



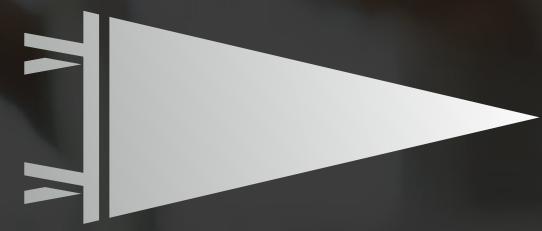
Team 7312

Seong, Kirill, Quyen, Jack and Luming



6M+

daily active users



50k+

paid enterprise teams



53

supported languages



or Mac and the app they had native app.

Docker	1.1	No	mattheworiordan
iStat Menus Status	1.1	No	mattheworiordan
Voila	0.8	No	mattheworiordan
Dropbox	0.8	No	mattheworiordan
GoogleTalkPlugin	0.7	No	mattheworiordan
Google Drive	0.6	No	mattheworiordan
VoilaHelper	0.3	No	mattheworiordan
Finder	0.2	0.06 No	mattheworiordan
Alfred 3	0.2	0.05 No	mattheworiordan

computer's energy is consumed by Slack which I estimate is in the foreground no less than 5% of the time

Where's all my CPU and memory gone? The answer: Slack

Slack resource usage scales linearly as you add more accounts to your desktop app. Use it wisely if you care about your battery life.

medium.com

5:01 AM - 28 Jul 2017

70 Retweets 110 Likes



7

70

110

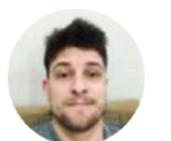


11:41 PM - 18 Nov 2017

1



t, no? Changing bonds, and the new slow.



Carlos Alexandre Becker

@caarlos0

Follow

slack for mac is really slow to open here.

anyone else had this problem? Should I clean it up and re-login everywhere?

5:55 AM - 15 Sep 2017

7

70

110



II ~ kind of the we running on my



jason
@_nosaj

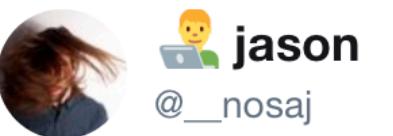


Process Name
Google Chrome
Slack
Atom
Core Sync
Atom Helper

Ivan Storck

Follow

Follow



Follow

Slack and Atom are idle in the background
using ~250 threads. Electron =
sloooooowwww...

Process Name	% CPU	CPU Time	Threads	Idle Wake Ups
Google Chrome	1.9	37:05.93	42	16
Slack	0.2	55.59	38	3
Atom	0.0	53.90	32	0
Core Sync	0.1	1:01.55	28	6
Atom Helper	1.3	1:08.30	28	30
Atom Helper	1.2	50.30	26	26
Google Chrome Helper	9.0	6:31.66	26	66
Slack Helper	0.4	40.49	24	4
Slack Helper	0.0	28.68	21	1
Slack Helper	0.0	14.49	19	0
Slack Helper	0.0	19.41	19	0
Slack Helper	0.0	23.12	19	1
Slack Helper	0.0	19.59	19	0
Google Chrome Helper	0.0	35.22	18	0

10:18 PM - 23 Nov 2017

1 Like



1



1





imzeeshan
@imzeeshan

@SlackHQ I get
plans to move on
use Slack for Team
Slack App's perf



Hacker News
@newsycombinator

Follow

Where's all my CPU and memory gone? The answer: Slack

App Name	Energy Impact	Avg Energy Impact	App Nap	Preventing Sle...	User
▶ Slack	63.8	48.67	No	Yes	mattheworiordan
▶ Google Chrome	13.3	15.75	No	No	mattheworiordan
Activity Monitor	6.2	0.13	No	No	mattheworiordan
Mailplane 3	2.8	0.74	No	No	mattheworiordan
Sublime Text	2.7	0.12	No	No	mattheworiordan
Little Snitch Agent	2.1	-	No	No	mattheworiordan
Little Snitch Network Monitor	1.2			No	mattheworiordan
Docker	1.1			No	mattheworiordan
iStat Menus Status	1.1			No	mattheworiordan
Voila	0.8			No	mattheworiordan
Dropbox	0.8			No	mattheworiordan
GoogleTalkPlugin	0.7			No	mattheworiordan
Google Drive	0.6			No	mattheworiordan
VoilaHelper	0.3			No	mattheworiordan
Finder	0.2	0.06	No	No	mattheworiordan
Alfred 3	0.2	0.05	No	No	mattheworiordan

60-70% of my computer's energy is consumed by Slack which I estimate is in the foreground no less than 5% of the time

Where's all my CPU and memory gone? The answer: Slack

Slack resource usage scales linearly as you add more accounts to your desktop app. Use it wisely if you care about your battery life.

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5:01 AM - 28 Jul 2017

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110



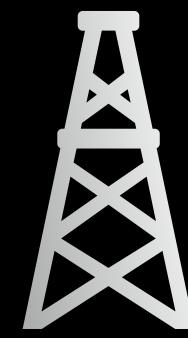
11:41 PM - 18 Nov 2017

1

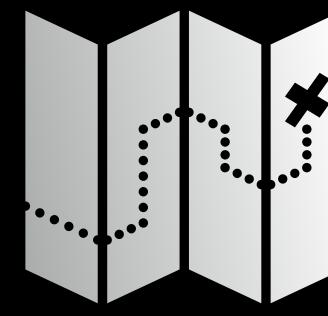


Real people. Not competitors.

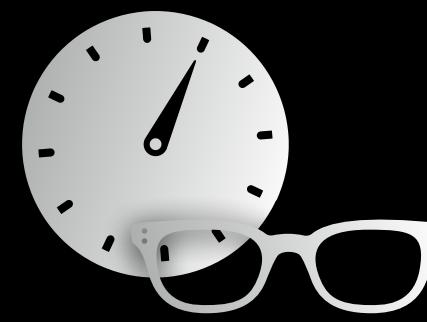
**“ Is this an answer seeking for questions,
or is this a question seeking for answers? ,”**



Importance



of Teams



Speed & Design

● 24%



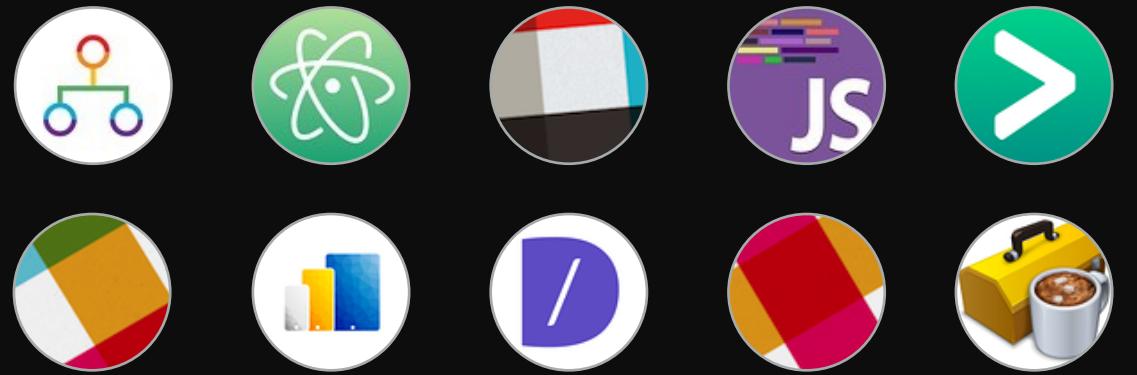
● ● ● 14%

● ● ● ● ● 33%

● ● ● ● ● ● 19%

● ● ● ● ● ● ● 9%



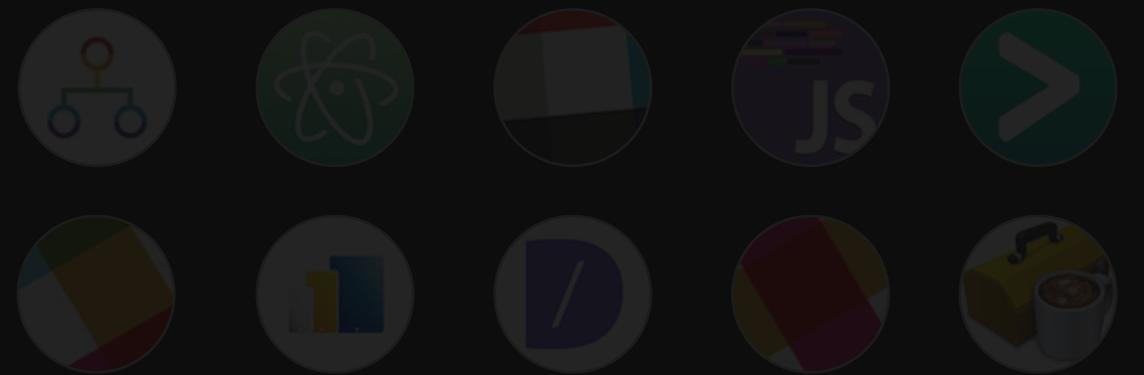


18%

very unsatisfied team switching speed

47%

not completely satisfied with launch speed



18%

very unsatisfied team switching speed

47%

not completely satisfied with launch speed



I use Slack to collaborate with my colleagues all the time, but the app just has **too many colors** with that alone makes the experience too distracting

I am a part of several teams, therefore I constantly switch between teams and it takes **too many clicks**

Communication is at its best when we react to others' thoughts, but that takes **steps**
steps
steps
steps
steps
steps
too many

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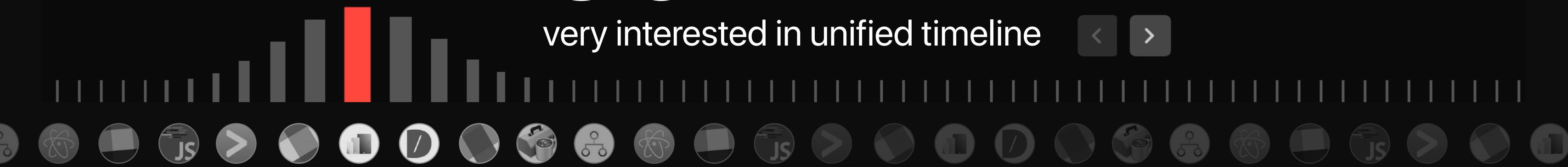
I use Slack to collaborate with my colleagues all the time, but the app just has **too many colors** with that alone makes the experience too distracting

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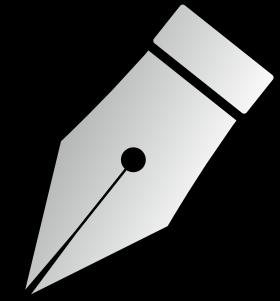
Communication is at its best when we  to others' thoughts, but that takes **steps**
steps
steps
steps
steps
steps
too many

36%

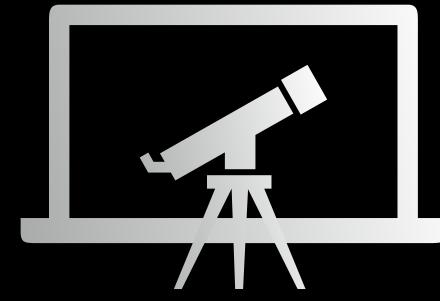
very interested in unified timeline



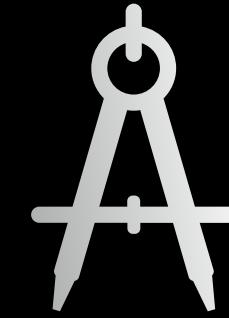
**“These results confirmed our intent,
allowing us to move along with the project. ,”**



