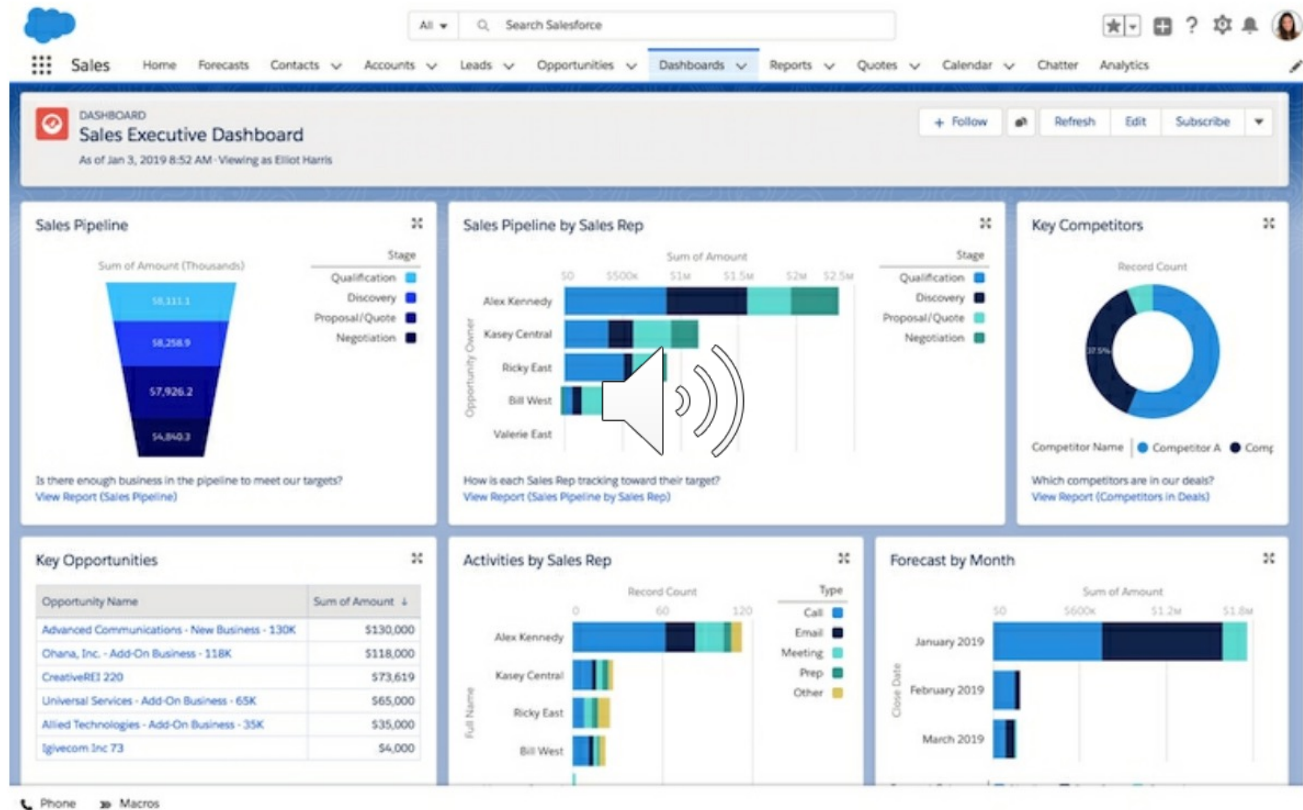


Uses multiple interior patterns



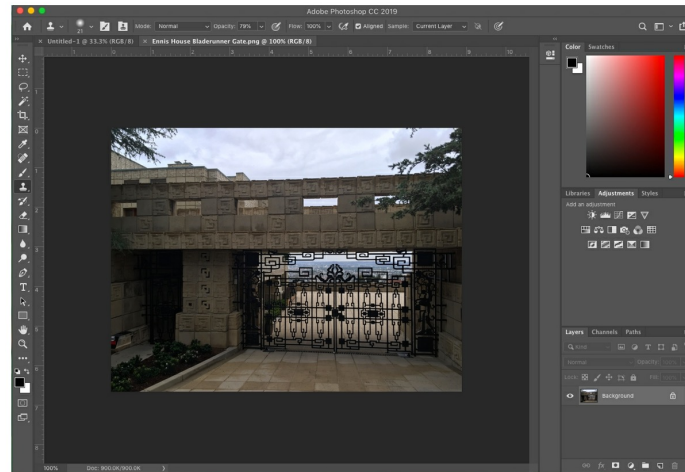
Titled Sections, Tabs and Collapsible Panels, Movable Panels, One-Window Drilldown, Lists and tables of various kinds, Information graphics and Datatips

