

Thunderbird Study: Search Bar

Scope of Study

This accessibility study was conducted between September 2025 - January 2026.

The purpose of this study is to observe both pros and flaws in Thunderbird's accessibility features for its users, including but not limited to the following when using the Global Search Bar:

- **Navigational Focus**
- **Keyboard Navigation**
- **Screen Reader**
- **Voice Control**
 - ****Voice control analysis is currently *on hold***

Additionally, I included observations I had when opening and responding to emails after using the global search bar as this was my next expected behavior of a user.

A comparison to other a11y-focused platforms (such as Gmail and Outlook) was completed to observe established patterns of accessibility users have come to expect.

It is important to note that users are as diverse as the systems they use to navigate computers; many use a combination of these accessibility features to use Thunderbird, so an inability to operate something **without** the use of a mouse is a critical flaw.

Flaws / Areas of Improvement

Navigational Focus

Summary:

During testing on macOS with keyboard navigation enabled, I observed difficulty selecting individual emails, and there was no visible highlight to indicate the current focus point, making it unclear where the focus was located. Additionally, after using the Global Search bar, the interface immediately placed me into Quick Search, which was disorienting and slightly disruptive to workflow. While these behaviors were specific to this test instance and may not be consistent across all users or systems, they highlight potential accessibility challenges for keyboard-only navigation.

Navigation Focus Conflict (*macOS*)

Focus & Keyboard Navigation Conflict

- Enabling macOS “keyboard navigation” periodically conflicts with result selection, preventing individual email selection
- Behavior appears consistent with a known macOS focus-handling issue observed across applications
 - **User Impact:** Keyboard-only users cannot efficiently interact with search results, reducing accessibility and workflow efficiency. Behavior suggests systemic focus management challenges rather than application-specific failure.
 - **Environment:** macOS Tahoe 26.2 | Thunderbird 146.0.1 | MacBook Air built-in keyboard
 - **Priority:** **HIGH**

Interactive elements do not consistently display a highlighted focus state, making active selection unclear

- Focus visibility issues reduce navigational orientation and user confidence in keyboard workflows
 - **User Impact:** Users navigating via keyboard may struggle to identify the active element, increasing cognitive load and reducing usability.
 - **Environment:** macOS Tahoe 26.2 | Thunderbird 146.0.1 | MacBook Air built-in keyboard
 - **Priority:** **HIGH**

After global search interaction, focus shifts immediately to quick search

- Unexpected focus movement introduces additional navigation steps and interrupts workflow
 - **User Impact:** Flow disruption increases task completion time and reduces interaction efficiency.
 - **Environment:** macOS Tahoe 26.2 | Thunderbird 146.0.1 | MacBook Air built-in keyboard
 - **Priority:** **HIGH**

Study Notes & Observations

Navigational Focus

1a Navigational flow from initial start up using keyboard navigation

***consistent recurrences of this throughout keyboard navigation*

The screenshot shows the Thunderbird email client interface with several numbered callouts (1-16) indicating key navigation elements:

- 1**: The main window title bar.
- 2**: The search bar at the top.
- 3**: The search icon on the right side of the search bar.
- 4**: The hamburger menu icon in the top right corner.
- 5**: The active email account in the left sidebar.
- 6**: The mail icon in the left sidebar.
- 7**: The 'New Messages' notification badge.
- 8**: The 'Inbox' folder selected in the left sidebar.
- 9**: The 'Inbox' folder header in the main pane.
- 10**: The 'Quick Filter' button in the main pane.
- 11**: The main email list content area.
- 12**: A specific email entry in the list.
- 13**: The 'Participate' button in the right-hand promotional banner.
- 14**: The 'Donate' button in the right-hand promotional banner.
- 15**: The 'Get Help' button in the right-hand promotional banner.
- 16**: A link to 'Thunderbird Mobile for Android' at the bottom of the right-hand banner.

