

The Slack App: An Introduction, the Sign on Process, and Accessibility

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Introduction: Slack. Why didn't I Think of That?

Slack is an app originally designed to compete with Internet Relay Chat, which is used popularly as a messaging platform within businesses, organizations and other more professional or academically focused groups. The key selling point of *Slack* is that it acts as a log of all written information from within the company's discourse that can be easily searched and organized into subgroups. Their current client list includes Lyft, NASA's Jet Propulsion Laboratory at the California Institute of Technology and Design for America.¹

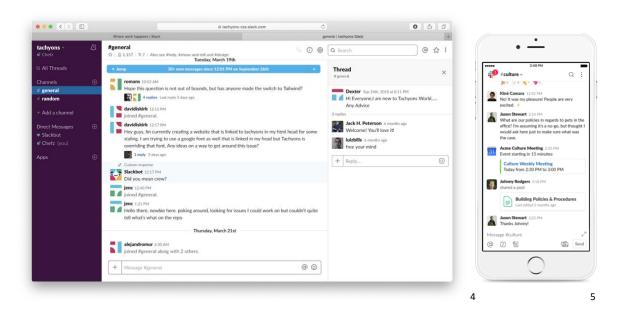
Along with group messaging functionalities, *Slack* is a platform for private, direct messages, and cloud storage. Beyond workplace communication, there are also options available for managerial responsibilities with channel organization and administration. Every user is offered a set of workspace customization options including notification control, color scheme and a plethora of accessibility options that will be covered in a later segment of this report.

Daniel Stewart Butterfield, cofounder of *Flickr*, and his team originally developed Slack for *TinySpeck* Games, founded by Flicker cofounder Daniel Stewart Butterfield. Butterfield and his team needed a way to communicate during the continuous development of their, now defunct massively multiplayer online game named "Glitch." Even though "Glitch" was relatively unsuccessful, *Slack* was promising enough to be released to the public in 2014 under the tagline, "Imagine all your team communication in one place, instantly searchable, available wherever you go… That's *Slack*." The success of *Slack* morphed *TinySpeck* Games into what is now called Slack Technologies.³

¹ Slack, "Customer Stories," Slack, accessed March 29, 2019.

² Thomas Knowlton, "A Brief History of Slack," Techvibes, accessed March 29, 2019.

³ Laura Blackwell, "Requiem for a game: Quirky MMO Glitch to close," PCWorld, accessed March 29, 2019.



Slack is available on many different platforms. The currently available offerings are MacOS, PC, Linux, iOS, and Android, with the support of all significant web browsers, such as Edge, Chrome, Firefox, and Safari. Across all devices and screens, Slack maintains a consistent appearance. The left side of the screen is reserved for a menu bar that houses your status, joined channels and a list of recently directly messaged contacts. The middle, most sizable portion, and the one that contains the most content is the Channel feed. On desktops, Slack also creates an extended thread view on the right that allows for easy, quick conversation and maximum work efficiency.

Because it is an application that is accessible to both nonpaying and paying users, the majority of independent *Slack* members likely do not have to pay as they have access to 10,000 messages saved in history. Premium members are charged 8 US dollars a month and gain access to unlimited messages, group calls, and channel sharing. A final commercial tier is also available for 15 dollars a monthly. This allows users to access to single use sign on functionality and corporate use service agreements.⁶

This generous pricing structure makes it difficult for *Slack's* competitors to encroach on their user base. Most other social medias, like *Facebook* and *Twitter*, are targeted toward casual and personal use that are too distracting for *Slack's* user base. On the other hand, apps like LinkedIn provide a professional presence but lack the robust messaging and searching platform of *Slack*

⁴ Screenshot. Author's own.

⁵ Slack, *iPhone Messages – English*, 2019, JPEG, BrandFolder.com, accessed March 29, 2019.

⁶ Slack, "Pricing," Slack, accessed March 29, 2019.