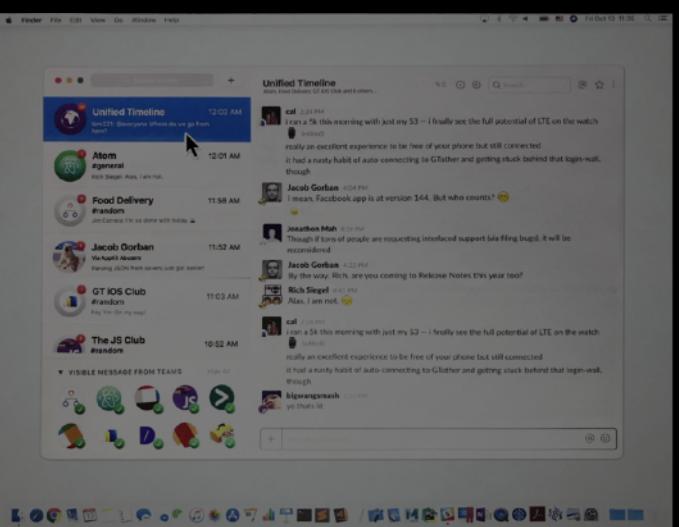
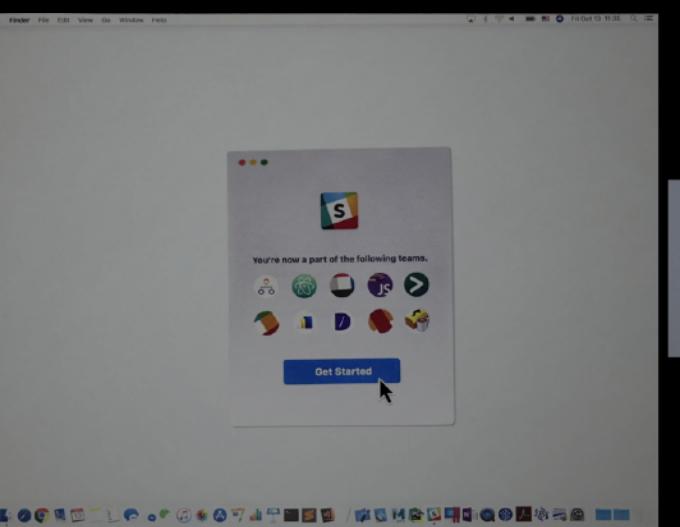
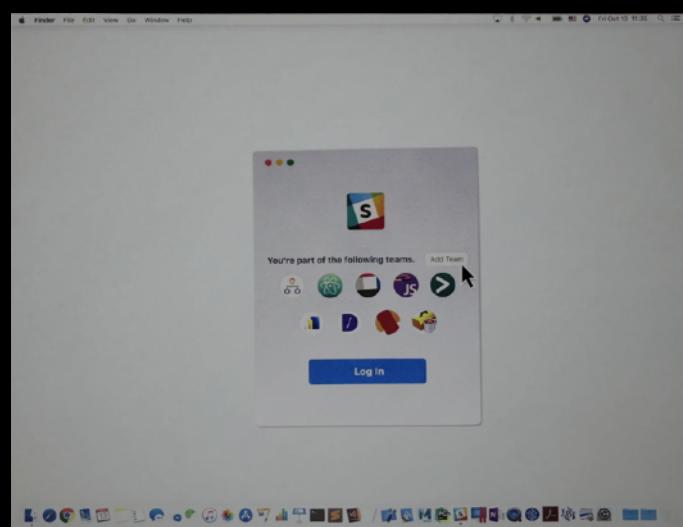
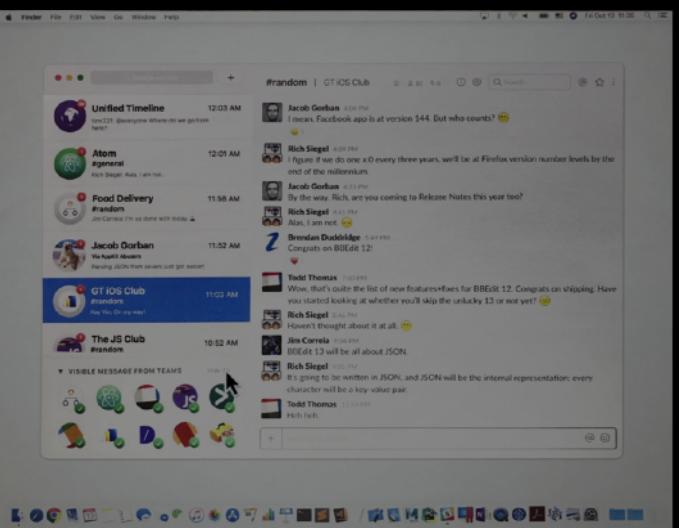
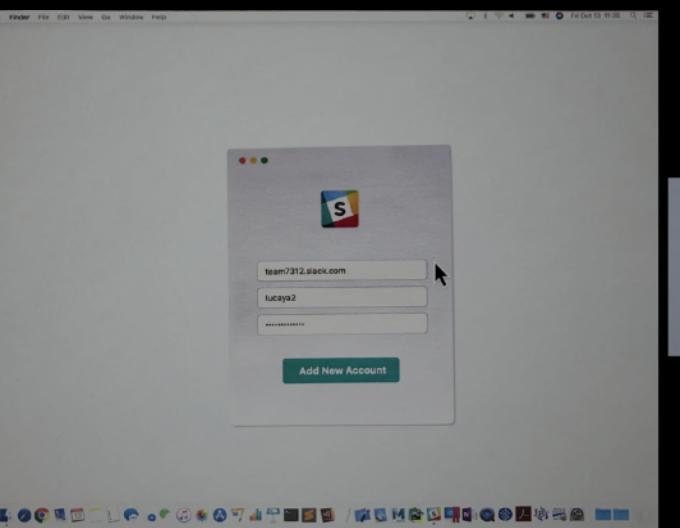
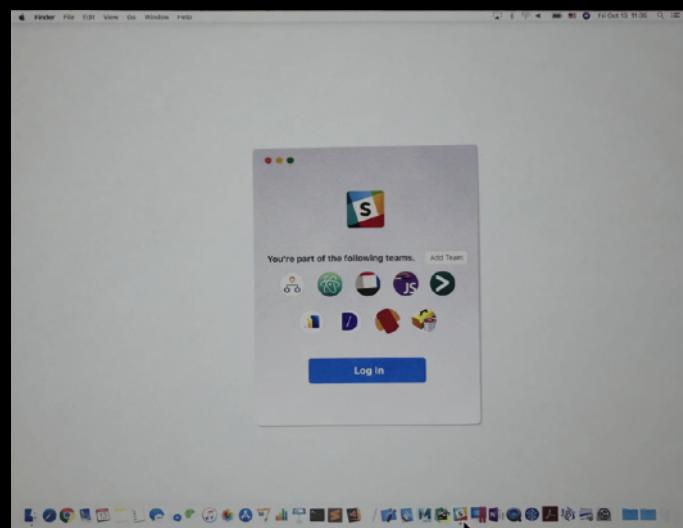
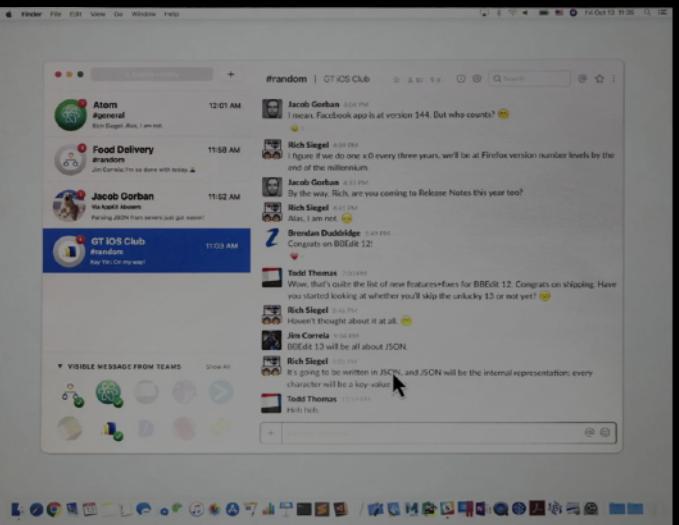
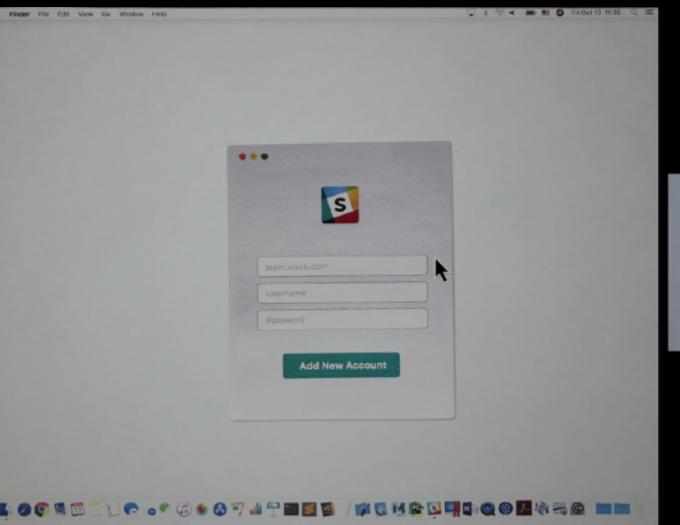
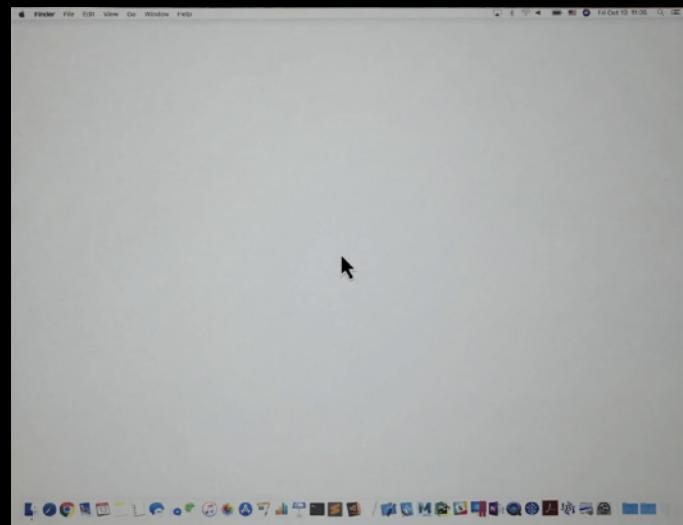
**Paper
Prototype**