The interface includes a left sidebar with folders like 'Inbox', 'Drafts', 'Sent', 'All Mail', 'Junk', 'Trash', 'Important', 'Starred', 'Taxes 2025', 'UXcel', 'Local Folders', 'Trash', and 'Outbox'. The main pane displays a list of emails with details such as sender, subject, and time. The right-hand side features a promotional banner for Thunderbird with text: 'Thunderbird is a gift from thousands of people like you. We hope you'll enjoy the productivity, privacy, and freedom they make possible and we invite you to become part of that gift to others.' Below this are buttons for 'Participate', 'Donate', and 'Get Help', and a section titled 'Free and Open Source' with the text 'Thunderbird is now yours forever.' and 'Thunderbird is developed openly and distributed freely. Our software license protects your right to use, modify, and share Thunderbird. Our mission is to protect your privacy and freedom.' Another section titled 'Powered by Community' states 'You can become part of our story.' and 'Anyone can contribute to Thunderbird. By donating, translating, answering questions, suggesting features, reporting bugs, and more, you make Thunderbird better for yourself and the world.'

1b Navigational flow after searching for subject

The screenshot displays an email client interface with a search bar at the top containing the text "savory". The search results are listed in a central pane, showing several promotional emails from "Savory Spice" to "Kaci McAfee". The results are numbered 1 through 9, with some numbers highlighted in red. The interface includes a left sidebar with filters and a right sidebar with a search bar. The search bar in the right sidebar is highlighted with a red box and labeled "2- Immediately goes to second nav bar". The search results are labeled "Results for: savory" and "10 of 17" items. The first result is "20% OFF Everything Starts Now!" with a red "9" next to it. The second result is "Fall For Flavor Sale: 20% OFF Your Entire Purchase" with a red "8" next to it. The third result is "Ends Tomorrow: 20% OFF Sitewide" with a red "7" next to it. The fourth result is "Starts Now: Save Up to 20% During the Big Fall Baking Sale" with a red "6" next to it. The fifth result is "Next Saturday & Sunday in Denver >>" with a red "5" next to it. The interface also shows a "Filters" section on the left with "People" and "Dash Events & Rio Grande Fes..." listed. The search bar in the top right is labeled "3 - Unkown when tabbing, no hilighted state".

1 Search... [K]

Inbox - mcafeekaci@gmail.com Settings x savory x

2- Immediately goes to second nav bar

Filters

From Me (0) To Me (17)

People

4 Dash Events & Rio Grande Fes... 1

5 Savory Spice 16

Results for: savory

10 of 17 Toggle timeline 7

6 Show results as list

8 Sort by Relevance

3 - Unkown when tabbing, no hilighted state

20% OFF Everything Starts Now! * 9 Savory Spice to:Kaci McAfee October 13

[Free Shipping on Orders Over \$35] (https://www.savoryspiceshop.com/)

[Savory Spice] (https://www.savoryspiceshop.com/)

[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...

Fall For Flavor Sale: 20% OFF Your Entire Purchase Savory Spice to:Kaci McAfee October 14

[Free Shipping on Orders Over \$35] (https://www.savoryspiceshop.com/)

[Savory Spice] (https://www.savoryspiceshop.com/)

[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...

Ends Tomorrow: 20% OFF Sitewide Savory Spice to:Kaci McAfee October 18

[Free Shipping on Orders Over \$35] (https://www.savoryspiceshop.com/)

[Savory Spice] (https://www.savoryspiceshop.com/)

[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...

Starts Now: Save Up to 20% During the Big Fall Baking Sale Savory Spice to:Kaci McAfee October 24

[Free Shipping on Orders Over \$49] (https://www.savoryspiceshop.com/)

[Savory Spice] (https://www.savoryspiceshop.com/)

[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...

Next Saturday & Sunday in Denver >> Dash Events & Rio Grande Festivals to:Kaci McAfee July 18

Food Truck Favorites

mcafeekaci@gmail.com: Opening folder [Gmail]/Drafts...

