

# **Hamburger Menus are Bad UX**

How to avoid them and why

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# The Ambiguity of Three Lines

Pretend you're Grandma. You are concerned about touching anything that doesn't tell you what it will do. You're worried that you won't be able to get back to where you are, because computer interfaces are confusing. You see three lines stacked in the corner but those don't even register as something you can click on.

Hamburger menus are terrible at both of those things, because the menu is not on the screen. It's not visible. Only the button to display the menu is. And in practice, talking to developers, they found this out themselves.

**That people who use their app don't switch to different sections very frequently when they use this menu.**

And the reason for that is because the people who use their app don't know where else they can go. Right? They don't know because they can't see the options, or maybe they saw it at one point in time, but they have since forgotten. And if you use this control, you have to recognize that the people who use your app may not realize the full potential of your app.

– Mike Stern, Apple, WWDC2014

Studies have indeed shown that in A/B testing, hamburger menus reduce app and website engagement time and usage frequency. (A. Rose, 2016) Users don't even know that the lines are interactive. Putting

app functionality offscreen hides it from users, and not realizing that functionality exists, those users leave.

More alarmingly, in most hamburger menus you'll find unrelated functionality – settings, navigation, light/dark mode, support and debug information, and so on. It truly is the junk drawer of UI elements. If any of these elements were important enough to be included in the UI, they should be included in the visible, named parts of the UI.

## **The Complexity of a Well-Cooked Hamburger**

Let's say you've decided you're in the minority of cases where a hamburger menu makes sense: Everything in the hamburger is related, and there's just no space to leave it onscreen. What do we need to do to make the hamburger as accessible as possible?

### **Name the Menu “Menu”**

A big hurdle for the hamburger menu is communicating to users that it's interactable. Just switching from three lines to the word “Menu” improves interaction by 20-50% (A. Rose, 2016)

### **Don't use a Div**

The best way to use ARIA is not to use ARIA – use semantic elements which match the content you're making. In this case you could characterize the hamburger menu as a button or a link. Either is fine; I see it implemented often as a link but the more accessible method is a button. (AcceDe Web, 2022)

Best practices also include placing the menu inside a `<nav role="navigation">` element.

## Use ARIA where you can't avoid it

Even when you've used all of the correct structural elements, the menu is hidden most of the time, and is initially hidden, so set `aria-hidden="true"` on your `ul` or other container for menu items. This will prevent screen readers from reading out elements which are not on the page.

Consider labeling your nav element with `aria-label="Main menu"` or "Open the menu".

Dynamically update your button with `aria-expanded="true"` when the hamburger menu is open, and `aria-expanded="false"` when it isn't. Dynamically update your `ul` or other containing element for the hamburger menu contents with `aria-hidden="false"` when the hamburger menu is open, and `aria-hidden="true"` when it isn't.

## Associate your menu with your hamburger

If your button isn't immediately followed by the list of links which it creates (such as a `nav > ul > li > a` scenario), use `aria-controls="some_id"` with the id of the list, to let screen readers know that the list "belongs to" the hamburger in some way.

## Ensure Proper Keyboard Interactions

When the menu button is focused, pressing “enter” or “space” should toggle the menu open or closed. All cases should be covered if the toggle is triggered by the **click** event. Ensure that the menu is in a reasonable place in the tab order so that it can be selected from the keyboard.

If you have a slide drawer layout, and a dedicated “back” button in your slide drawer, use `focus()` to focus the back button, or consider dynamically setting the tab order of the original menu button to -1, and the tab order of the back button to 0 (to remove the menu button from the tab order and set the back button to the default/initial tab item).

## Some Vegetarian Alternatives

By now you can see why, in most cases, especially as a beginner, the hamburger menu should generally be avoided. Not in every case, not as a hard rule, but as the end result of most practical UX and IA design. But information is always hierarchial, and screen space is limited. We’ll go through some ways to organize data that avoids some or all of these drawbacks. (L. Abreu 2014)

## Top Tab Bar

Phones can fit 3-4 textual navigation elements up top. While the top of the screen is still a very high-travel location for mobile users, placing links at the top reinforces their importance as primary

navigation elements. When these menu items remain on top during scrolling, the user never has to look far to find them, as they are always in a focused position.

## Bottom Icon Bar

4-5 icons with captions can fit at the bottom of a mobile screen. Doing this prevents users from forgetting they exist. (J. Constine, 2014) These icons are in an easily-accessible location for mobile users, although their positioning at the bottom can convey reduced importance compared to information earlier in the “Z” pattern of typical attention. If more icons are needed, it’s better to add a “three dots” style hamburger menu to the right than to scroll the icons horizontally, but all the same caveats apply to these hamburger menus as the original three-lines style.

## Stacked Links

Stacking links at the top of the page is an extremely straightforward solution that works wonderfully with screen readers, especially when placed within a **nav** element. Placement on the top of the page conveys importance, while the user can quickly swipe them off the top of the screen to read more content. The number of links displayed this way should still be kept to a minimum.

## Final Thoughts

In a beginner / educational setting, I would absolutely recommend a Stacked Links approach. There is a deep rabbit hole of accessibility problems with the hamburger, a gordian knot of requirements that not even experienced web developers often fully cut through. Failing stacked links, things like Cookly-

style navigation hubs or Spotify-style card layouts can offer visually appealing yet usable navigation options for all devices.

With the problems, controversy, complexity, and availability of alternatives, there's no good reason to recommend or require the hamburger.



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