Dashboard



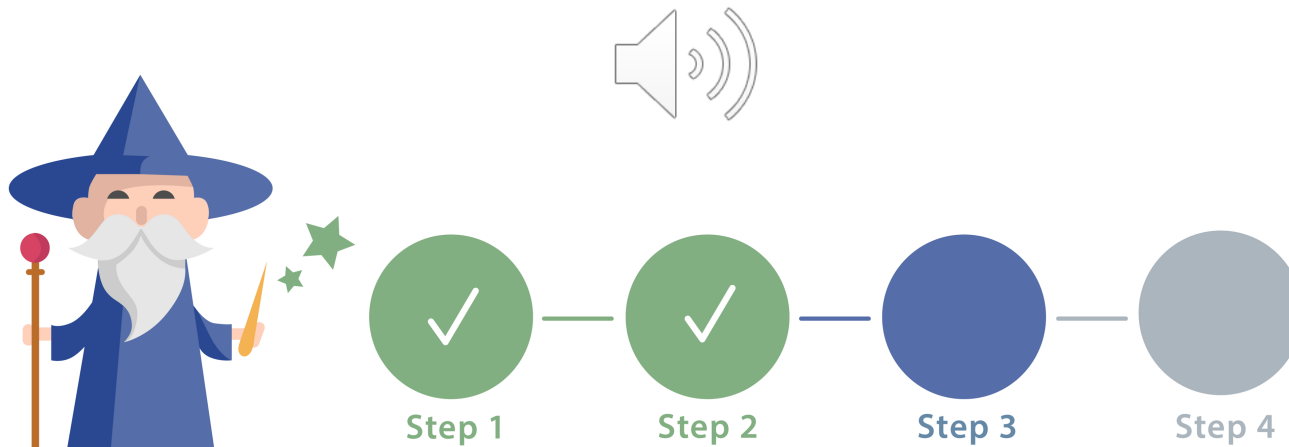
Canvas + Palette

- An application structure defined by a central workspace with containers of tools around it. It consists of a large blank area, or canvas, where a user creates or edits a digital product.
- Think Photoshop



Wizard

- A feature or component that leads the user through the interface step by step to do tasks in a prescribed order.



Wizard



 Edit Location 92101

 Switch Model

 View Saved

 Message Us

1 TRIMS

2 COLORS

3 PACKAGES

4 EXTERIOR

5 INTERIOR

6 ACCESSORIES

7 SUMMARY

NEXT

2020 BOLT EV FWD LT\$29,390 Net Price  ▼





 INTERIOR

 ENLARGE

Drive Type 

Trims (2) 

Compare Trims

☒ LT 

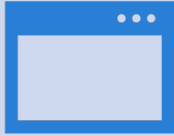
☐ Electric drive unit
MSRP from \$37,495¹ 