Navigational Focus: Pros

- Highlighted states are prominent in both light and dark mode
 - **subjective observation, have not used tools to check compliance ratios;
 - **Nice to have:** would be nice to have an option to make highlighted states more visible, such as making them “bolder” or the option to change the highlighted states to different colors (currently light mode uses blue and dark mode uses orange, there are people who are color blind to both of these colors- highlighted states would just appear absent of color or dull to them)
 - **Last updated: 1/5/26**
 - MacOS Tahoe 26.2 / Thunderbird App 146.0.1
 - Mac Air Built-In Keyboard

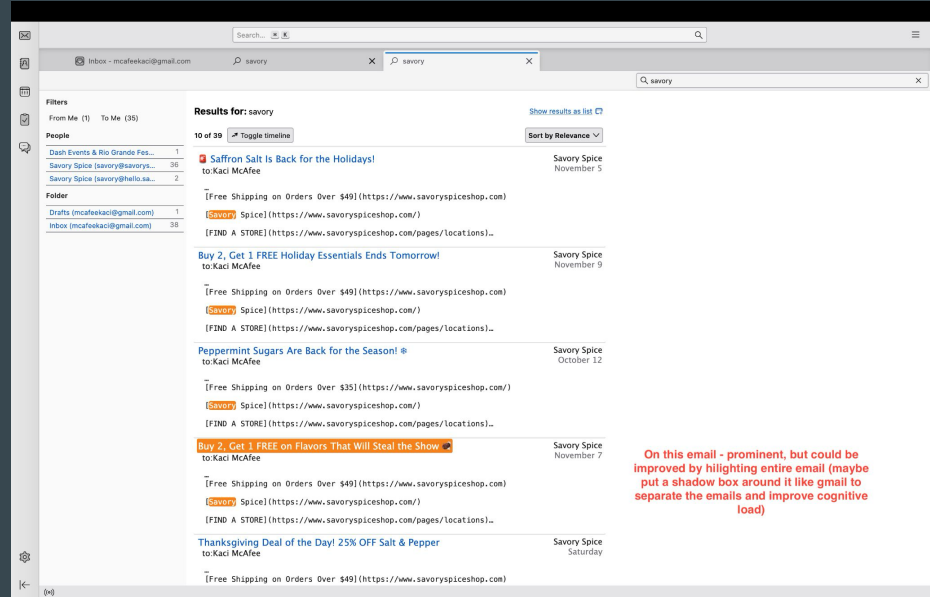
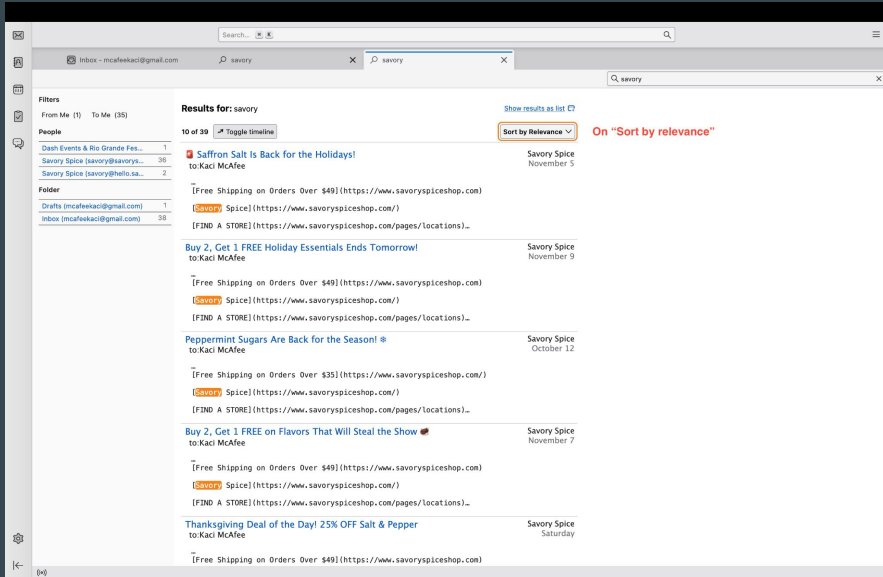
Comparing Thunderbird to Gmail