User Testing: The Up's and Down's of the Slack Sign-on

The problem space occupied by my Audience Analysis is with the subjects who utilize multiple Slack accounts for multiple organizations. Currently, Slack makes it confusing and sometimes demanding for the user to operate among two or more spaces because of multi-step login processes and separated feeds, windows and tabs. Of course, these measures may be in place for the sake of the user, so that they may more easily avoid messaging groups under wrong accounts. The Slack login process should be made clearer on how the multi-account user can operate.

I recruited my friend, who is okay being identified as Mika, to help me with my user testing. Mika is somewhat of an avid Slack user, but he is still new to the product. Before the activity, he was a part of two different slack groups but joined his first only two months ago. Even though he has been active on the platform, he never realized that it was accessible through a MacOS desktop application.

I devised a test that would cover what I thought was problematic about Slack, its sign on process. First I would have Mika join my channel on his account through his browser of choice and send me a message. Then, I threw a curveball and asked him to download the official *Slack* app, add all his workspaces and then message me. This is where things got messy.

The first set of instructions were very straightforward. Mika noted that this would be easy for him because he had done it all before. It was. After receiving the email with my invitation to a "WRA320Test" workspace, clicking the email link brought him directly to a "join" screen that asked for his full name and a password. Proceeding on from there, *Slack* opened a tutorial feed that was promptly skipped as Mika had "done this before." From there, he was familiar with the in-app navigation and quickly found my username on the sidebar under the "Direct Messages" header, clicked through, and sent me a message: "Hey whats up [sic]."

Up to this point, the process had only taken around one minute and fifteen seconds. Not a bad time for a prior *Slack* user. So, I decided to have him ditch the browser and add the account on the MacOS application. Here, he responded, "I worked on slack two different channels and did not know they had an app." How *Slack* fails to market their product capabilities is not what I am focused on with this report, so I saw this strictly as an opportunity to play around with the ease of use for signing on to a new platform.

Upon gracing him with the news that there was a MacOS application available, Mika went around the browser window looking for a quick download link. He found a button labeled

"Apps" and clicked it, but was taken to a screen filled with third party application links like Google Docs and Google Slides, with no option that he was looking for. Next, he poked into the pulldown area by his username. It did not show up originally, but scrolling revealed an "Open the *Slack App*" button that he clicked. The download process began and a few minutes later he was treated to generic install window.

When completed with the installation, Mika was surprised to find that *Slack* was not where he normally found recent downloads and had to search for the Application folder in MacOS's Finder to finally open the app. Here, Mika wanted to clarify that this was something that he had experienced before and not necessarily the fault of *Slack Technologies*.

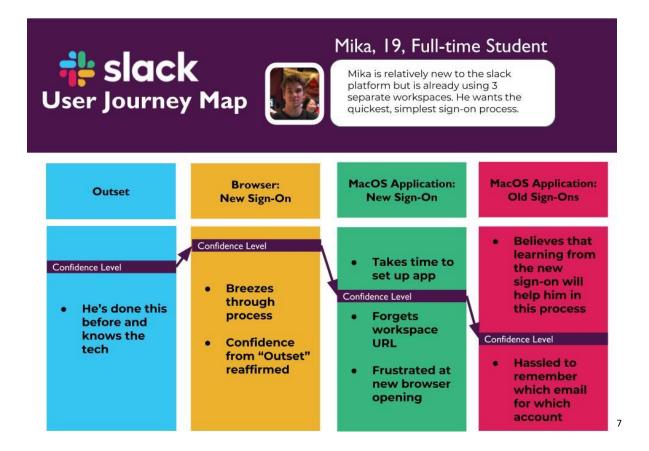
At this point, it seemed like it should be back to square one and Mika was feeling confident about logging in because it should be repetitive of doing it on the browser. This turned to confusion quickly as Slack pushed Mika out into a browser to do a new sign on.

By the time all of this happened and he was prompted to type in the workspace name he had forgotten it, and had to go back to check that the title was "WRA320 Test." He did not realize, however, that at this point he was being asked for the workspace in the form of its web URL. It took another half a minute or so to decipher that problem and then he was treated to a login where he used the username and password he had used not long ago to get back into the familiar feed view of *Slack* and send a message. The process of doing the same thing from new browser user to new application user took nearly 6 times as long, according to the screen record of his performance.