**Heuristics Evaluation
+ Scenario Findings**

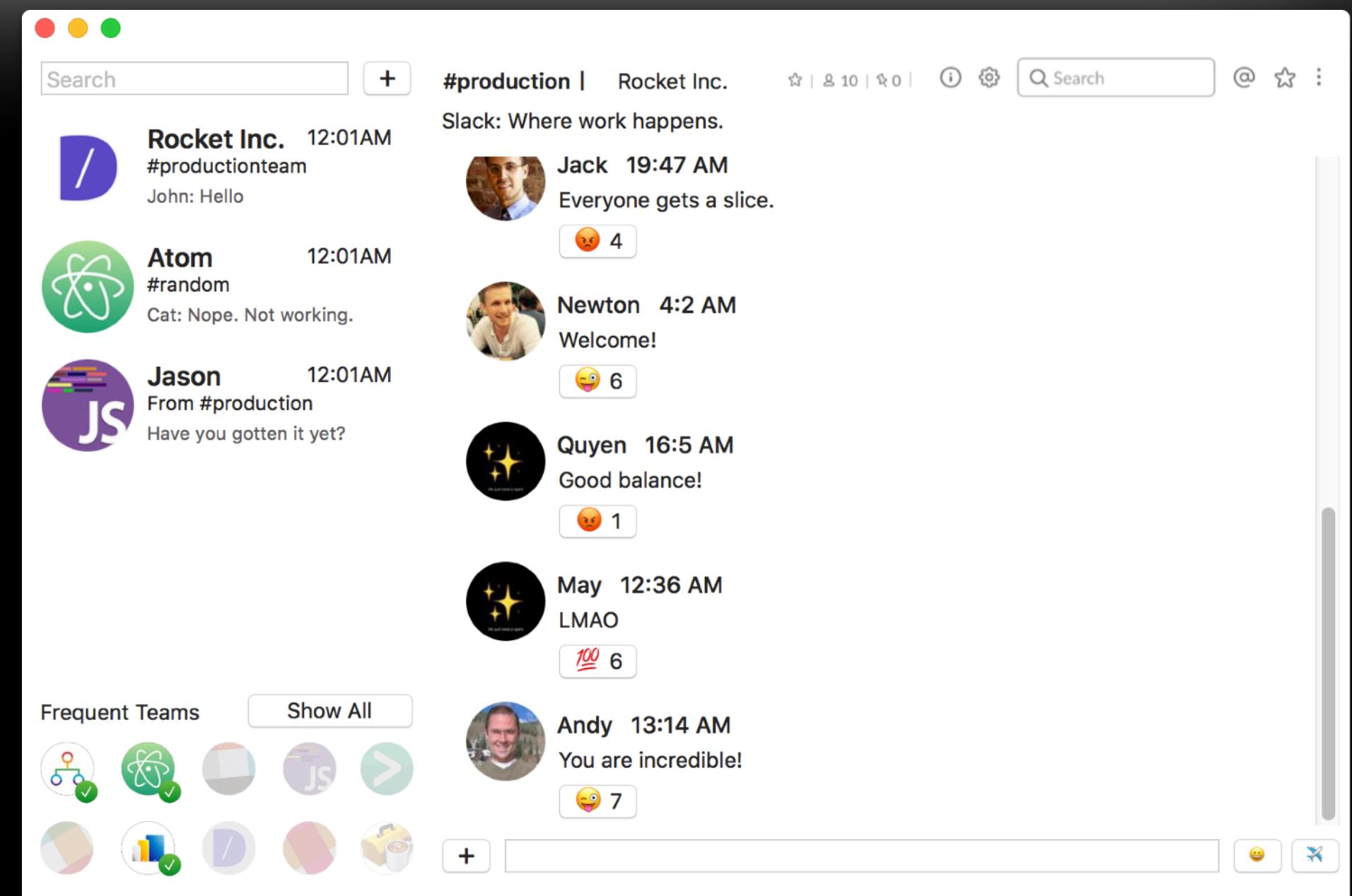


**Refined
Prototype**

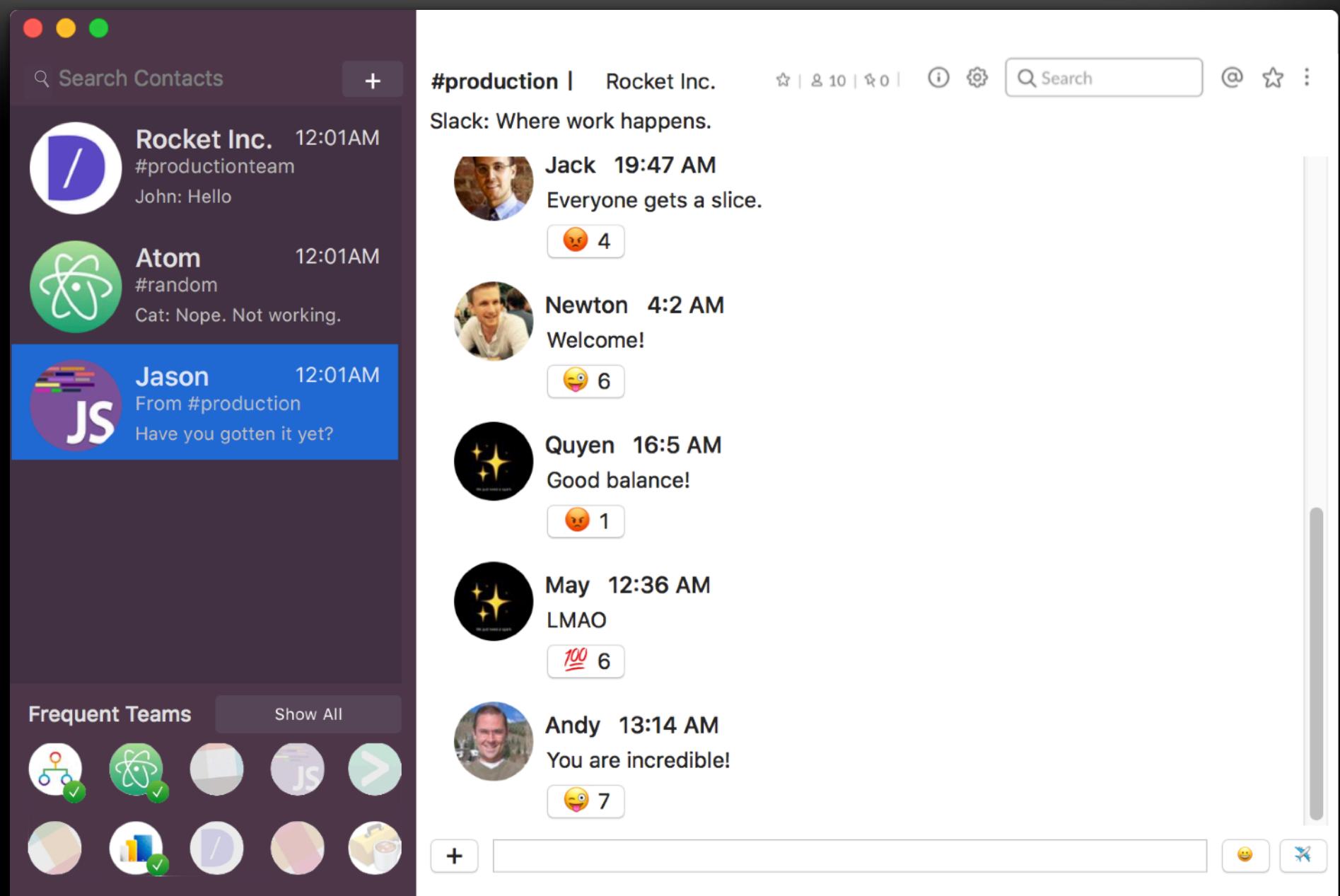


“ Heuristic evaluation and scenario findings played important roles in shaping the design. ,”

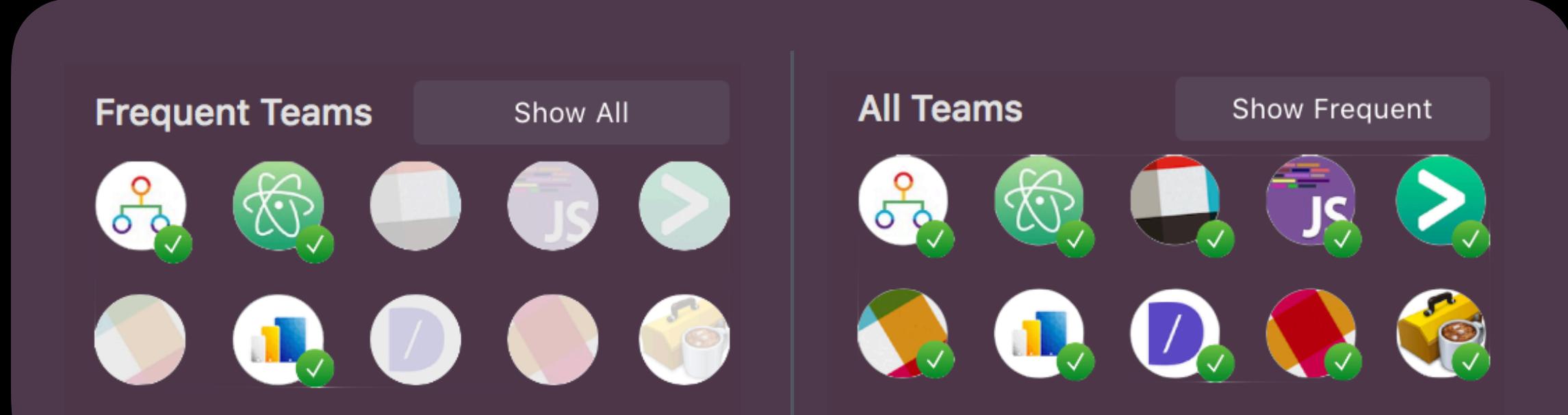
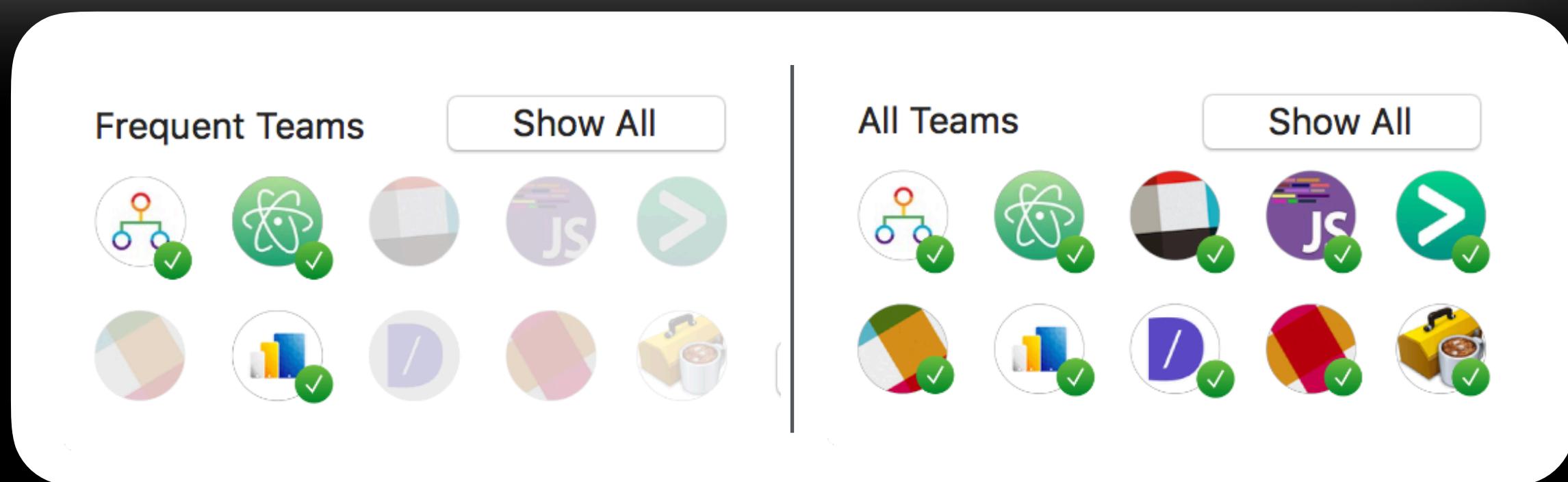
It's really hard to distinguish between the sidebar and main chat content.