Navigational Focus

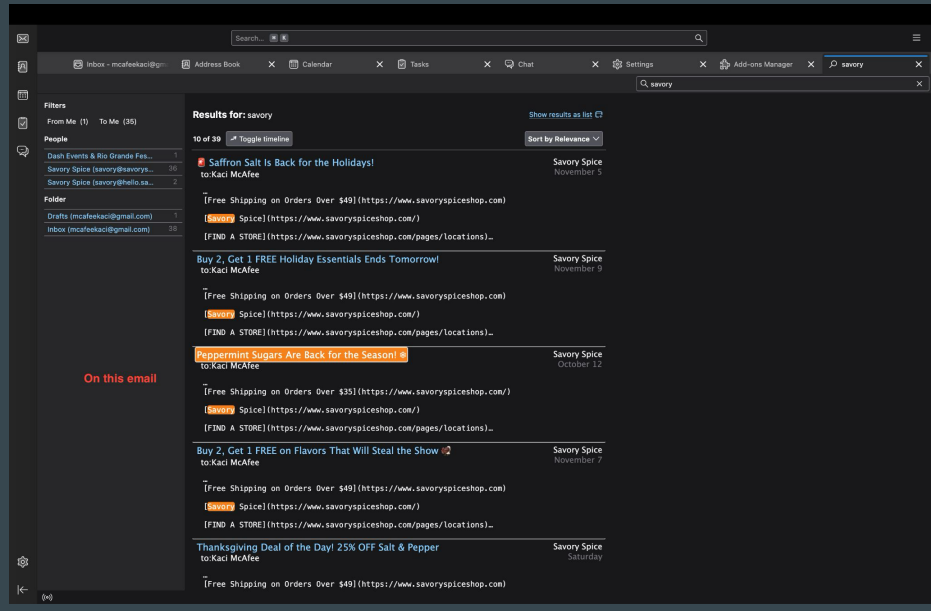
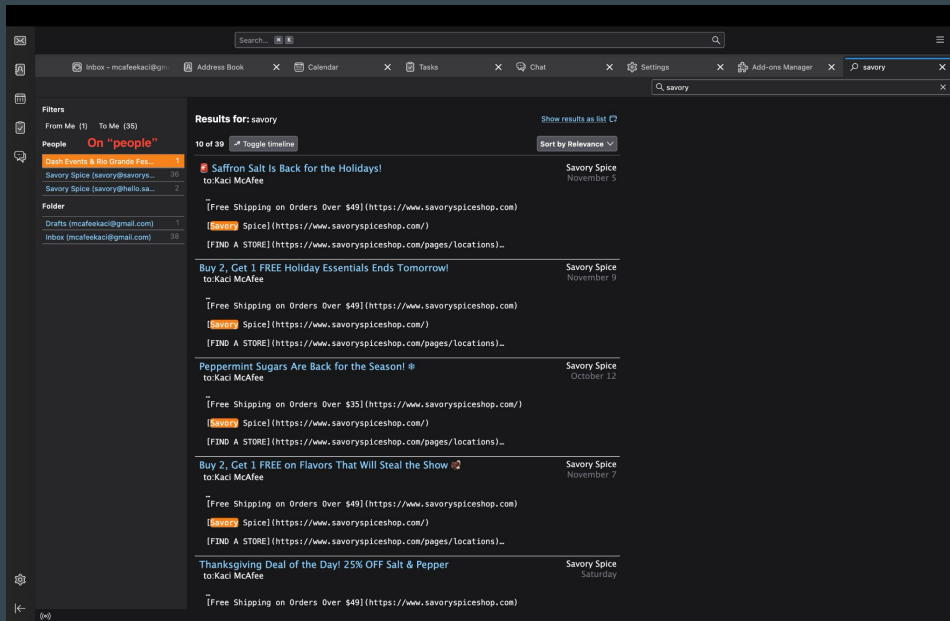
(Gmail)



Highlighted states in Thunderbird light theme



7d Highlighted states in Thunderbird dark theme



8a Thunderbird light/dark mode

The screenshot shows the Thunderbird Settings window with the 'Appearance' section selected. The 'Message reader style' section is expanded, showing the following options:

- Enable **dark** message mode
Force the message body to follow **dark** themes
- Show **dark** message mode toggle
Show a toggle in the message header to quickly disable the **dark** message mode

The 'Theme' dropdown is set to 'Thunderbird' with a 'dark' label next to it. Below this, a 'Preview' section shows three messages:

- 10:42 Florian: Hi! 😊
- 10:42 What's up?
- 10:43 Patrick: I'm trying Thunderbird! 😊

At the bottom, the 'Variant' dropdown is set to 'Light', with a 'dark' label next to it. A red annotation points to this label, stating: "shows 'dark' even though hidden in toggle".

