

Open Project Management

from an “open” perspective

UNIT 3

Instructor: Dr. Bradly Alicea

<http://bradly-alicea.weebly.com>



IS 340: Spring 2023

All content



Welcome!

A Final Example of Technical Debt in a Community Resource



DevoLearn

Accelerate research in developmental biology with deep learning models

4 followers Worldwide <http://devoworm.weebly.com>

Follow

Overview Repositories 17 Projects 1 Packages Teams People 8 Settings

Pinned Order updated.

Customize pins

devolearn Public ⋮
Accelerate data driven research on embryos with deep learning models
Python 36 29

data-science-demos Public ⋮
Jupyter Notebook 1 10

Community-Board Public ⋮

DevoGraph Public ⋮
Jupyter Notebook 1

nucleus-segmentor_HuggingFace Public ⋮
Devolearn Nucleus segmentor model hosted HuggingFace spaces
Python

Synthetic-Embryo Public ⋮

View as: Public ▾

You are viewing the README and pinned repositories as a public user.

You can [create a README file](#) visible to anyone.

[Get started with tasks](#) that most successful organizations complete.

Discussions

Set up discussions to engage with your community!

[Turn on discussions](#)

Repositories

Find a repository...

Type ▾

Language ▾

Sort ▾

New

People



<https://github.com/DevoLearn>



Release schedule is out of sync with Github repository, version of Python is out of sync with project code.

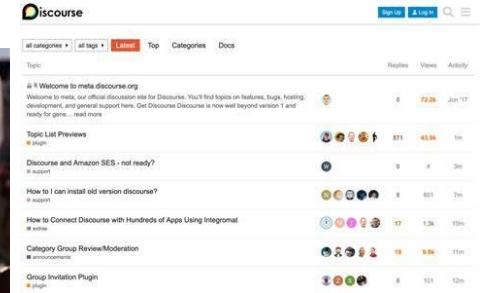
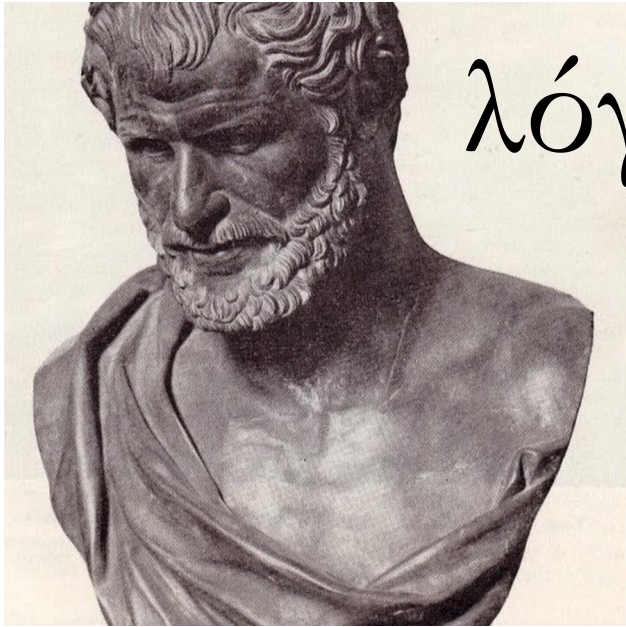
We will return to this in Unit 5.

Release history [Release notifications](#) | [RSS feed](#)

THIS VERSION	0.3.0 Feb 22, 2021
	0.2.3 Feb 6, 2021
	0.2.2 Feb 6, 2021
	0.2.1 Jan 14, 2021
	0.2.0 Aug 19, 2020
	0.1.9 Aug 6, 2020
	0.1.8 Aug 6, 2020
	0.1.7 Aug 5, 2020
	0.1.6 Aug 5, 2020