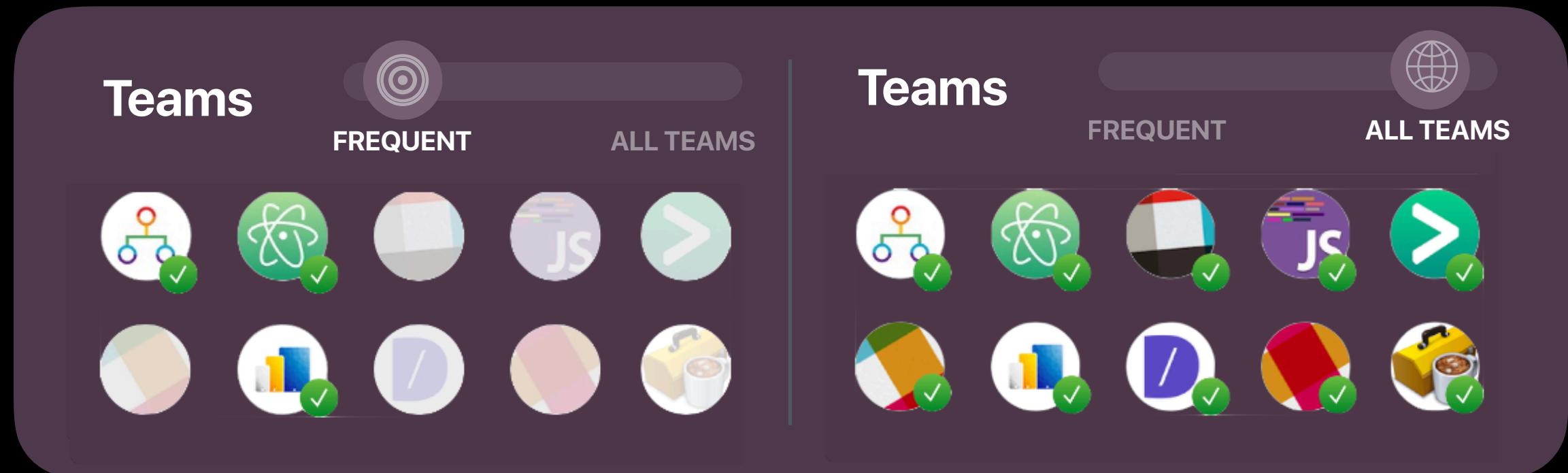
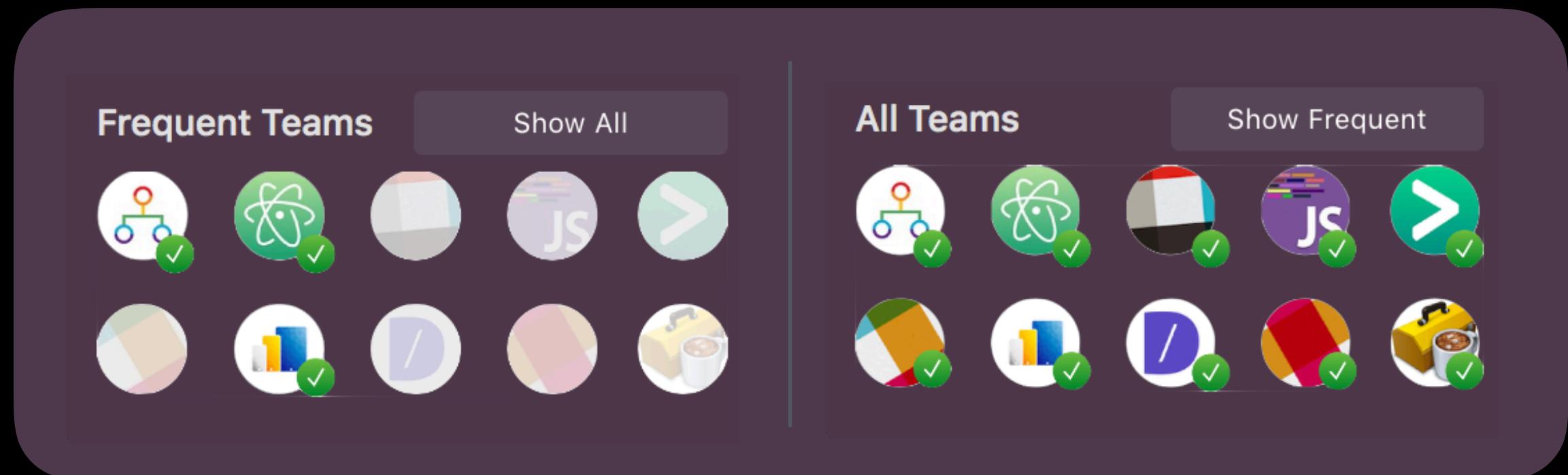


It's really hard to distinguish between the sidebar and main chat content.

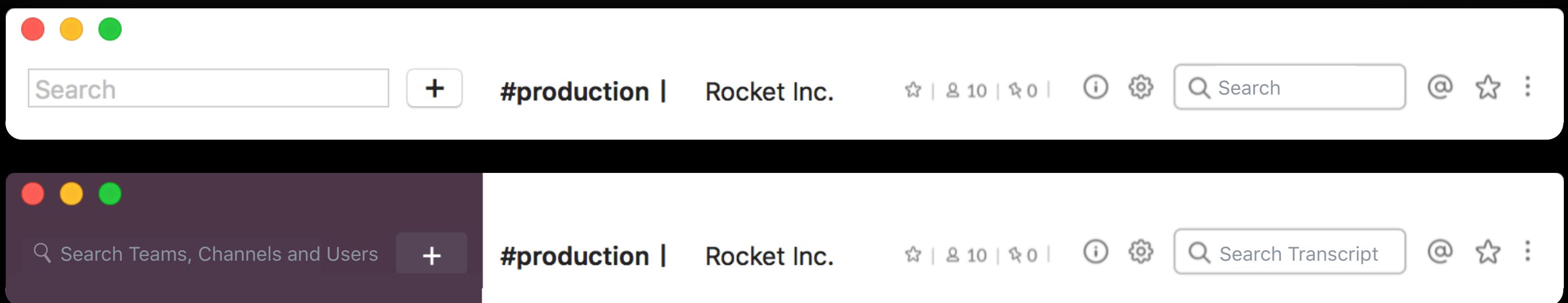


This button to toggle between showing all teams and showing frequent teams is really confusing.

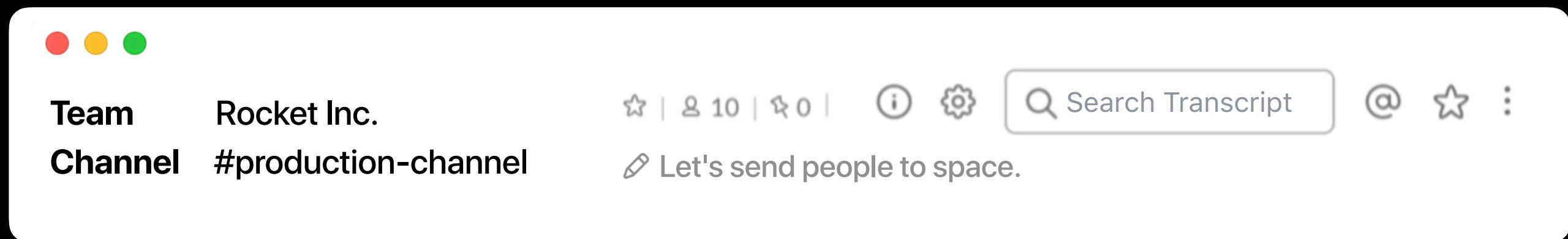
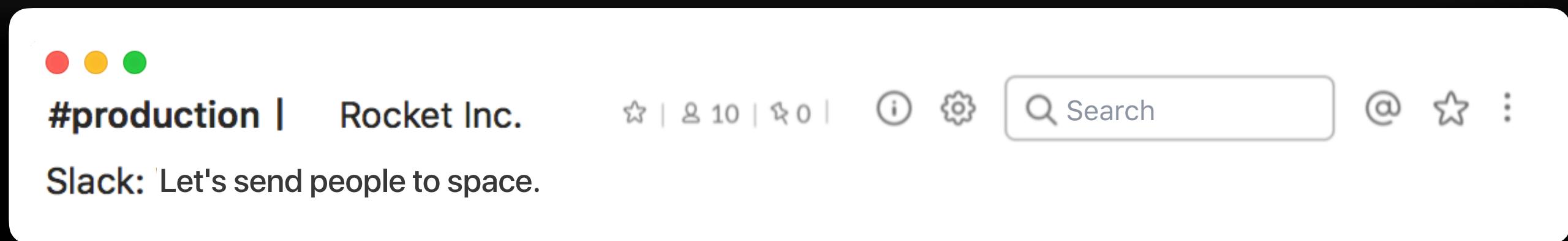




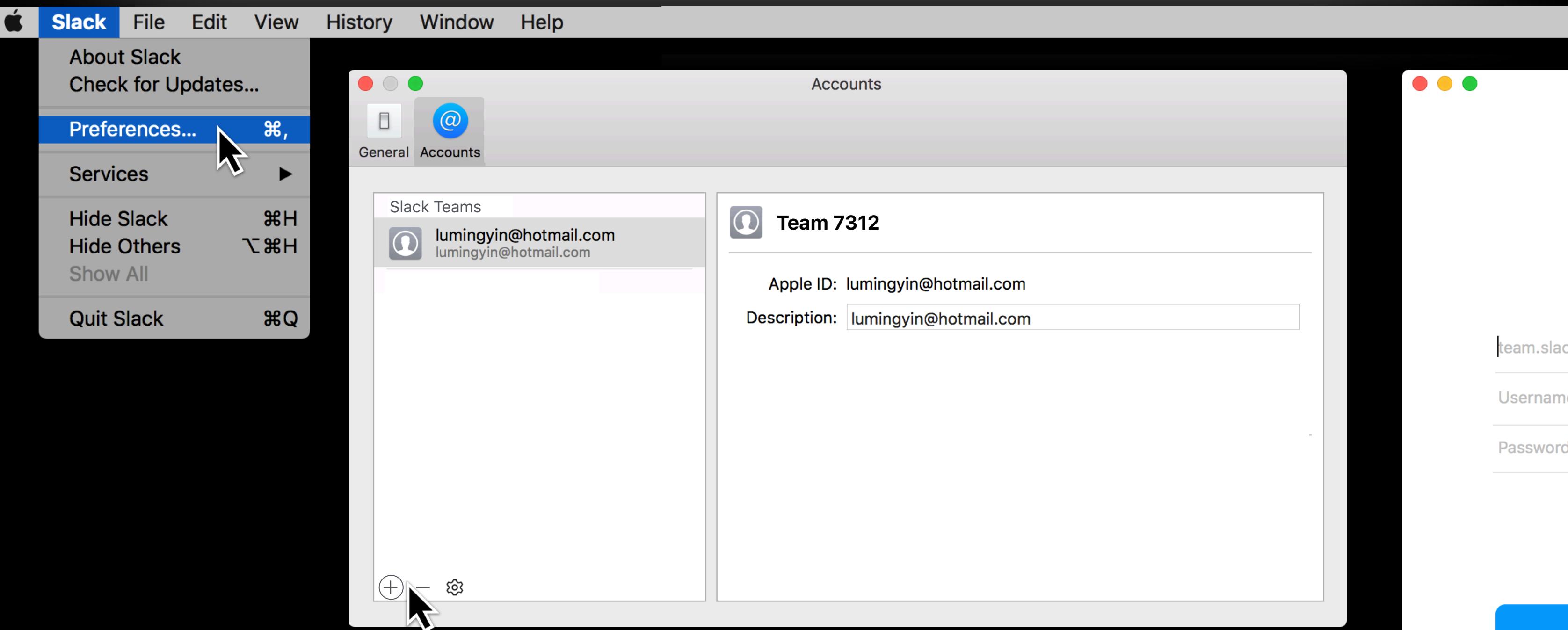
**Having two separate search bars is quite ambiguous
and I don't know which one searches for what.**