The final step I prompted Mika with was to add his other groups to the MacOS application and it was home to one last curveball. Now, instead of just needing to remember what the workspace identifier was, he also had to remember what email he had used during the creation of each account. Because of Mika's student status, he managed to guess correctly each time, but he noted that, "it might take a couple guesses" and had the idea that one central username for each of his *Slack* groups would have streamlined the process. He mentioned that an online chat service, *Discord*, that he uses resembles *Slack* and uses a single user, multiple workspace method.

Other than that, the final step was slightly easier as Mika learned how to game the system in a few ways, like copy and pasting the URL from browser to browser when prompted instead of trying to spell them out independently. He feels like he is all set to utilize the app and it should not be such a hassle the next time.

User Analysis: What We Can Learn from Mika



I think that Mika's process was typical of an average *Slack* student user. To his age and cultural demographic, being a 19-year-old, American male, Mika showed what would be expected out of someone who grew up on using applications like these that require logging in and account management systems. I found that Mika felt intuitive in knowing wear to click on *Slack's* main interface. After the test was done he mentioned that he could barrel through what needed to be done quickly, and his main sources of confusion were on why the application was organized the way that it is and not like apps he had encountered previously.

Through this confusion, Mika never seemed to become frustrated in the process, and I believe that can be attributed to the step by step nature of the sign in. It took him from window to window, with generally only one hardship per window, such as mistyping the URL or

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⁷ Zach Albright, *Profile Picture, Mika & User Journey Map.*

remembering the correct email. This means there was never an opportunity to feel overwhelmed with the number of requirements needing to be satisfied at any given time.

Mika was never visibly frustrated and he got through the process easily, but I believe the user and workspace divide took a toll on what I call his "confidence level" throughout the process. Mika never truly lost confidence in what he was doing, but along the way I asked him to gauge how well he thought the process was going and graphed his responses onto the visual above. As is represented, his "confidence level" was at the lowest point at the end of the process.

Although Mika had no major problems logging on through everything I threw at him, I do believe that there is a problem here if the average user follows a similar process. I can only believe the most important point for maintaining a user's good faith is to leave on a high note and in this case, *Slack* fails to deliver. Fortunately, I do think their usability and accessibility design philosophy can help fix the problem.

Usability & Accessibility: What Slack Does for those Who Log On

Slack Technologies may be a relatively young company but they are incredibly forward thinking when it comes to product design, and that translates to an openness on the web that allows for a deeper look at what they are trying to accomplish with the usability of their communication tool. One way that they have been open is through an engineering blog hosted on Medium called Slack Engineering. In a post that is titled "How to Fail at accessibility," Trish Ang, a Front-End Engineer, explains that Slack's mentality is that if any user cannot utilize the application than that is "broken functionality," and "unacceptable." This means that Accessibility issues for a single user become and are treated as usability issues for everyone. In a Slack HQ blog post, Slack's Accessibility Product Manager echoes this sentiment, and adds that accessibility is always a work in progress, and that failing repeatedly is how progress occurs for individual designers and the entire team at Slack.9

Ang, who self-proclaims as "not an accessibility expert", chunks the process of making progress on accessibility into three categories. The first step is testing, which involves figuring out what is not accessible on the site. After that is the build phase, which involves coding out the issues.

⁸ Trish Ang, "How to Fail at Accessibility," (Several People Are Coding (blog)), Medium/Slack, accessed March 29, 2019.

⁹ Slack Team, "Designing Slack for everyone," Slack HQ (blog), Slack, accessed March 29, 2019.

Finally, *Slack* engineers look back on how they can improve the process of their coding the next time around, to be more accessible to everyone.¹⁰

In recent years, Slack has made headway on a few specific features like, text readers, visual contrast, animation viewing preferences, and keyboard navigation. ¹¹ This may seem like features that only benefit fringe Slack users, but Ang echoes that this benefits all users by either improving usability in making important elements easier to find through contrast, animations less distracting while reading keyboard navigation cutting down time of use in app.