<https://pypistats.org/packages/devolearn>

Discussions, Documentation, and Public Events

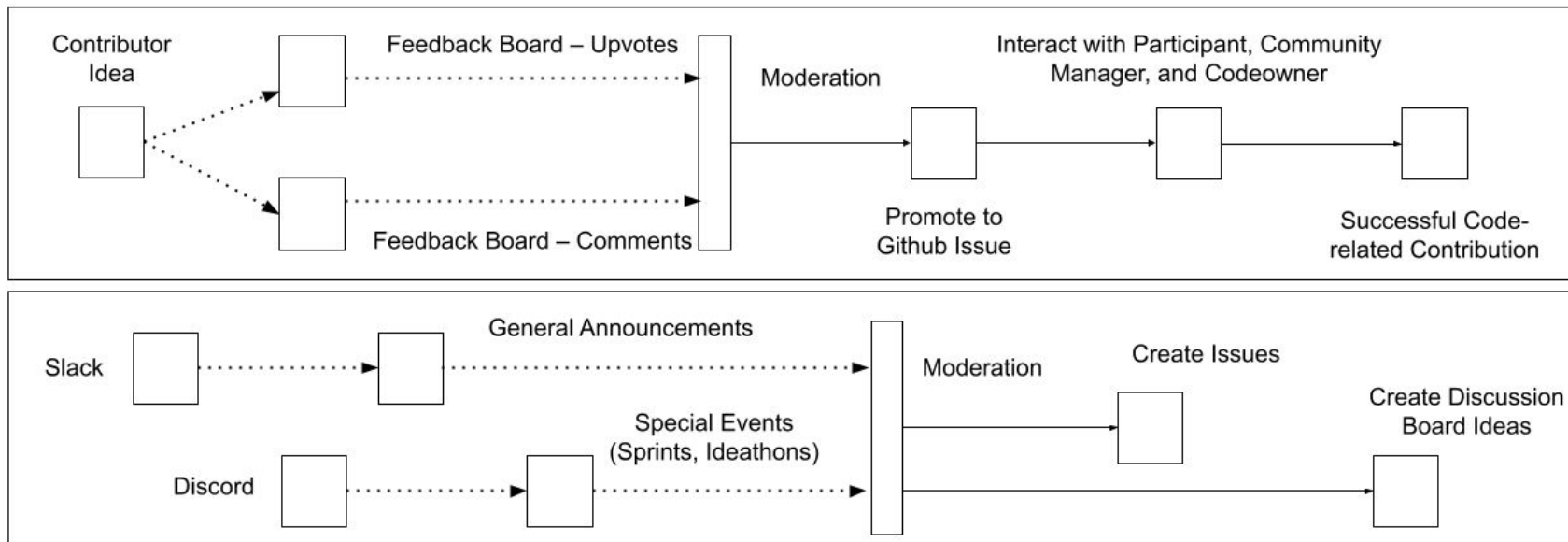


How to Develop Desirable, Useful, and Sustainable Discussion Forums

Participation Type: Leader/Shaper

Becoming a Discussion Leader

Discussion Board (Illinois App)



Github Discussions (Feedback Board)

Instructions (Please Read)

Illinois (and Rokwire) App Discussion and Feedback Board

balicea

Search all discussions

Sort by: Latest activity

Label

Filter

New discussion

Categories

- View all discussions
- General
- Ideas
- Instructions (Please Read)
- Polls
- Q&A
- Show and tell