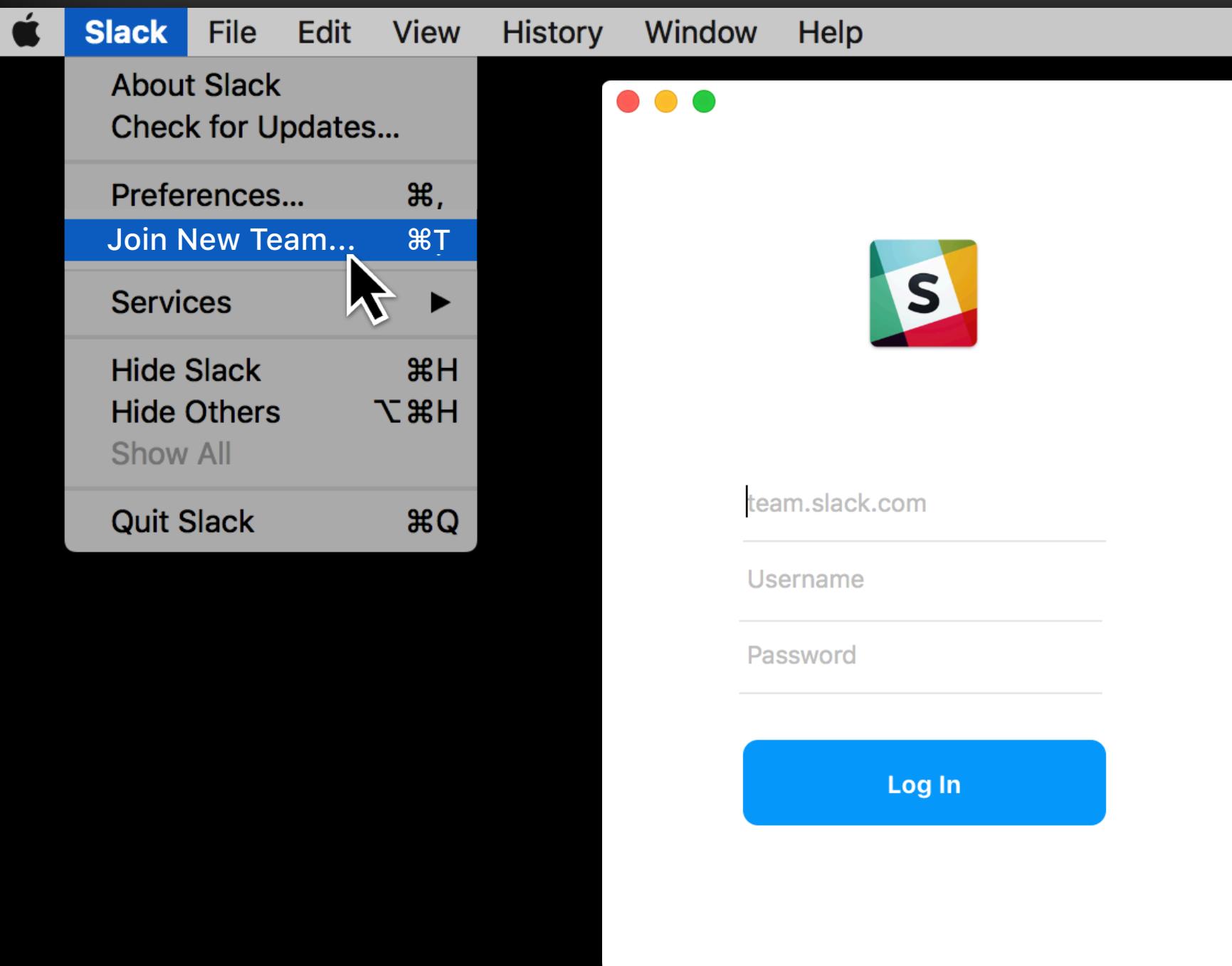
At a glance, it is not obvious which channel you are currently on.



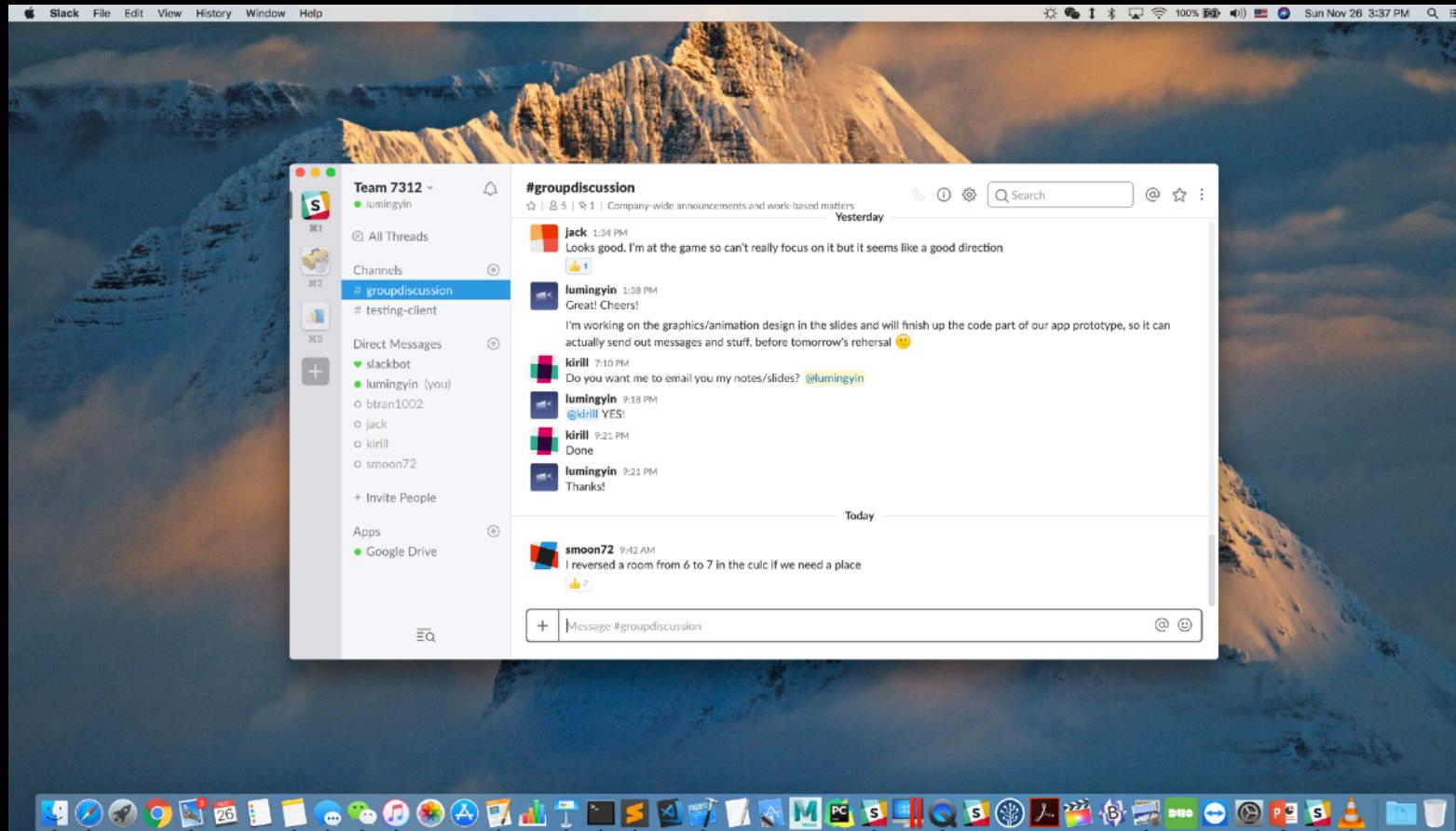
Signing into a new account (joining into a new team requires too many steps).



Signing into a new account (joining into a new team requires too many steps).