Other visible settings include 'General' (Full name and email address selected), 'Composition', 'Privacy & Security', 'Chat', 'Export for Mobile', 'Account Settings', and 'Add-ons and Themes'. The status bar at the bottom indicates 'mcafeekaci@gmail.com is up to date'.

8b Thunderbird light/dark mode

The screenshot shows the Thunderbird Settings window with the 'Appearance' section selected. The 'Message reader style' section is expanded, showing the following options:

- Enable **dark** message mode
- Force the message body to follow **dark** themes
- Show **dark** message mode toggle
- Show a toggle in the message header to quickly disable the **dark** message mode

The 'Theme' dropdown is set to 'Thunderbird' with a 'dark' variant selected. A preview window shows an email message with a dark background and light text:

10:42 Florian
Hi! 😊

10:42 What's up?

10:43 Patrick
I'm trying Thunderbird! 😊

The 'Variant' dropdown is set to 'Dark'. A red text annotation on the right side of the preview window reads: "provides example of what light/dark theme would look like".

Sc Thunderbird light/dark mode

The screenshot shows the Thunderbird Settings window for the account 'mcafeekaci@gmail.com'. The 'Appearance' section is active, displaying various settings. A search bar at the top right of the settings pane contains the text 'dark'. The 'Message reader style' section is expanded, showing the following options:

- Preferred address display format:
 - Full name and email address
 - Email only
 - Name only
- Show only display name for people in my address book
- Determine how Thunderbird handles return receipts: [Return Receipts...](#)
- Message reader style**
 - Enable **dark** message mode
 - Force the message body to follow **dark** themes
 - Show **dark** message mode toggle
 - Show a toggle in the message header to quickly disable the **dark** message mode

The 'Theme' dropdown is set to 'Dark'. A preview of an email message is shown below, demonstrating the dark theme. The email header shows 'Florian' and the body contains 'Hi!', 'What's up?', and 'Thunderbird!'. A color selection menu is open over the preview, with 'Blue' selected. The 'Variant' dropdown is also set to 'Blue'. A red annotation 'Customizable color- improves a11y' is placed below the variant dropdown.

Account Settings

Add-ons and Themes

Navigational Focus Observations

(compared to GMAIL)