☐ PREMIER 

☐ Electric drive unit
MSRP from \$41,895¹ 

Next Step: Colors

Settings Editor

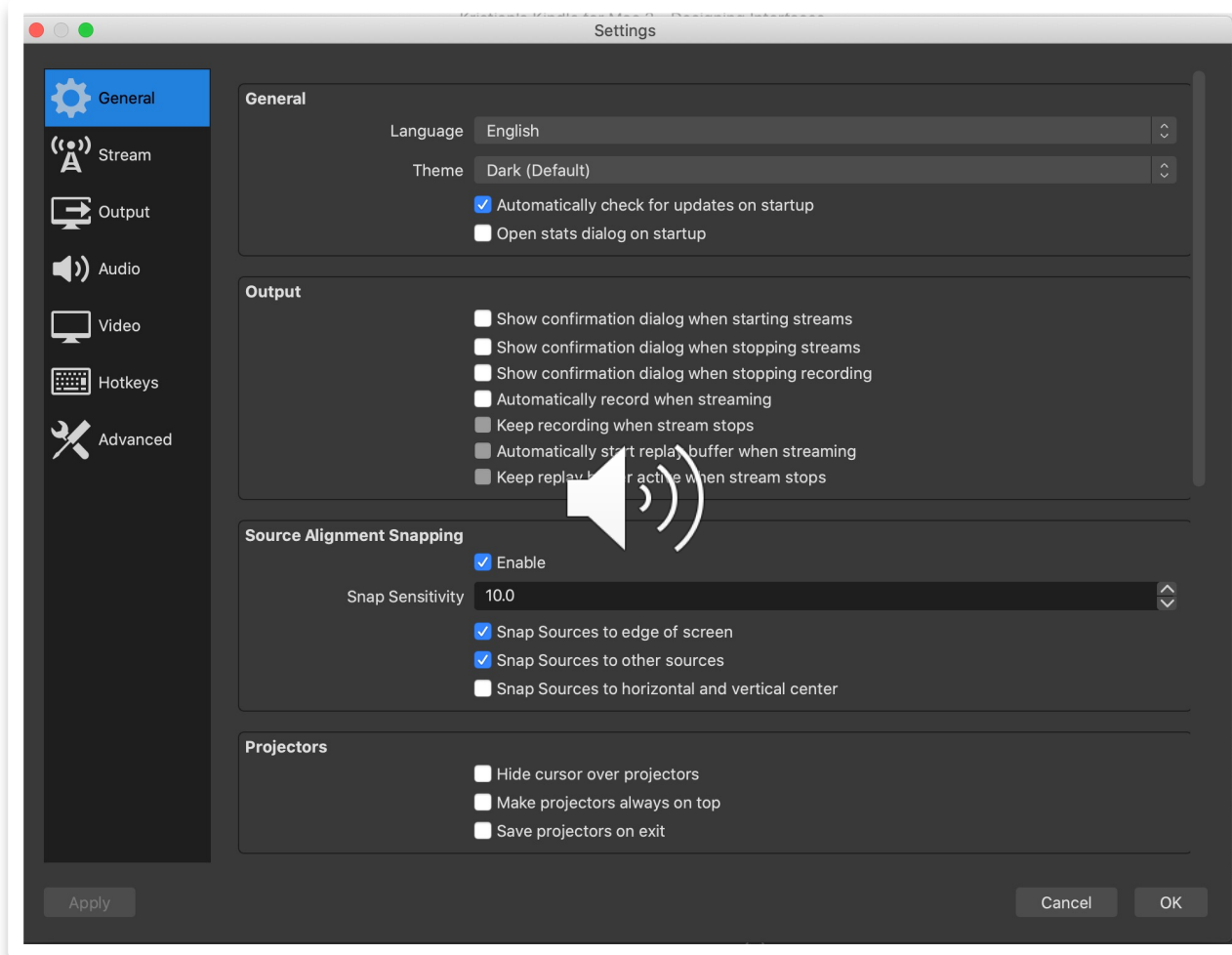


An easy-to-find, self-contained page or window where users can change settings, preferences, or properties.



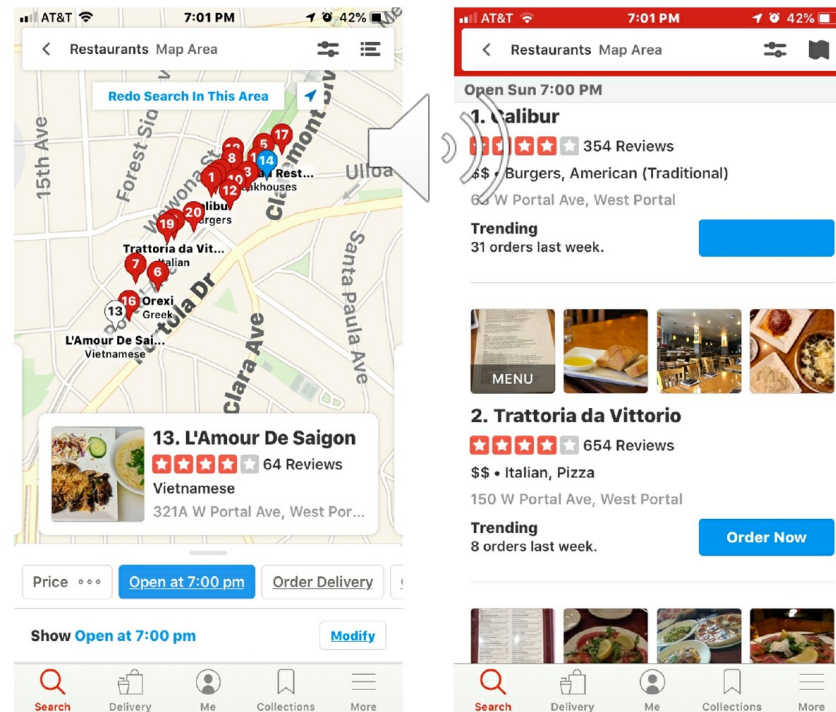
Divide the content into separate tabs or pages if you need to manage large numbers of settings.