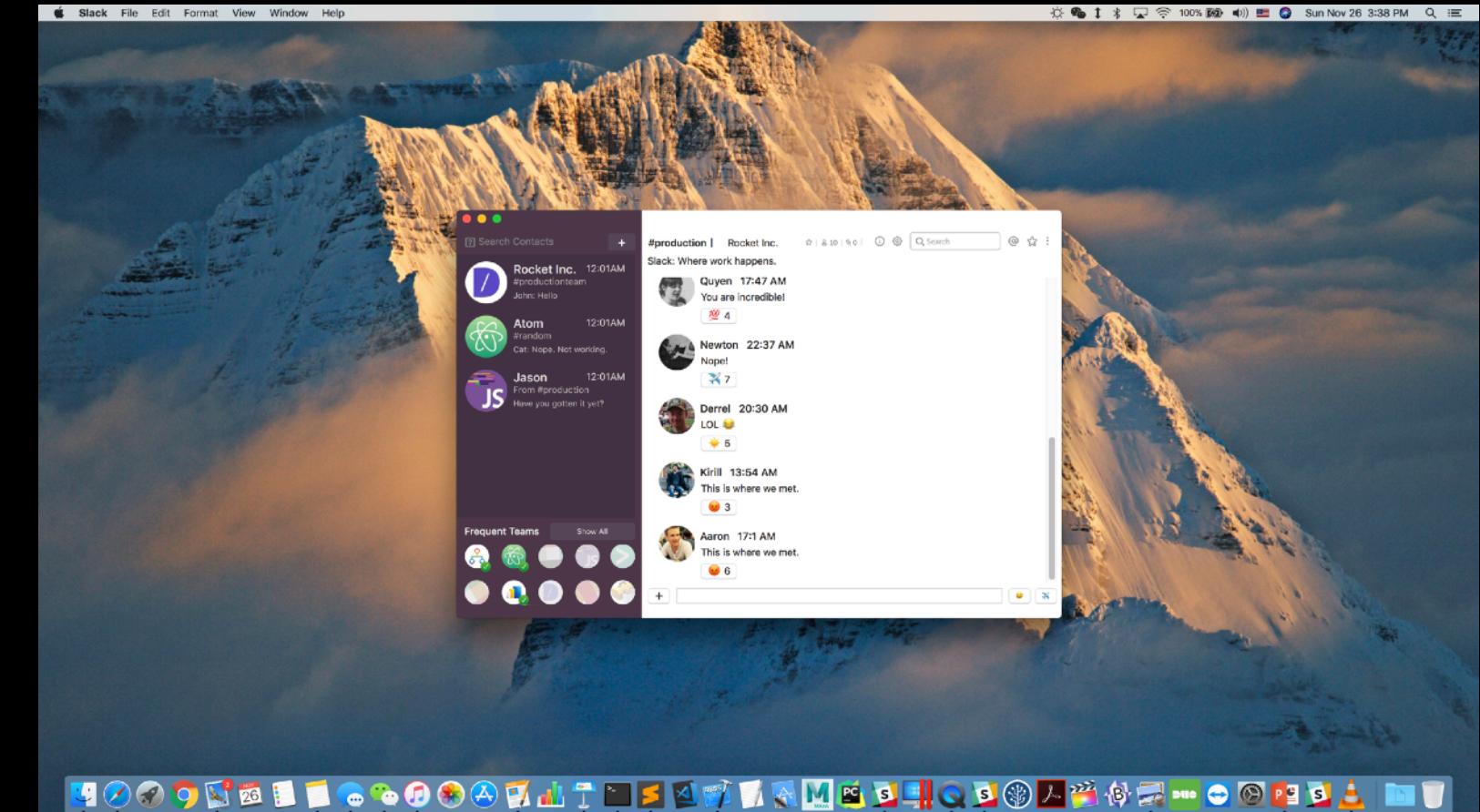


Performance Demo



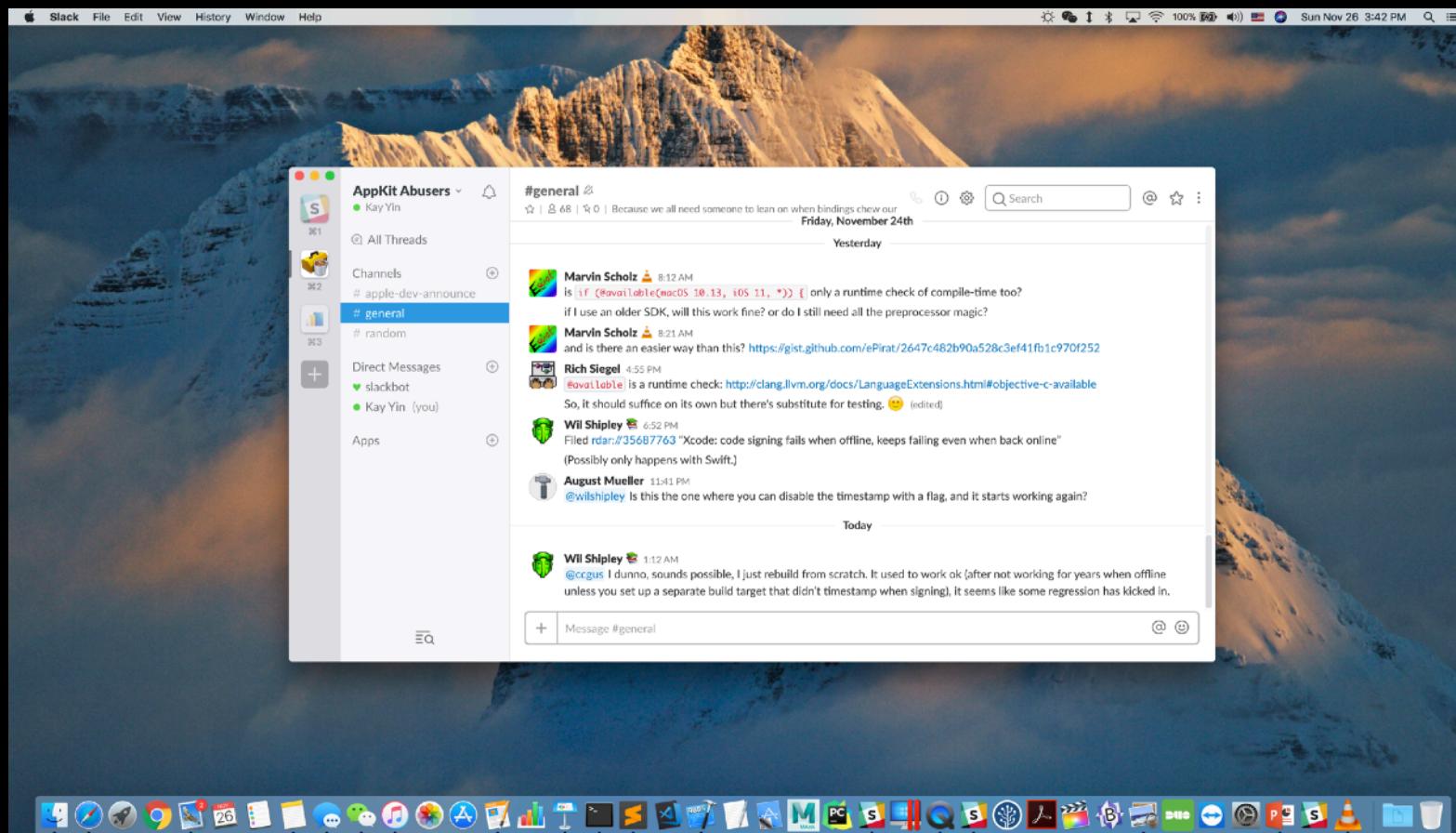
Launching official app

12.3s



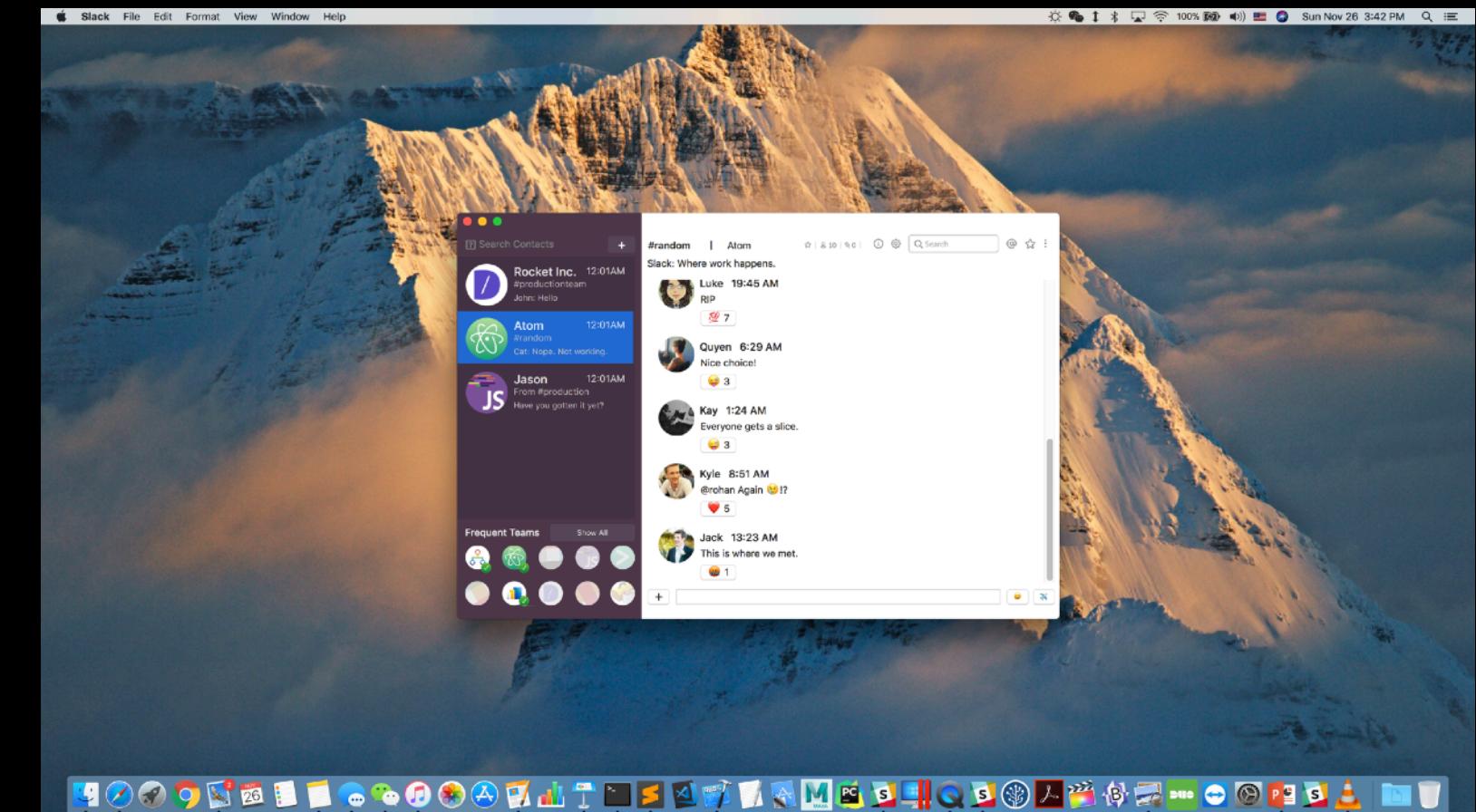
Launching Team 7312 app

1.25s



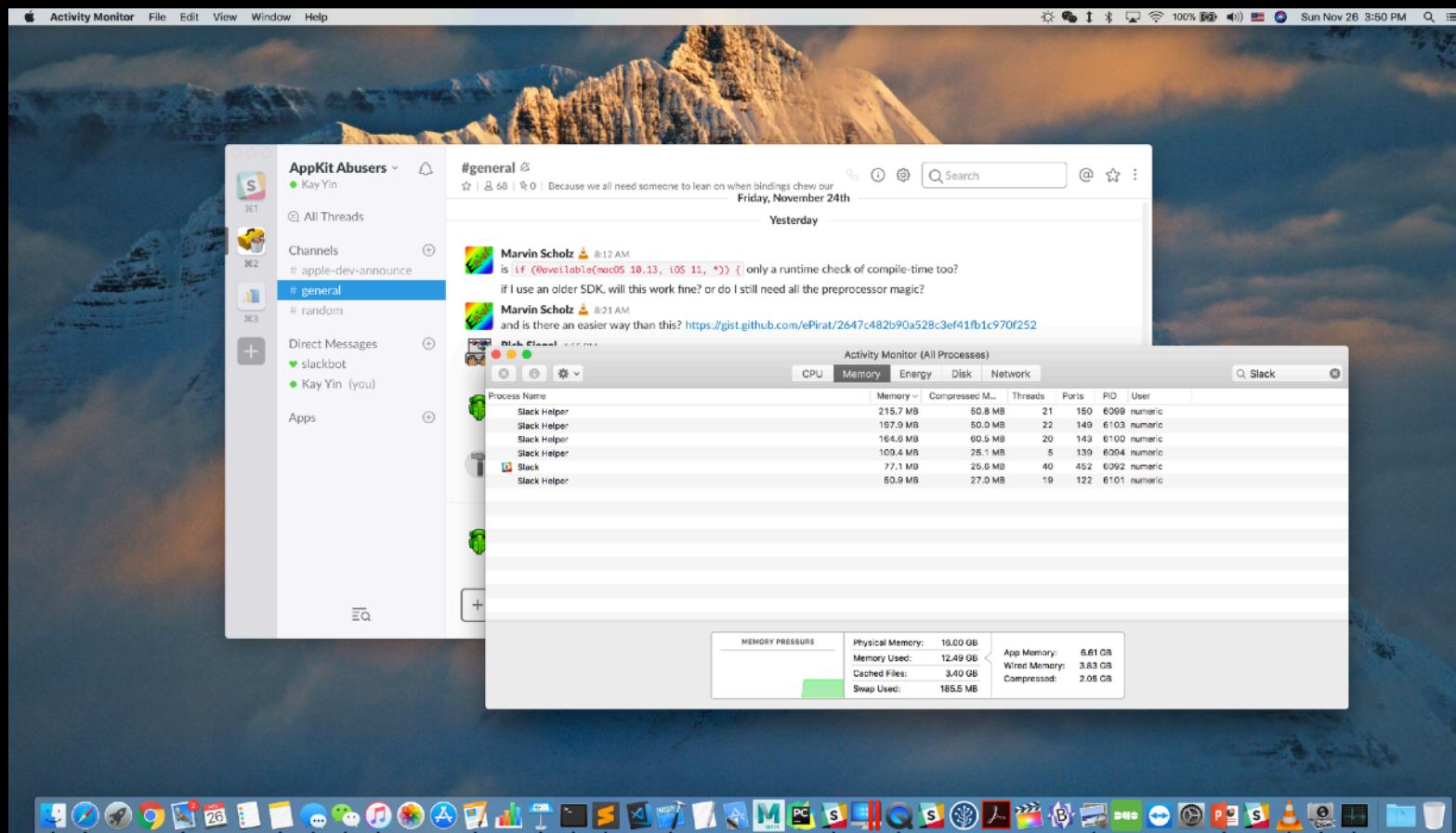
Switching between teams

1.5s

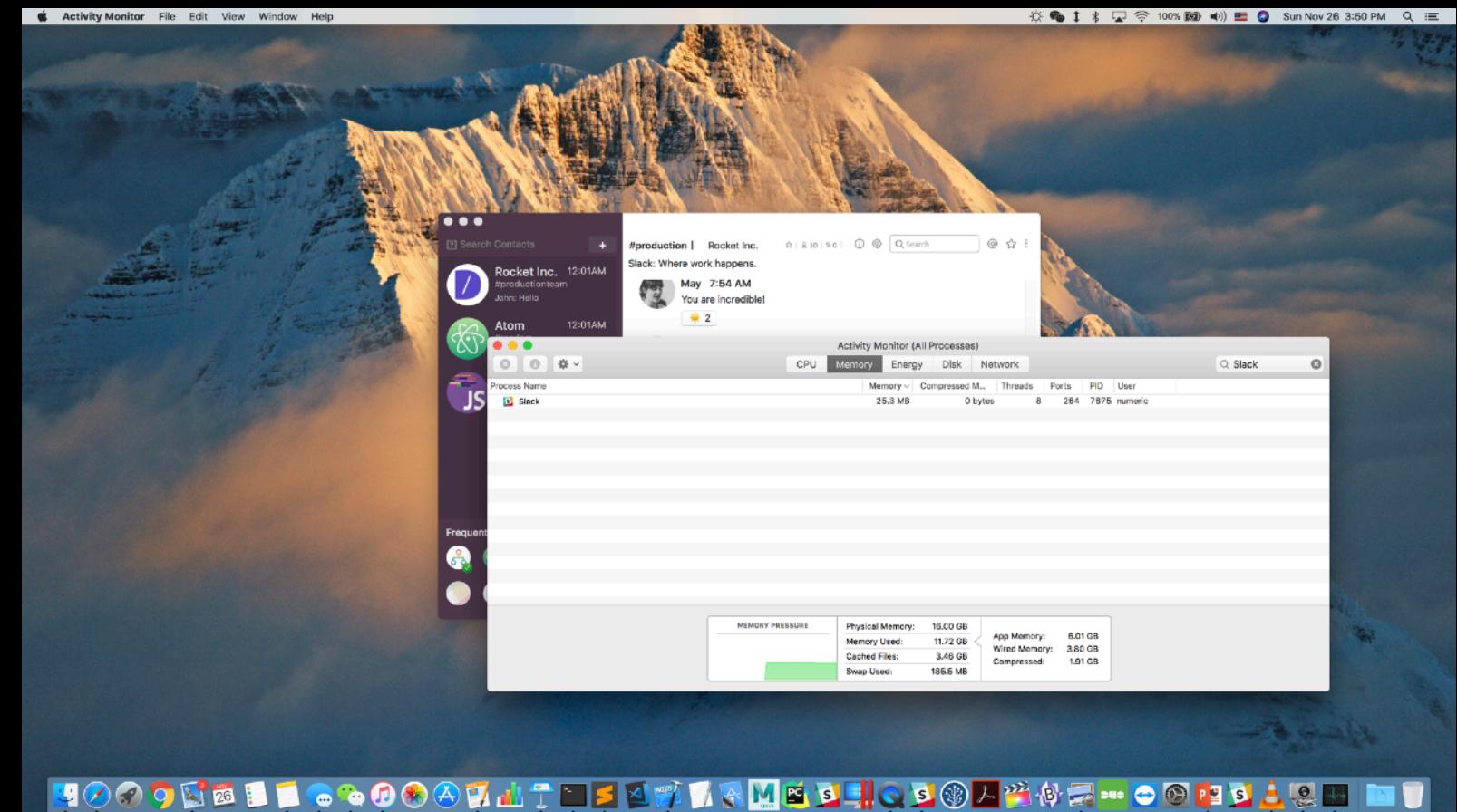


Switching between teams

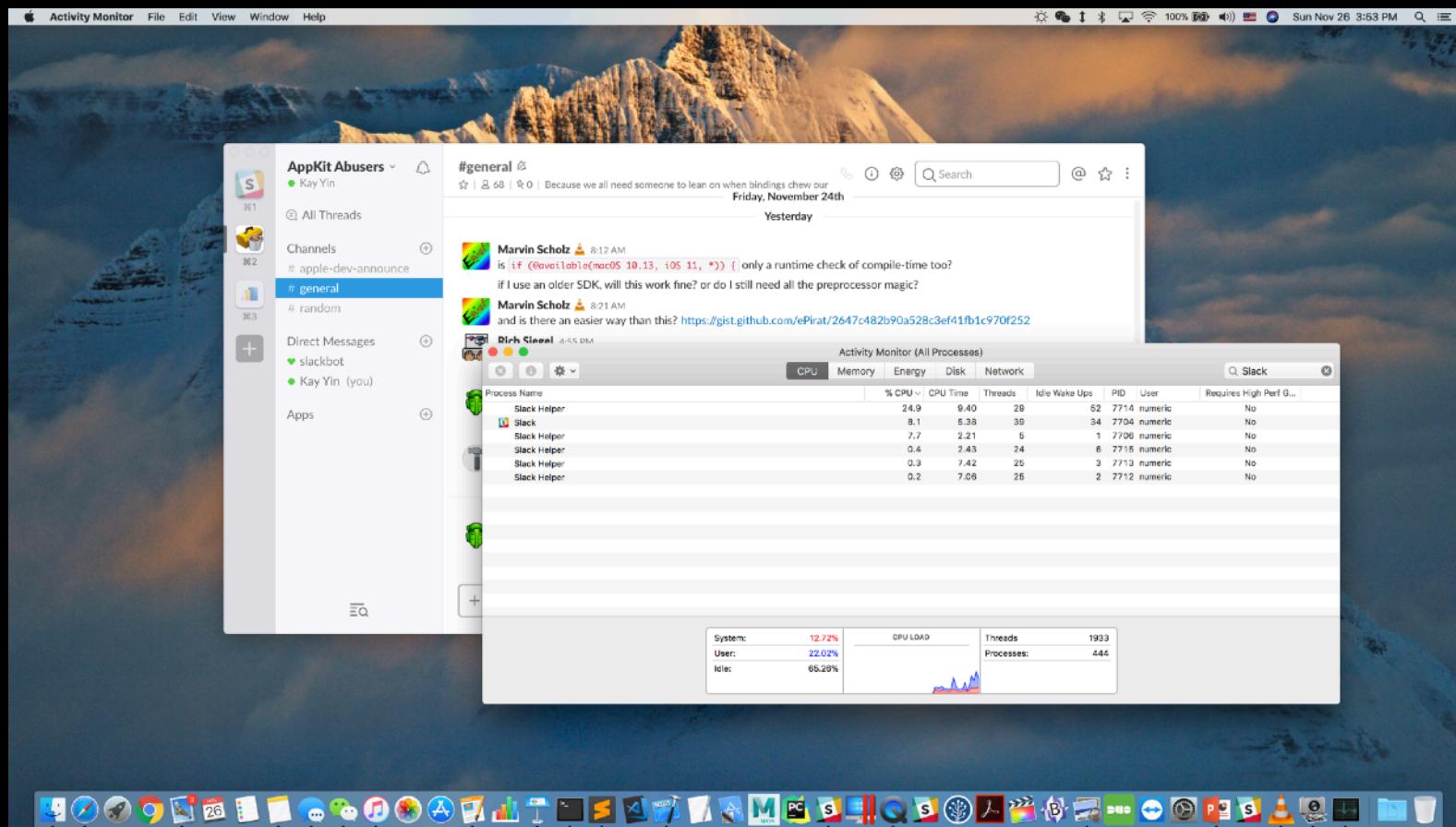
0.3s



Memory Usage
812MB

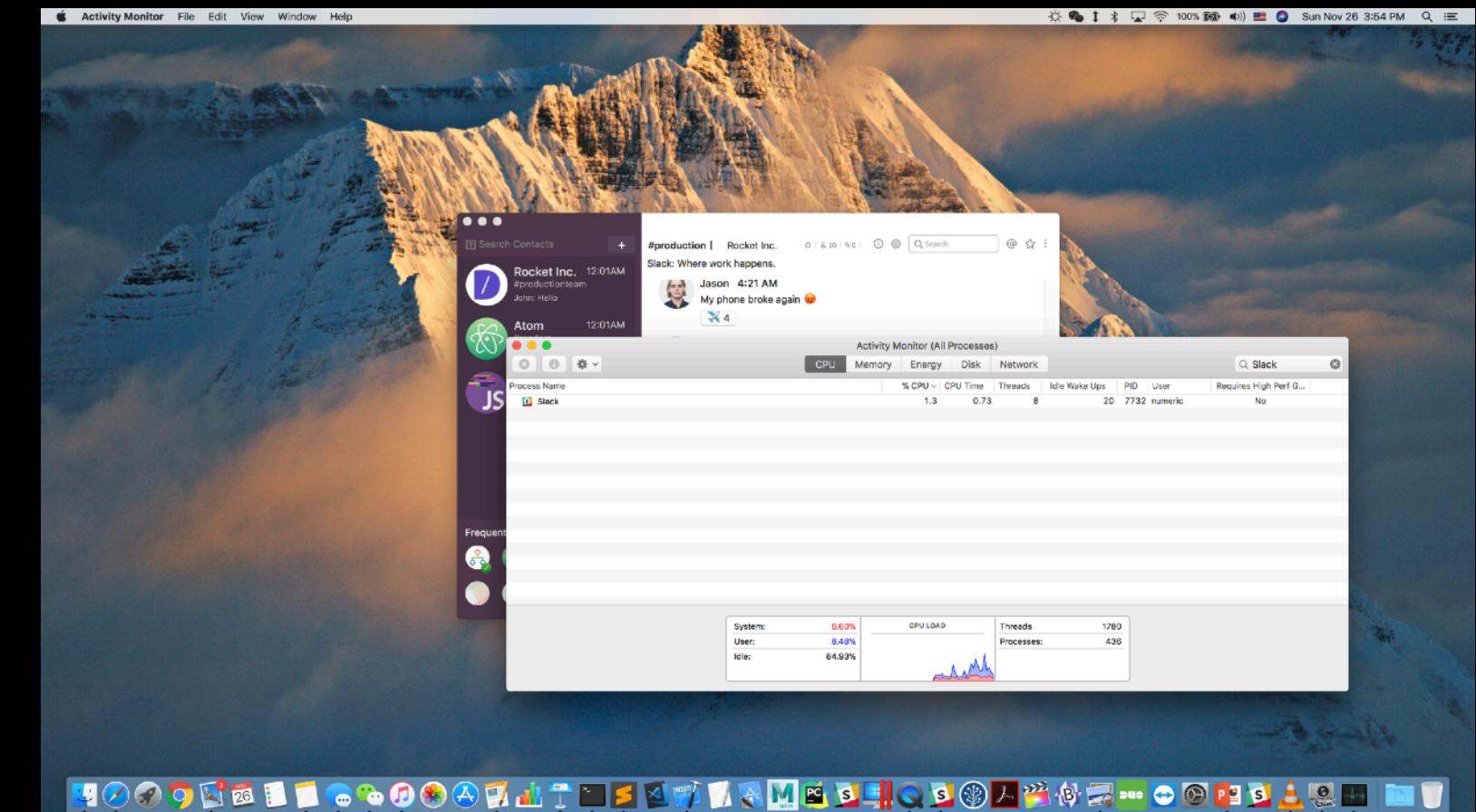


Memory Usage
25MB



CPU Usage

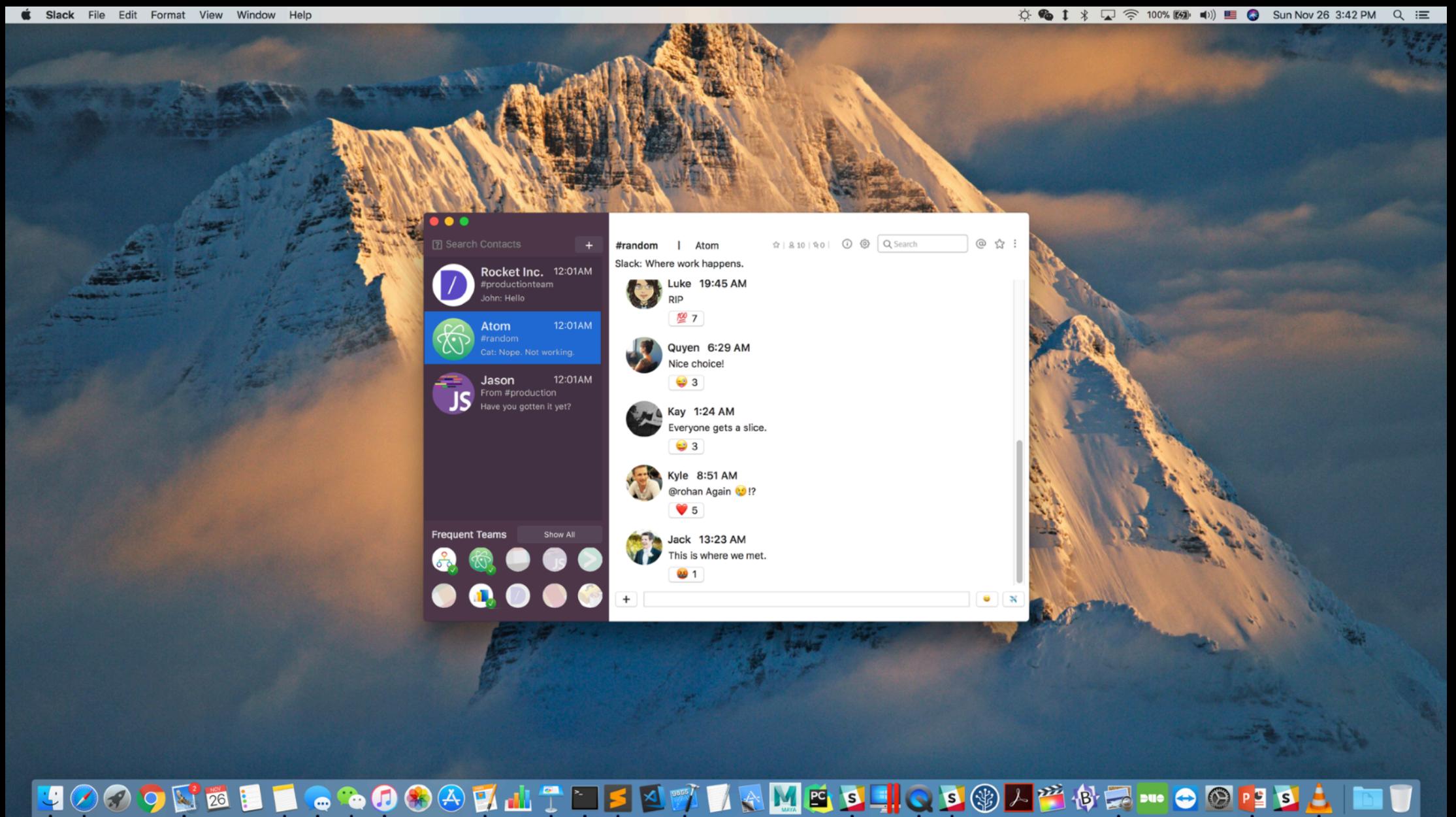
41%



CPU Usage

1%

Compatibility Demo



Search 15:44 87%

#groupdiscussion

btran1002 11:55 AM
@kirill @smoon72 Why not 12pm-1pm?


lumingyin 11:59 AM
I can come at any time between 10am to 10pm on Sunday
@everyone Let's VOTE!

kirill 12:00 PM
12-1 works
 2 

lumingyin 12:00 PM
12-1 works for me too!

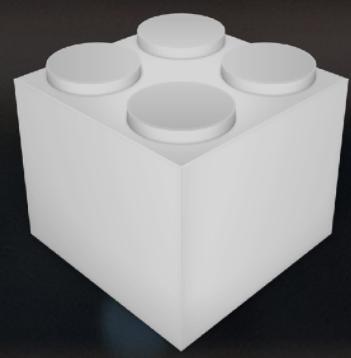
btran1002 12:01 PM
12-1pm works for me

lumingyin 12:01 PM
What about @smoon72 @jack?

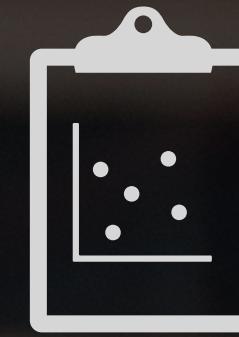
smoon72 12:01 PM
12 - 1 doesn't work

lumingyin 12:01 PM
Why so?

btran1002 12:01 PM
why



AppKit



Agile + Git



Complete + Refine

The screenshot shows the Xcode IDE running on a Mac. The main window displays a Swift file, `MainViewController.m`, with the following code:

```
55 - (void)webSocket:(SRWebSocket *)webSocket didReceiveMessageWithString:(NSString *)string {
56     NSLog(@"SRWebSocketDelegate: didReceiveMessageWithString, %@", string);
57     NSStringEncoding encoding = NSUTF8StringEncoding;
58     NSData *jsonData = [string dataUsingEncoding:encoding];
59     NSError *error=nil;
60     NSDictionary * parsedData = [NSJSONSerialization JSONObjectWithData:jsonData options:kNilOptions
61                           error:&error];
62     if (!error && parsedData != nil) {
63         NSString *type = [parsedData valueForKeyPath:@"type"];
64         if (type == nil) {
65             return;
66         }
67         if ([type isEqualToString:@"start"]) {
68             [self handleTeamInitializationWithJSONDict:parsedData];
69         }
70     }
71 }
```

A code completion dropdown is open over the variable `parsedData`, showing several suggestions:

- V NSAttributedStringRef _Nonnull NSParagraphStyleAttributeName
- V NSAttributedStringRef _Nonnull NSParagraphStyleAttributeName
- f int uuid_parse(const char *in, unsigned char *uu)