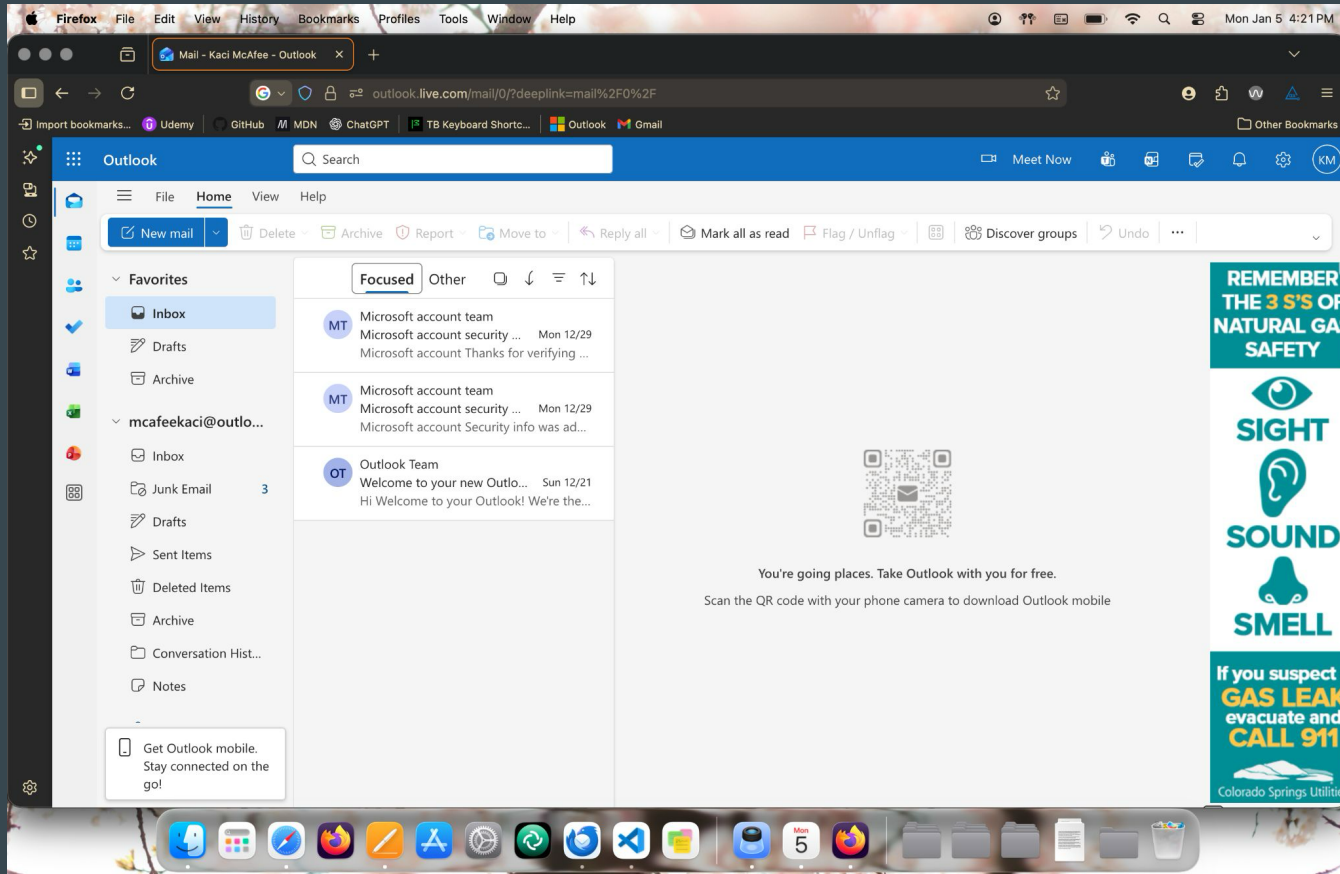
- Thunderbird's highlighted states of interactivity (both in light and dark theme) are much more visible than Gmail (currently have a picture theme on Gmail, did not check their basic themes- doesn't really matter since TB seems good- this observation is subjective, I did not run the TB colors through AXE to see if they are WCAG compliant yet) (see **images 7a-7c**)
 - **Last updated: 11/19/25**
 - MacOS Tahoe 26.0 / Thunderbird App 143.0.1 || Firefox 145.0.2
 - Mac Air Built-in Keyboard
- Thunderbird does an awesome job of implementing light/dark mode- provides examples of what it would look like before applying changes and includes options to improve visibility by customizing colors (see **images 8a-8d**)
 - **Last updated: 11/19/25**
 - MacOS Tahoe 26.0 / Thunderbird App 143.0.1 || Firefox 145.0.2
 - Mac Air Built-in Keyboard

Comparing Thunderbird to Outlook

Navigational Focus

(Outlook)

11a Outlook highlighted states of interactivity (on “focused”)



11b Outlook Global Search- highlights keyword

The screenshot displays the Outlook web interface in a browser window. The browser's address bar shows the URL `outlook.live.com/mail/0/fd/AQqkADAwATM3ZmYBLWE4YzQlNDU3YyOwMAITMDAKABAahJHWuGth2EiAG0AgI`. The browser's address bar also shows a notification: "Add 'outlook.live.com' as an application for mailto links? Add application".

The Outlook interface features a navigation pane on the left with sections for "Favorites" (Inbox, Drafts, Archive) and "mcafeekaci@outlo..." (Conversation Actio..., Inbox, Junk Email, Drafts, Sent Items, Deleted Items, Archive, Conversation Hist..., Notes). The main content area is titled "outlook" and shows a search result for "Outlook Team". The search result is highlighted in blue and includes the text "Welcome to your new Outlook.com" and "Hi Welcome to your Outlook.com".