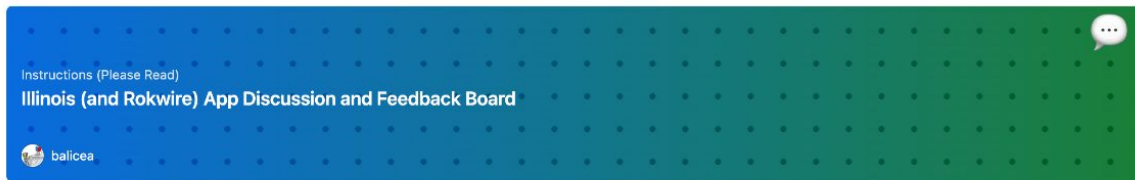
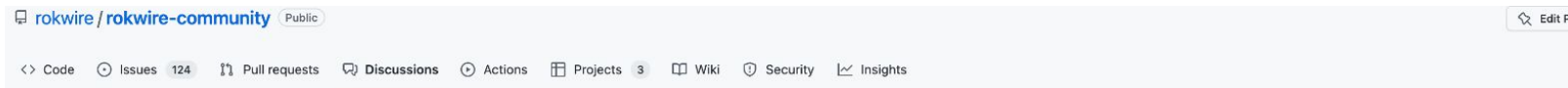
Most helpful

Be sure to mark someone's comment as an answer if it helps you resolve your question — they deserve the credit! 💖

Discussions

- 1 Rokwire Community @ GSoC
balicea asked on Feb 18, 2022 in Show and tell · Unanswered
- Illinois (and Rokwire) App Discussion and Feedback Board
community-admin
balicea announced on Oct 12, 2021 in Instructions (Please Read)
- 1 Creating a New Set of Rokwire Instances
balicea asked on Oct 12, 2021 in General · Unanswered
- 2 Apps for Organizing Research Groups
balicea asked on Sep 29, 2021 in Ideas · Unanswered

Github Discussions (Feedback Board)



Discussion thread with upvotes and downvotes



Categories

View all discussions

- General
- Ideas
- Instructions (Please Read)
- Q&A
- Show and tell

Question/Answer

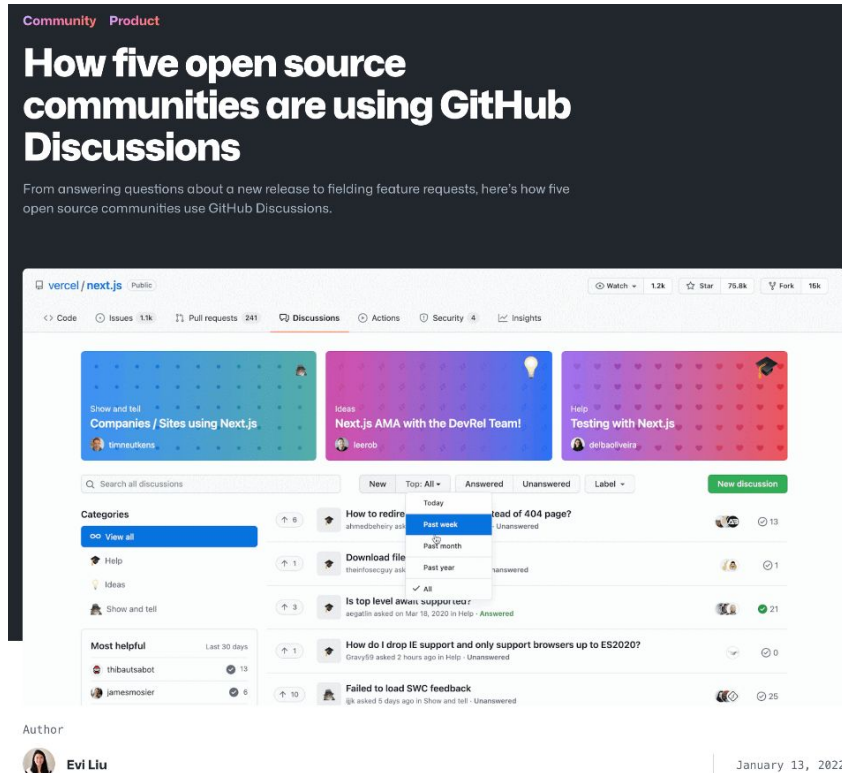
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Most helpful

Be sure to mark someone's comment as an answer if it helps you resolve your question — they deserve the credit! 💖

Github Discussions (Feedback Board, con't)



Answering questions after a major release (React18).

Getting feature requests (Dogecoin).