OBS Settings

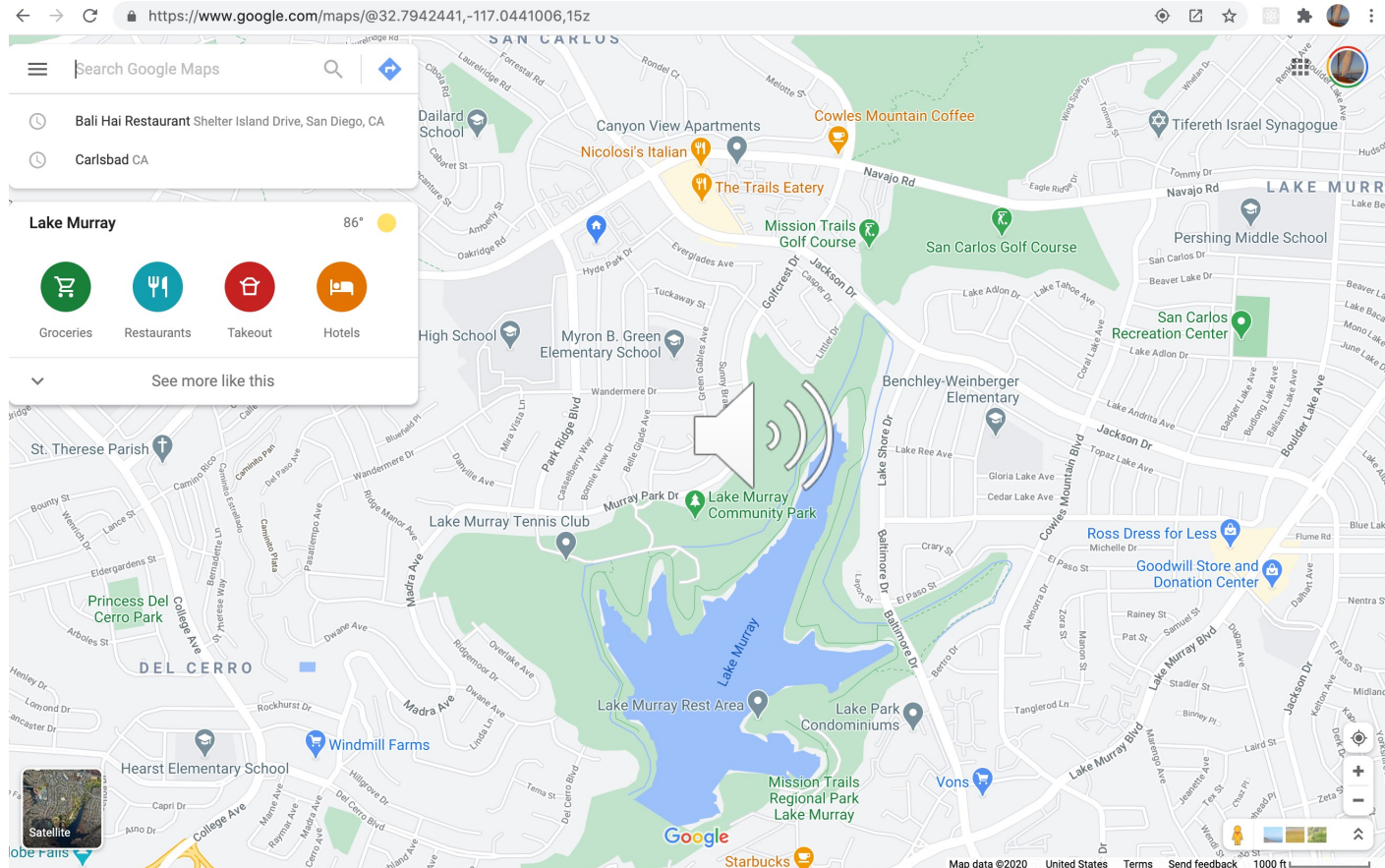


Alternative Views

- Views or methods of visualizing information in your software or app that are substantially different from one another but offer access to the same information.

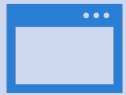


Alternative Views





An interface where users can view more than one page, project, file, or context at a time. It can consist of multiple top-level tabs, tab groups, streams/feeds, panels, or windows.



Users might have the option to place these workspaces side by side.