In fact, I believe that the Slack team's design philosophy towards accessibility benefited Mika's sign on process. Mika doesn't identify as disabled physically or visually, but he still made use of increased contrast the sidebar to speedily find the buttons he was after.

Conclusion: Wrapping It All Up

Slack has some 12 million active users daily.¹² That is an impressive number and one that is difficult to support, yet alone to grow. Mika's lowest "confidence level" in *Slack* came at the end of the process, and *Slack* should avoid that outcome for all users if possible.

Mika's solution of one unified user with separate workspaces could work, but it sounds difficult or impossible to implement with so many users. I think the most reasonable next step is to consider a verification code system that can link all your workspaces and logins from one platform to another. Smart television streaming apps often use a similar system because of the difficulty typing on their remotes. For example, Hulu allows users to display a 5-digit code on their TV and input it into their phones to share a login. *Slack* can compile all this for a user and have them input it with just their passwords to cut down a lot of the steps that wear down on users like Mika.

Slack is a beautifully designed application, but just like their engineering department admits, it is always a work in progress when It comes to accessibility. The history of *Slack*, my user test, and their design philosophy proves this.

¹⁰ Ang, "How to Fail."

¹¹ Slack Team, "Designing Slack for everyone."

¹² Ang, "How to Fail."

Bibliography

- Butterfield, Stewart. Twitter Post. September 27, 2016, 4:04 PM. https://twitter.com/stewart/status/780906639301812225
- Laura Blackwell, "Requiem for a game: Quirky MMO Glitch to close," PCWorld, November 15, 2012, https://www.pcworld.com/article/2014252/requiem-for-a-game-quirky-mmo-glitch-to-close.html.
- Sarah Gibbons, "UX Mapping Methods Compared: A Cheat Sheet," Nielson Norman Group.

 November 5, 2017. https://www.nngroup.com/articles/ux-mapping-cheat-sheet/
- Slack, *iPhone Messages English*, 2019, JPEG, BrandFolder.com, https://brandfolder.com/slack/product-screenshots.
- Slack Team, "Designing Slack for everyone," Slack HQ (blog), Slack, May 18, 2017, https://slackhq.com/designing-slack-for-everyone.
- Slack Team, "Customer Stories," Slack.com, March 29, 2019.

https://slack.com/customer-stories.

Slack Team, "Pricing," Slack.com, March 29, 2019. https://slack.com/pricing.

Slack Team, "Media Kit," Slack.com, March 29, 2019. https://slack.com/media-kit.

Thomas Knowlton, "A Brief History of Slack," Techvibes. September 26, 2015.

https://techvibes.com/2015/09/25/a-brief-history-of-slack-2015-09-25.

Trish Ang, "How to Fail at Accessibility," Several People Are Coding (blog), Medium/Slack,

February 22, 2019, https://slack.engineering/how-to-fail-at-accessibility-99bdf3504f19.

slack Technical Report Zach Albright

About

Searchable Log of A **Conversations** and Knowledge

About

Slack is an online messaging and data sharing application used popularly for internal professional or academic purposes.

For example: a classroom, club, or office.



Details

Uses

Slack is primarily used by academic or professional organizations in which one large group of users breaks off into small work groups.

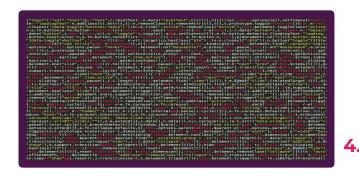






History

Written in a C++ based language called "Electron".



Created by cofounder of flickr, Daniel Stewart Butterfield and his gaming company TinySpeck that later morphed into Slack Technologies.

Daniel Stewart Butterfield and his team originally coded Slack during the development of their Multiplayer Online Game "Glitch."

While the game was relatively unsuccessful, the team found Slack could be adopted by other groups.