Core flight system development (NASA).

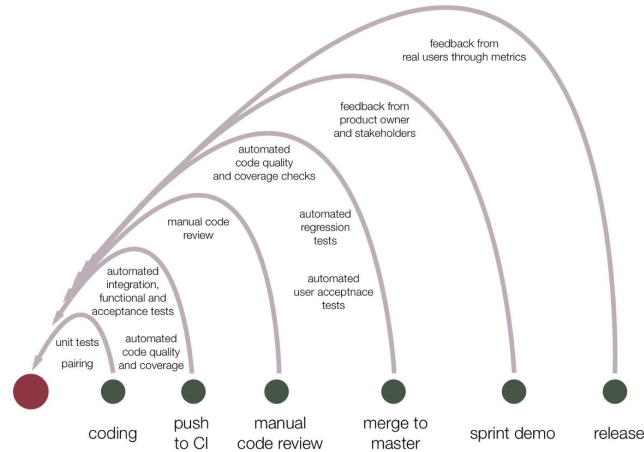
Ordered Timelines for Media (Open Timeline IO - Pixar).

All Phases of Development (Next.js).

<https://github.blog/2022-01-13-how-five-open-source-communities-are-using-github-discussions/>

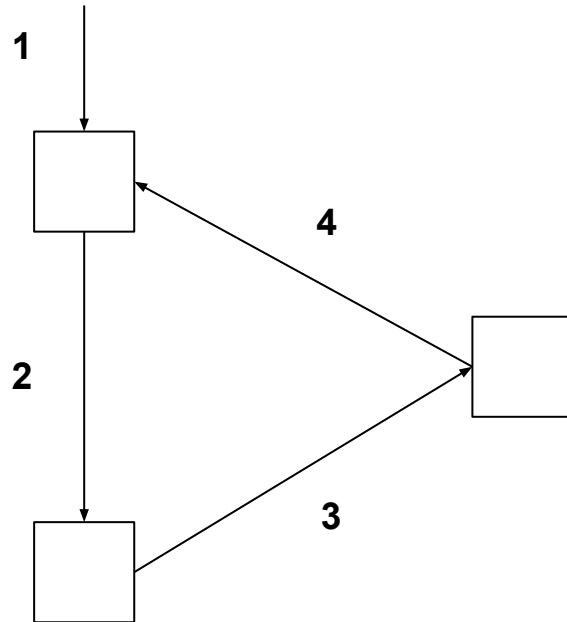
What Are Feedback Loops and Why You Need to Implement Them

<https://kanbanize.com/blog/feedback-loops/>



“Feedback is a central pillar of Agile. Integrating feedback loops into your agile project workflow ensures you will collect fast and frequent feedback from your customers and increases your chances to adapt to emerging changes”.

Four-step Feedback Loop in Agile



1) capture and store the input – this is the data with which we operate every day.

2) analyze the input, gathered from stage one.

3) make decisions based on the insights gained from the second stage.

4) the implementation of the changes we have set forward.

Integrating Discussions with Community Events

Monthly Substack Post on Mobile App Design

Technology Concept

Ohio State Alumni, Ohio State, Ohio State: Discover

Ohio State Kit (Native Swift/Kotlin)
Shared Platforms support all iOS / Android Apps

API / Transformation Layer (node.js/Redis/mysql/CouchDB)

PeopleSoft, Canvas LMS, EAB Advising, Bus System TTM, PARE/GIS, CampusParc, Dining, Blackboard, Events Calendars, Libraries, Registrar, SIMS/Buildings, Alumni CRM, IMG/Athletics, Rave Alerts, 60+ more source systems

Ohio State: Dining, Ohio State: Discover, Ohio State: Find People, Ohio State: Locations, Ohio State: Parking, Ohio State: Safety, Ohio State: Transportation

Benjamin Hancock

Start with a Special Event with relevance to the community.