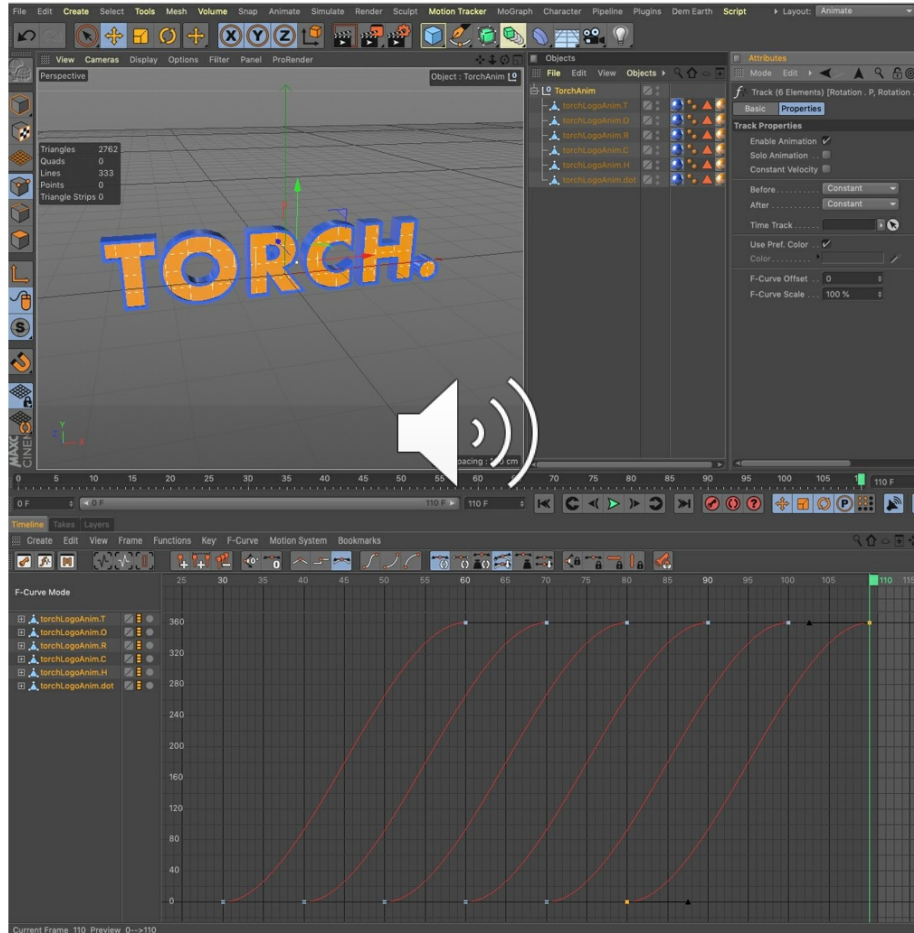
Think about your operating systems



Tabs, Separate OS Windows, Columns or Panels within a Window, Or Split Windows with Size Controls

Many Workspaces

Cinema 4d



Providing labels, explanations, and descriptions of how to use the interface are a fundamental part of making usable software.



The goal is to provide assistance, answers, or training to users when they need it — in multiple forms so the it can be accessed in different situations.

Help Systems

Turbotax