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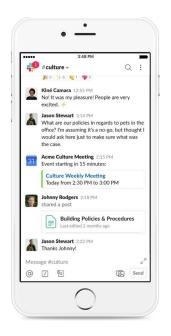
Launch



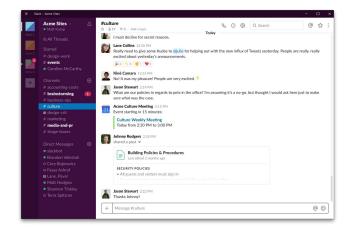
2014

""Imagine all your team communication in one place, instantly searchable, available wherever you go... That's Slack.""

Releases





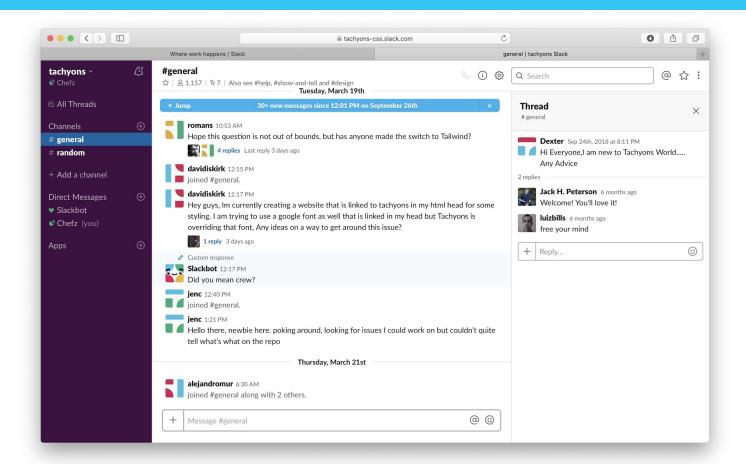


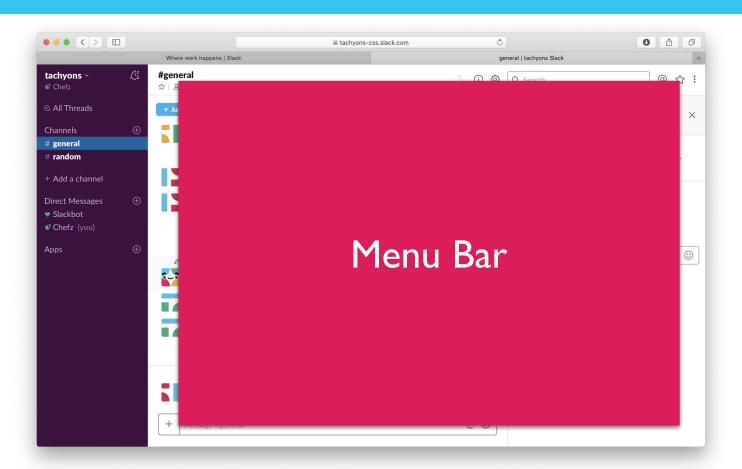
iOS

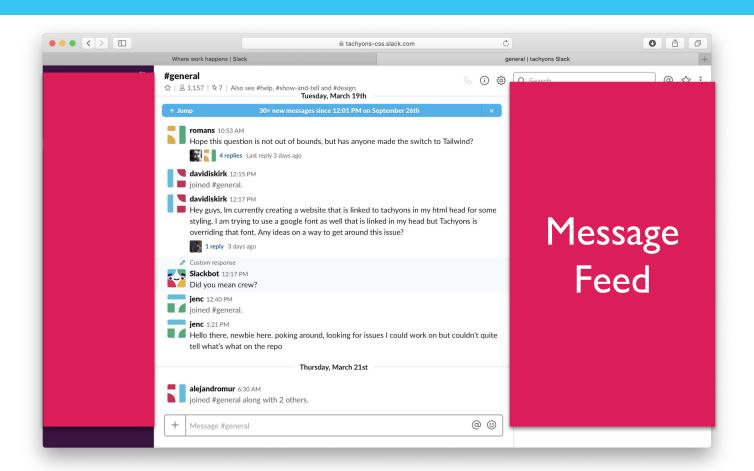
Android

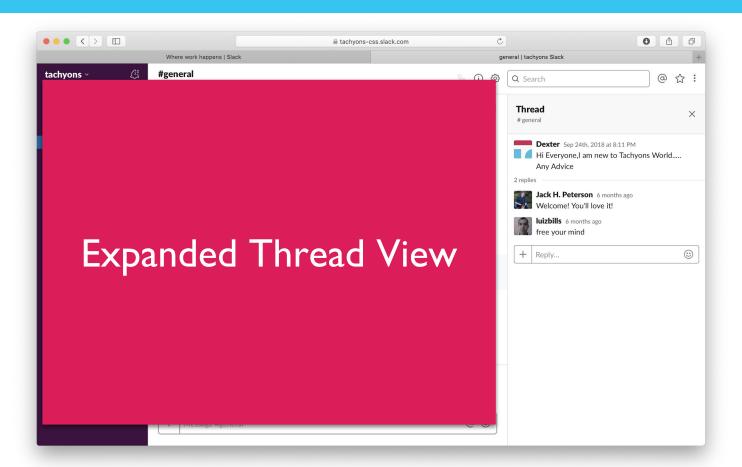
Windows Linux MacOS

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Payment Plans

Free

- 10,000 Message Limit
- 10 App Limit
- Two Way Calls

\$8.00 Billed Monthly

- Unlimited Messages
- Unlimited Apps
- Group Calls
- Channel Sharing

\$15.00 Billed Monthly

- Professional Grade
- Single Use Sign-on
- Corporate Use Service Level Agreement



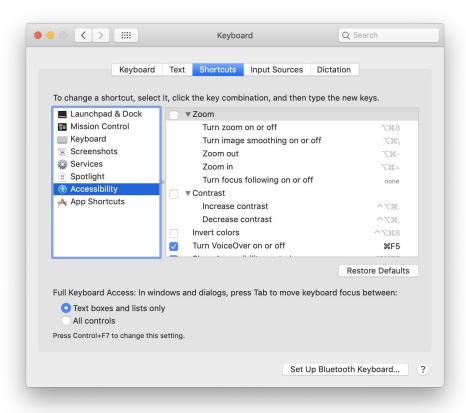
Specifications

Features

- Group Messaging
- Private Messaging
- Channel Organization
- Cloud Storage
- Workspace Customization



Accessibility





Example of Accessibility windows on MacOS Mojave.



Slack's mentality is that accessibility is always a work in progress but in recent years they have made headway on:

- Text Readers
- Contrast
- Animation viewing
- Keyboard Navigation

Competitors

Facebook - Too many Distractions, unprofessional.

Linkedin - Professional, but still distracting.

Internal Memos - Doesn't provide logging functionality.