ROKWIRE FORUM SERIES

DESIGNING THE OHIO STATE CAMPUS APP

A DISCUSSION WITH BENJAMIN HANCOCK

MARCH 30 AT 3:30PM-5:00 ON ZOOM

Benjamin Hancock is the Director of Application Development at The Ohio State University. He will speak to the Rokwire team about the design and development of the Ohio State campus mobile app and the factors that guide their decisions. The Ohio State app was launched in 2013. In 2021 the Ohio State app had more than 247 thousand unique users and more than 65 million screen views.

Benjamin Hancock will be interviewed by William Sullivan, followed by discussion where attendees are encouraged to ask questions. Submit questions beforehand to Brady Alicea at balicea@illinois.edu

Rokwire Forum with Benjamin Hancock: Designing the Ohio State app



ROKWIRE
18 subscribers

Subscribe



0



Share



Download



Clip



Save



...

39 views 10 months ago

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<https://www.youtube.com/watch?v=9Q1P4RIPW3A>

Monthly Substack Post on Mobile App Design (con't)

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Ohio State: Dining, Ohio State: Discover, Ohio State: Find People, Ohio State: Locations, Ohio State: Parking, Ohio State: Safety, Ohio State: Transportation

Rokwire Forum with Benjamin Hancock: Designing the Ohio State app

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One big takeaway from the event: success emerges from *doing a few things well*. What kinds of things are engaged with most often? If you are able to make those things work seamlessly, then it is much easier to drive adoption. The Ohio State App has focused on a few core features. Features are added by recognizing a gap and addressing it rather than reinventing the wheel or duplicating an existing app.

Impact

65,141,754
Screen views in the Ohio State App within the past year.
iPad Only

264,074
General article and wellness article views in the Ohio State App within the past year.

247,181
Unique Users in the Ohio State App within the past year.

© 2021 The Ohio State University

Another takeaway is the focus on *reducing friction* in both use and design. Reducing friction means simplifying design elements, making things run smoothly, and quickly allaying user concerns. One example of reducing friction is the notion that *obvious always wins*. In The Ohio State App (below), each button provides enough information for the user to know what it does and whether it is worth their time to click on it. Reducing friction also involves keeping complexity to a minimum, so that a user only encounters essential information. It may be that your minimalist focus reduces the size of your user base a bit, but this also provides a tradeoff of less friction and a better app experience.

Newsletter report on “Campus App Design Principles” that accompanies a YouTube lecture. Summarize and educate on key concepts and issues.

Monthly Substack Post on Mobile App Design (con't)

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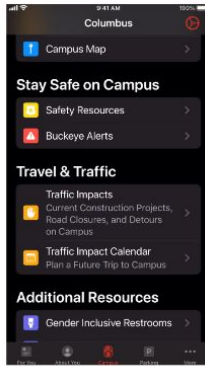
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Monthly Substack Post on Mobile App Design (con't)



The principles of doing a few things well and reducing friction also intersect in interesting ways. For example, new functionality should reduce the friction potentially encountered by users in the course of trying to achieve their goals. In The Ohio State App, features consist of activities core to the student experience, such as bus schedule, grades, account balance, school calendar. In integrating Canvas, only the features that reduced friction most, such as assignment schedules, can be accessed using The Ohio State App.

Continuous design is the key to longevity, guided by the notion that *design is never done*. This involves a long-term commitment to design that goes beyond the latest feature or release. The Ohio State App has been around for over 10 years, with many design changes over that time. Benjamin has graciously shared [a sample design lab](#) in addition to some infographics on annual app usage (from 2019 and 2021).

Expose community to new tools and perspectives, suggest possible new features and directions.



Stream-Feed Integration

Flows of contributor and development activity

- human interactions
- diffusion of skills and code
- task completion.

Stream-Feed Integration

Flows of contributor and development activity

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Flow of media that enables access to short-term and long-term information

- streams are continuous real-time flows of information defined by sources such as live video.
- feeds are curated streams of content from those same sources

What is the difference between a stream and a feed?