The email content area displays a welcome message from "OutlookTeam <no-reply@microsoft.com>" to "You" on "Sun 12/21/2025 5:14 PM". The message body includes the Microsoft logo, the text "Hi", and a paragraph: "Welcome to your Outlook! We're the email service designed to help you conquer your day. Connect, organize, and get things done for free across your devices." Below this is a promotional banner for the free Outlook mobile app, which includes a QR code and the text "Get the free Outlook mobile app. The Outlook apps for iOS and Android are free. They make using your various email accounts and calendars simple and consistent!".

On the right side of the interface, there is a vertical advertisement for "WICKED: PART TWO" featuring a landscape image and the text "A little magic. A major upgrade." and "xfinity mobile".

11c Thunderbird Global Search- does NOT highlight keyword

The screenshot shows the Thunderbird Global Search interface. At the top, there is a search bar with the text "Search..." and a magnifying glass icon. Below it, the browser tabs are visible, including "Sent Mail - mcafeekaci@gmail.com", "outlook", and "spice". The search results are displayed in a list format. On the left side, there is a "Filters" section with a "People" sub-section. The "People" section lists various email addresses and their counts: Amazon.com (1), Etsy (1), Fable (2), Poshmark Info (2), Poshmark Shopping (4), Savory Spice (savory@savorys... (84), Savory Spice (savory@hello.sa... (2), and Verve Coffee Roasters (4). Below the list is a "List all 11" button. The main search results are titled "Results for: spice" and include a "Show results as list" link and a "Sort by Relevance" dropdown menu. The results are sorted by relevance and show 10 of 103 items. The first three results are from "Savory Spice" and are dated 10/31/25, 11/7/25, and 12/13/25. Each result has a subject line, a recipient name "to:Kaci McAfee", and a preview of the email content. The subject lines are "The Next Era of Savory Spice Has Arrived", "Buy 2, Get 1 FREE on Flavors That Will Steal the Show", and "10th Day: Buy One, Gift One on Our Founders' Favorite Flavors". The fourth result is "Starts Now: Save Up to 20% During the Big Fall Baking Sale" dated 10/24/25. The preview text for each result includes "[Free Shipping on Orders Over \$49] (https://www.savoryspiceshop.com)", "[Savory Spice] (https://www.savoryspiceshop.com/)", and "[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...".

Search... 🔍

Sent Mail - mcafeekaci@gmail.com outlook spice

Search... 🔍

Filters

From Me (0) To Me (91)

People

Amazon.com	1
Etsy	1
Fable	2
Poshmark Info	2
Poshmark Shopping	4
Savory Spice (savory@savorys...	84
Savory Spice (savory@hello.sa...	2
Verve Coffee Roasters	4

List all 11

Results for: spice [Show results as list](#)

10 of 103 [Toggle timeline](#) [Sort by Relevance](#)

The Next Era of Savory Spice Has Arrived Savory Spice
to:Kaci McAfee 10/31/25

[Free Shipping on Orders Over \$49] (https://www.savoryspiceshop.com)
[Savory Spice] (https://www.savoryspiceshop.com/)
[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...

Buy 2, Get 1 FREE on Flavors That Will Steal the Show Savory Spice
to:Kaci McAfee 11/7/25