Email - Not conducive to quick response.

Internet Relay Chat - No longer supported.

None of these options have the robust search and sorting properties Slack gives its users.



Case Study

Problem Space

The problem space occupied by my Project 2 will be with the subjects who utilize multiple Slack accounts for multiple organizations. Currently, Slack makes it confusing and sometimes demanding for the user to operate among two or more spaces because of multi-step login processes and separated feeds, windows and tabs. Of course, these measures may be in place for the sake of the user, so that they may more easily avoid messaging groups under wrong accounts. The Slack login process should be made clearer on how the multi-account user can operate.

Bibliography

Citations

- 1. https://brandfolder.com/slack/product-screenshots
- 2. https://giphy.com/gifs/slack-goat-prawn-3o6ozmlzlH8YQdr9GU
- 3. https://www.pcworld.com/article/2014252/requiem-for-a-game-quirky-mmo-glitch-to-close.html
- 4. https://www.pexels.com/photo/full-frame-shot-of-abstract-pattern-249798/
- 5. https://pexels.com/photo/group-hand-fist-bump-1068523/
- 6. https://slack.com/media-kit
- 7. https://slack.com/pricing
- 8. https://slack.com/customer-stories
- 9. https://slackhq.com/designing-slack-for-everyone
- 10. https://techvibes.com/2015/09/25/a-brief-history-of-slack-2015-09-25
- 11. https://twitter.com/stewart/status/780906639301812225