<https://www.quora.com/unanswered/Why-does-Quora-not-show-the-users-newly-...>

[Answer](#) [Follow](#) · 34 [Request](#) [2](#) [Downvote](#) [Share](#) [More](#)

You've hidden this ad

Undo

2 Answers



Chris Messina, Organizer at Botness (2016-present)



Answered April 2, 2010

It would seem then that a feed is somewhat curated or selective (as in, an aggregation of discreet elements from potentially disparate sources — and not necessarily time-ordered), whereas a stream is a constant flow of data or content in reverse-chronological order.

4.5K views · [View Upvoters](#) · Answer requested by [Daniel Raffel](#)



27



More



Add a comment...

Add Comment



Jake Kaldenbaugh, Works at the intersection of growing tech cos & finance



Answered April 11, 2010

A stream exists independently of the user. A feed is created by the user for some purpose. However, a feed can be a stream in the case where a user creates a feed out of a stream and vice versa.

500 views · [View Upvoters](#)



2



More

Stream-Feed Integration (con't)

Stream-feed: cognitive advantages for the learner.

- streams are based on what community is producing (discussing, writing) or interested in (papers, images) at any given time
- presented in the order they are posted, each medium is considered a stream.

Stream-Feed Integration (con't)

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To achieve a curated feed, the user sorts through the multiple streams manually.

- resulting feed is driven by human curiosity and based on a non-random set of interests

In context, serendipitous themes begin to emerge: interesting posts that might form a coherent topical theme.

The screenshot displays a social media interface for the Orthogonal Research and Education Laboratory. At the top, navigation tabs include HOME, PEOPLE/COLLABORATION, ENGAGEMENT, PUBLICATIONS, and OPEN SCIENCE. The main content area is divided into several sections:

- OREL Medium:** A section with a gear icon and the text "Hi everyone!". It features two posts: one by Daniela (@daniela.ciaff) from 4 days ago, and another by Brady Alicea (@brady) from 12 days ago. The second post includes a YouTube link: <https://www.youtube.com/watch?v=YEG6LDCrAwI>.
- Tweets by @Orthogonal_Lab:** A tweet from Florian Levett (@fl_levett) dated Dec 28, 2020, mentioning a beta version of PoCA (Point Clouds Analyst) and providing a GitHub link: github.com/levett/PoCA.
- Resources for and Reflections on AI Debate 2:** A post by Brady Alicea from Dec 28, 2020.
- Ethics at NeurIPS 2020—A small collection of resources:** A post by Jesse Parent from Dec 25, 2020.
- Recap of Orthogonal Lab Activities for 2020:** A post by Brady Alicea from Dec 24, 2020.

Below these sections is a video player for "Orthogonal Research and Education Laboratory" with 37 subscribers, 111 videos, and 3.3K views. The video content is sponsored by Orthogonal Research. The player shows three video thumbnails:

- Saturday Morning Recap:** 12/26/2020. Description: "Saturday morning session for December 26. Discussion and recap of AI Debate 2, in addition...". 4 Views, 0 Likes, 0 Comments.
- Saturday Morning NeuroSim, 12-19:** 12/19/2020. Description: "Featuring Jesse Parent, Akshara, Copi, and Brady Alicea. Follow-up on NeurIPS reflections, the...". 2 Views, 0 Likes, 0 Comments.
- Brady Alicea's lecture to Philosopher's Web ...:** 12/12/2020. Description: "Lecture 'Observer-dependent Models'. Slides available on Figshare...". 0 Views, 0 Likes, 0 Comments.

At the bottom of the video player, there are navigation arrows and a page indicator showing "1 2 >".

Curated Discussion Channels to Support Community (making discussions sustainable)

Slack/Discord Model of Community Discussion



Manage and post links, start convos, lurk and respond to all posts (as a moderator or participant).