- # _PATH_RSRCNAME
- K enum <anonymous> tuneParseOSErr
- # NSString *message _PATH_RSRCFORKSPEC NSData valueForKeyPath:@"text"];
- K enum <anonymous> textParserParamErr
- V NSExceptionName _Nonnull NSPPDParseException

The bottom right corner of the Xcode interface shows a terminal window with the following log output:

```
2017-11-26 15:31:00.558552-0500
Slack[7134:620646] We get a pong back 16826
2017-11-26 15:31:05.558644-0500
Slack[7134:620646] SRWebSocketDelegate:
```

AppKit with Xcode

The screenshot shows a GitHub pull request interface with the title "Fix color highlighting · LumingYin/SlackPrototype@8c04aa9". The code editor displays the file "Slack/View Controllers/MainViewController.m" comparing two versions. The left column shows the original code, and the right column shows the modified code. Changes are highlighted with green for additions and red for deletions.

```
14 Slack/View Controllers/MainViewController.m
@@ -111,6 +111,7 @@ - (void)webSocket:(SRWebSocket *)webSocket didCloseWithCode:(NSInteger)code reas
111 #pragma mark - view controller lifecycle
112 - (void)viewDidLoad {
113     [super viewDidLoad];
114
115     _contactSearchTextField.placeholderAttributedString =
116         [[NSAttributedString alloc] initWithString:@"Search Contacts"
117                                         attributes:@{NSForegroundColorAttributeName: [NSColor grayColor],
118                                                      NSFontAttributeName: [NSFont systemFontOfSizeFontOfSize:13]}];
119
120     self.pingCount = 16385;
@@ -126,6 +127,8 @@ - (void)viewDidLoad {
126     _transcriptTableView.dataSource = self;
127     _sidebarTableView.delegate = self;
128     _sidebarTableView.dataSource = self;
129
130     [self updateSourceList:_sidebarTableView];
131 }
@@ -188,6 +191,7 @@ - (CGFloat)tableView:(NSTableView *)tableView heightForRow:(NSInteger)row {
188
189 - (void)tableViewSelectionDidChange:(NSNotification *)notification {
190     NSTableView *affectedTable = notification.object;
191
192     [self updateSourceList:affectedTable];
193 }
```

```
111 #pragma mark - view controller lifecycle
112 - (void)viewDidLoad {
113     [super viewDidLoad];
114     + [_sidebarTableView
115         setSelectionHighlightStyle:NSTableViewSelectionHighlightStyleNone];
116
117     _contactSearchTextField.placeholderAttributedString =