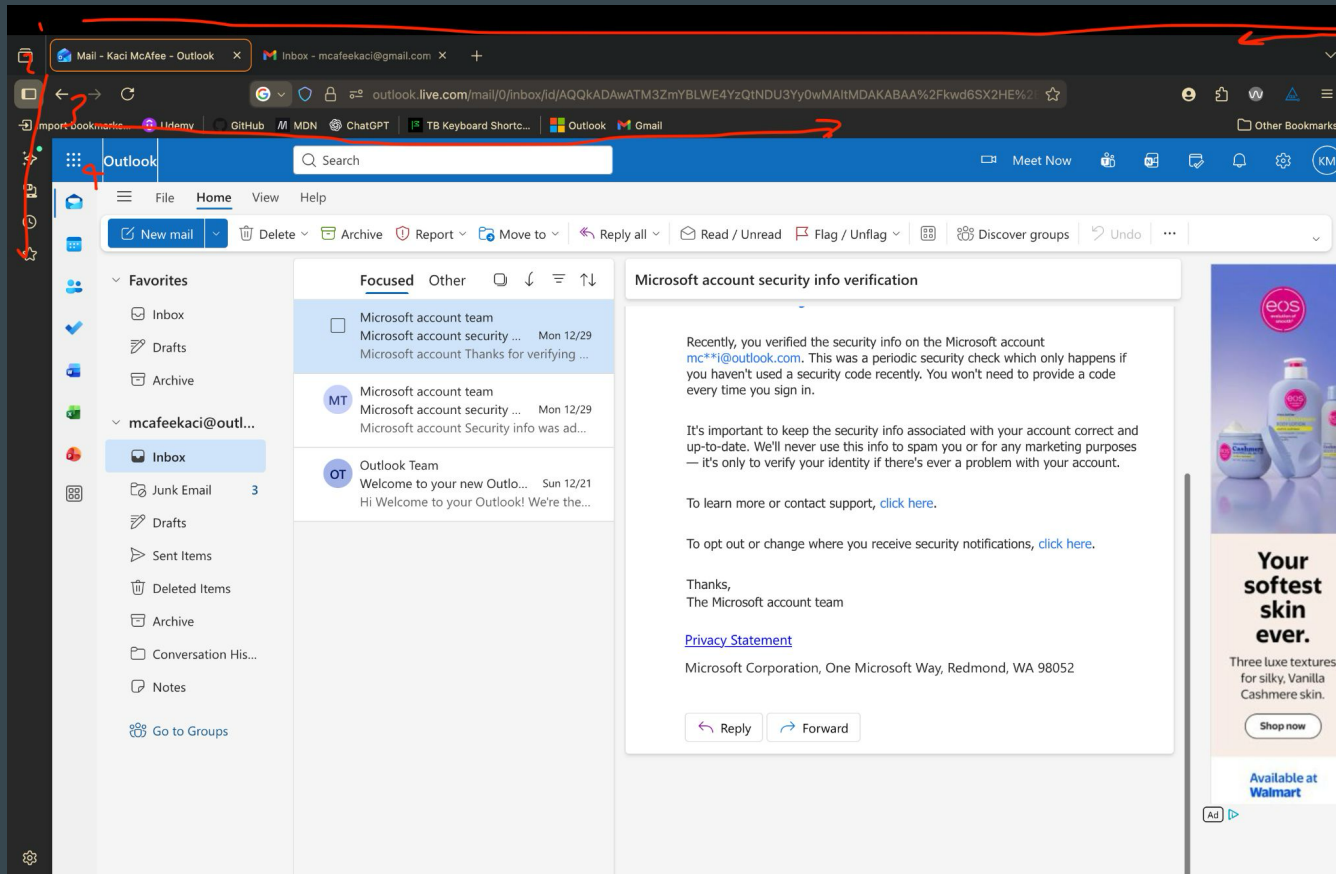
[Free Shipping on Orders Over \$49] (https://www.savoryspiceshop.com)
[Savory Spice] (https://www.savoryspiceshop.com/)
[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...

10th Day: Buy One, Gift One on Our Founders' Favorite Flavors Savory Spice
to:Kaci McAfee 12/13/25

[Free Shipping on Orders Over \$49] (https://www.savoryspiceshop.com)
[Savory Spice] (https://www.savoryspiceshop.com/)
[FIND A STORE] (https://www.savoryspiceshop.com/pages/locations)...

Starts Now: Save Up to 20% During the Big Fall Baking Sale Savory Spice
to:Kaci McAfee 10/24/25

11d Navigational Flow Outlook requires excessive tabbing to access email content



Navigational Focus Observations

(compared to OUTLOOK)

- Similar to Gmail, I had difficulty seeing highlighted states of interactivity; additionally, they were inconsistent- some had a grey shadow with black border, others had white border that blended with rest of UI
 - **Last updated: 1/5/26**
 - MacOS Tahoe 26.2 / Thunderbird App 146.0.1 || Safari 26.2
 - Mac Air Built-In Keyboard
- Outlook does a better job of highlighting search results (see **images 11b for Outlook and 11c for TB**)
 - **Last updated: 1/5/26**
 - MacOS Tahoe 26.2 / Thunderbird App 146.0.1 || Safari 26.2
 - Mac Air Built-In Keyboard