- file sharing, chat is indexable and searchable, channel structure and private groups, DMs (as a participant).
- invite people to join (Newsletters, Public Events, other Outreach).
- get people access through link invitation or Launchpass.
- join a channel to become part of the conversation, or tag people to bring their attention to something.

Benefits and Drawbacks

- private wrt the internet, easy to navigate, get feedback and manage content.
- directly answer questions in threaded discussions.
- message avalanche — too many messages per unit attention.
- channel review can tie into your community activities
 - Agile-oriented standup (native to the Slack channel, bot will ask questions once a week and select people will provide an update).
 - formal virtual meeting review (feature Slack channels in a meeting).

Stay Focus on Slack

<https://zapier.com/blog/stay-focused-on-slack/>

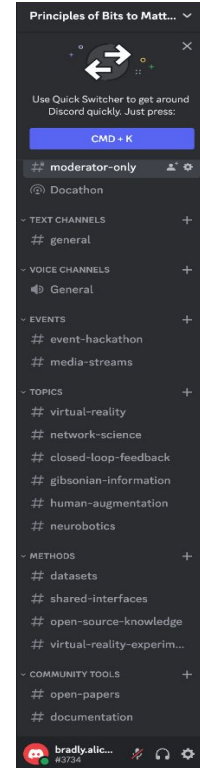
How to keep Slack channels “optimal”

<https://www.pcmag.com/how-to/get-organized-how-to-keep-slack-tidy-scannable-and-not-too-busy>

Slack solved the problem of e-mail threads where people lacked control of the conversation flow.

Set up Slack team/Discord server in a way that is manageable.

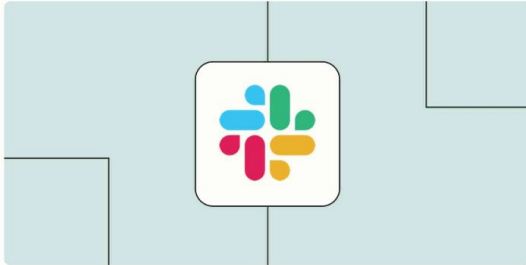
- aggressively *leave* channels you don't need to be in.
- *thread discussions* — and unsubscribe when needed.
- *change* your notification settings.
- declutter and *organize* your sidebar.
- save *actionable* items (and possibly send them to your to-do list).
- schedule away times and *automate*.



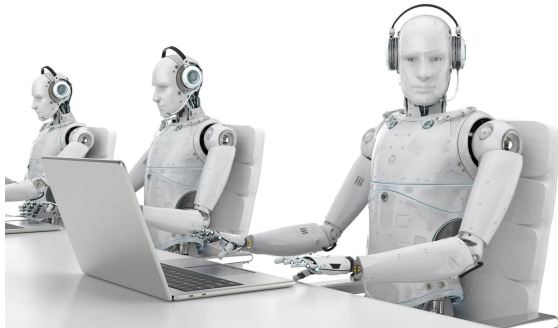
Slack/Discord/Mastodon Bots

How to build your own Slack bot

By Justin Pot - October 24, 2022



<https://zapier.com/blog/how-to-build-chat-bot/>



Programs (Chatbots) that Automate repetitive processes

Reply bots: for weekly stand-ups and other types of chat functions.

