

Dropdown Navigation Menu

- Many ways to think about this

Simple approach:

- List and sublists in HTML
- Main List visible, sublists not visible
- On select Main List Item
 - Relevant Sublist now visible
 - Sublist shows OVER existing content

We've already made assumptions

- Need to work with mouse, touchscreen, keyboard
 - Also assistive tech (AT)
 - Ex: screen readers and voice command

Think before acting.

- Don't learn: "Doing this gives this result"
- Learn: "To get this result, what do I do and why?"

Early Thoughts on Visibility

Showing/Not Showing

- `display: none;` **removes** from accessibility tree
 - Can't be moved to, selected, read aloud, etc
- Other options hide from **sight** but still exist
 - position offscreen, height 0, etc

Changing what is Shown

- JS can do a lot of things with our styling
 - But we don't know JS yet
- CSS has state checks with `:hover` and `:focus`

HTML Navigation Menu Structure

No one right way to make navigation HTML structure

- Often some commonalities
- Semantically a `<nav>`
- Main List
 - Each item has a visible name
 - Always visible
 - Our "interaction"
 - Each item has a sublist of links
 - Sometimes visible

Dropdown Navigation Example HTML

```
<nav class="nav">
  <ul class="menu">
    <li class="menu-option">
      <button class="menu-name" type="button">Famous Cats</button>
      <ul class="submenu">
        <li><a href="/cats/jorts.html">Jorts, King of Mishaps</a></li>
        <li><a href="/cats/jean.html">Jean, the Union Organizer</a></li>
        <li><a href="/cats/maru.html">Maru, Explorer of Boxes</a></li>
        <li><a href="/cats/nyan.html">Nyancat, Rainbow Singer of Songs</a></li>
      </ul>
    </li>
    <li class="menu-option">
      <button class="menu-name" type="button">About This Site</button>
      <ul class="submenu">
        <li><a href="/purpose.html">Site Purpose</a></li>
        <li><a href="/history.html">History</a></li>
        <li><a href="/privacy.html">Privacy</a></li>
      </ul>
    </li>
  </ul>
</nav>
```

Buttons?!

I placed my main list item names as `<button>`

- We don't want the visuals of buttons
 - But we can change appearance
- Semantically correct
 - a "control", not "navigation"
- Gives us a ton of built-in benefits
 - mouse, touch, keyboard interactions
- `type="button"` has no automatic ACTIONS
 - Nothing happens on click

Styling the Lists

This looks terrible, let's style it

- Remove list styling on main list
- Switch main list to a flexbox row

Styling the submenu

- Set submenus to `position: absolute;`
 - Ugh, awful, but that's the overlap
 - Add a background color
- Remove default list styling

We said we don't want `display: none;`

- But let's start with that for simplicity

Submenu Shown on Hover

`:hover` is mouse-only, but good to learn with

- I'll use `":hov"` in dev tools on the submenu
- `.menu-name:hover ~ .submenu`
 - Using **sibling selector** (`~`)
 - `.submenu` w/prev sibling of `.menu-name:hover`
 - Selects `.submenu` element for styling
- Set to `display: block;` for now
- Now acts as if always hovered
 - Turn off `:hover` in `":hov"` menu

Submenu Shown on Focus

Only works when element hovered

- Bigger issue: `:hover` is mouse only
- Remove the `:hover`
- Add same idea with `:focus`
- Clicking on the button "focuses" it
 - Stays focused even when we hover elsewhere
 - Loses focus (blurs) if we click elsewhere

Great! What about keyboard navigation?

Submenu Shown on focus-within

- Keyboard (Tab key) almost works
 - Hint: Tab complicated when DevTools open
 - Focuses button, but then...gets lost?
 - Focuses first link, removing button focus
 - Hiding the submenu
- Remove `:focus ~` on submenu
- Add `.menu-option:focus-within .submenu`
 - Not sibling, descendant
 - `:focus-within` - focus on descendants counts
- Working for mouse, touch, keyboard!

Hiding without Display

- `display: none;` hides links on screenreaders
 - They have additional ways to handle links
 - Let's not hide the links this time
- `height: 0;` makes links not visible to sight
 - Still available to screenreaders
- Swap the `display` none/block to `height` 0/initial
 - What?! Still shows w/o background
- Set `.submenu` to `overflow: hidden;`
- Visuals work for mouse, keyboard, touchscreen
 - Just list of links for screenreader

Styling Cleanup

- Buttons don't have to look like buttons!
 - Can even look like links!
- Might want `:hover` on `.menu-option`
 - In addition to `:focus-within`
- Probably want some padding on the submenu
 - And the submenu `s`
 - And perhaps a hover effect