118         [[NSAttributedString alloc] initWithString:@"Search Contacts"
119                                         attributes:@{NSForegroundColorAttributeName: [NSColor grayColor],
120                                                      NSFontAttributeName: [NSFont systemFontOfSizeFontOfSize:13]}];
121
122     self.pingCount = 16385;
123
124     + _transcriptTableView.dataSource = self;
125     + _sidebarTableView.delegate = self;
126     + _sidebarTableView.dataSource = self;
127
128     + [self updateSourceList:_sidebarTableView];
129 }
130
131
191
192 - (void)tableViewSelectionDidChange:(NSNotification *)notification {
193     NSTableView *affectedTable = notification.object;
194     +
195     [self updateSourceList:affectedTable];
196 }
```

Source Control with Git and Github

The screenshot shows the Pivotal Tracker interface for the project www.pivotaltracker.com/n/projects/2132085. The top navigation bar includes links for Stories, Analytics, Settings, Members, and a Slack integration. The main area displays two panels: "Current Iteration/Backlog" and "Icebox".

Current Iteration/Backlog: This panel shows tasks for the iteration starting on Nov 20, 2016, and ending on Nov 26, 2016. The backlog contains the following stories:

- Investigate missing avatars (KY) - Bug, Unestimated points, Started
- Investigate WebSockets Protocol - Bug, Unestimated points, Started
- Support macOS Sierra (10.12) - Feature, Unestimated points, Unstarted
- Fix Login UI Glitch - Bug, Unestimated points, Started
- Implement Search (Chat Transcript) - Feature, Unestimated points, Unstarted
- Implement Search (Sidebar) - Feature, Unestimated points, Unstarted
- Implement transcript deletion - Feature, Unestimated points, Unstarted
- Implement sending files and receiving files - Feature, Unestimated points, Unstarted
- Implement reaction business logic - Feature, Unestimated points, Unstarted

Icebox: This panel is currently empty.

Left Sidebar: The sidebar lists project management categories: My Work (0), Current/Backlog, Icebox, Done, Blocked (0), Epics, Labels, and Project History. A prominent "Add Story" button is located at the top of the sidebar.

Agile with Pivotal Tracker

“ In addition to feature-completion, we plan to refine the app while adding support advanced power features. ”

Thank you!

Q&A