

Common Patterns

The Web has many common UI patterns

- Those present in base HTML
 - bulleted lists, forms, etc
- Non-interactive, built from HTML
 - horizontal menus, "cards", etc
- Interactive, built from HTML
 - dropdown menus, accordions, modal

Accordion Pattern

This UI Pattern is

- a collection of sections
- each with a title
- each can collapse/expand
- Sometimes only one/expanded at a time
- Sometimes only collapse by expanding another

Accordion UI Pattern

What to do about a catnip addiction?	+
Will I ever catch that red dot?	—
Dolor dicta odio inventore ut qui dolorem. Omnis recusandae quo porro voluptatibus veniam? Sed earum rem nobis quasi odit, similique ducimus Voluptatibus fugit sint error?	
Why does the human have a problem with me claiming the center of the bed?	+

Accordion considerations

- What (if any) limitations on expand/collapse?
- Both keyboard and mouse controls?
- Accessibility concerns?
 - Semantic HTML
 - Indicating open/close

Unicode Characters

"unicode" characters are a way of encoding characters

- Beyond common english characters and symbols
- Beyond european characters
- Beyond characters of all languages
- Includes an ever expanding list of emoji
 - But emoji can have a11y issues
 - Text may not match intention
 - 🤯 (dizzy face)
 - 🚩 (triangular flag on post)

How to include a unicode character

- You already are
- but how to include those not on the keyboard?
 - Operating System (ex: apple emoji keyboard)
 - Cut-and-paste
 - Other ways depend on what kind of file is encoding it (js, css, HTML)



- HTML: `🐱`
- CSS: `\1F431`
- JS: `\uD83D\uDC31` or `\u{1F431}`

Finding Unicode characters

Easiest: Search web

My current fav:

- **<https://unicode-table.com/en/1F431/>**

Unicode warnings

- Font dependent!
- Encoding is very important
 - Web should be set to UTF-8
 - `<meta charset="utf-8" />`
 - Wrong encoding means wrong characters!
- Be careful with language characters
 - Example: **<https://unicode-table.com/en/2630/>**
 - Often misused for hamburger menu
 - Try to use the correct meaning

Borders

We've used borders around a box to make it stand out

But they have additional uses/notes

- A dividing line by putting a border on one side
- open borders between areas to "connect" them

If two bordered boxes touch, you get a thicker line

- remove that side from one to fix
- Or overlap by using negative margins
 - when the lines aren't the same length

Planning the HTML

What HTML are we rendering?

- Each entry is a div(?) container
 - Always question a div
 - But often a div
- Title will be button
 - For semantic meaning
- Link vs Button?
 - Link should navigate
 - This is on the line

Plan the HTML 2

What additional structure do we need?

- How are we showing open/close?
 - Icons, text would be additional element
 - Might require a wrapper if so
 - `::before/::after` pseudo-elements
 - No extra elements required
 - But cannot have extra ARIA info
- No extra validation info or feedback
 - For this pattern

Plan the appearance

- Clues for CSS
- Reality-checks HTML plan
- Title button full width
 - Padding to make a nice block
- Title will be on the left side of the button
- Show a "+/-" on the right side of the button
 - Based on open/close state
- Content will show/hide content
 - Show/hide via CSS vs include/not in HTML
 - Judgment call, all the same "content"
 - No animation for now

Planning state

- Allowing multiple open?
 - On open action, do we close others?
- Is one always open?
 - On close action, act only if another open?

Beyond scope of this class

- But I recommend tracking "state"
 - Outside of DOM

Accordion variations

- many sections, show one
- Similar UIs:
 - Show one vs Show many
 - re-collapse vs advance-only
 - Tabs
 - vertical or horizontal
 - Menus w/on-screen content
 - Just tabs with different UI

Tabs UI Pattern

What to do about a catnip addiction?	Will I ever catch that red dot?	Why does the human have a problem with me claiming the center of the bed?
Amet minima assumenda debitis fugiat aut Illo adipisci accusantium totam est labore. Quam cum dolorum magni facere!		

Consider when choosing

- Where is "navigation" interaction?
 - Tabs in same location
- When is navigation interactions?
 - Accordions CAN activate on focus
 - but do not have to
 - What about a staged form?
 - as you complete a "stage", the next "stage" becomes visible
- Where is visibility?
 - Accordions can push content off screen
- Title size (tabs prefer smaller titles)

Summary - Accordion

- A UI Pattern of multiple collapsible sections
 - Can many sections be open
 - Which section(s) start open?

Summary - Process

- Implement in steps
- Verify before advancing
 - HTML structure
 - Base on semantics
 - Appearance plan
 - Define needs for HTML + CSS
 - Verify A11y
 - Keyboard and accessibility labels min
- Final CSS clean up
 - Colors, whitespace, borders
 - Hover effects

Summary - Implement

- CSS and JS
 - Build in cycles
 - Confirm each step
 - Manually force class states to confirm
- Implement state change handling last
 - You know the UI works already