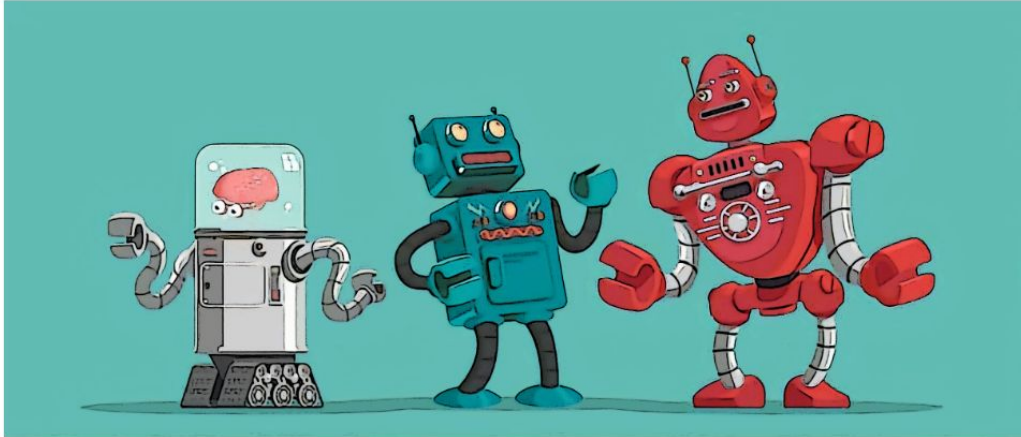
Notification bots: what's happening outside of your channel or platform?

Slash Command bots: call a bot to do specialized tasks (find gifs, make a video call).

How to Build a Bot and Automate your Everyday Work



Tim Grossmann



Most jobs have repetitive tasks that you can automate, which frees up some of your valuable time. This makes automation a key skill to acquire.

<https://www.freecodecamp.org/news/building-bots/>

“Likes and engagement are digital currency and you are devaluing them”

Prisoner's dilemma, zero-sum game:

If I don't bot and you bot, you win. If you don't bot and I bot, I win. If no one bots, everyone wins.

Since there is no incentive for everyone not to bot, everyone bots, so no one wins.

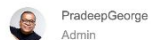
The Discourse Model of Community Discussion

Examples from INCF Neurostars Discourse

About Neurostars

A question and answer forum for neuroscience researchers, infrastructure providers and software developers.

Our Admins



PradeepGeorge
Admin



Mathew_Abrams



leif Leif Larsson

Our Moderators



effigies Chris Markiewicz



emdupre Elizabeth DuPre



oesteban Oscar Esteban



satra Satrajit Ghosh



malin



rwblair Ross Blair



ChrisGorgolewski
Regular



franklin Franklin Feingold



Helena
NMA_admin

Site Statistics

	Last 24 hours	Last 7 days	Last 30 days	All Time
Topics	3	19	139	6.4k
Posts	37	215	941	62.9k
Users	4	28	131	9.5k
Active Users	87	256	498	—
Likes	17	49	151	17.6k

all categories ▾ all tags ▾ **Categories** Latest Top My Posts Bookmarks + New Topic



Category Topics Latest

- Neuro Questions** 5.3k 2 new
This is a place to ask any and all non-software related questions about Neuroscience. Please discuss the software related topics in the Software Support category below.
- Software Support** 130 2 new
Questions and discussions specific to software.
- Announcements** 372
Announcements can be a new project, a software release, a job posting, or any information you want to share that's not a "question".
- Community Chat** 56
A place for friendly conversation, ideas, discussion, and otherwise un-categorizable things in the NeuroStars community.
- Site Feedback** 36
Any questions, concerns, suggestions, etc. that you have about Neurostars, please feel free to leave here.
- Institutions** 38
Category for Institutions that are partnered with INCF to discuss the institution-specific topics.
■ OCNS
- Courses** 179 1 unread
Course information and discussions organised by different Neuroscience community/organisations.
■ ABCD ReproNim ■ Neurohackademy
■ Neuromatch Academy 1 unread
- GSoC** 239 2 unread
This is the workspace for the INCF Google Summer of Code (GSoC) as well as Google Season of Docs projects.
■ GSoC ■ GDocs

- H** Before and after seem reversed in sdc results figure 2 13m
- J** Field maps for use in susceptibility distortion correction (SDC) of EPI images 8 2h
- S** TDT prevalence inference - confusion matrix 0 3h
- fmrn** Suggestion about ghosting in BOLD images 4 5h
- neuroimaging** How do I apply a mask / overlay using a nifti segmentation? 30 6h
- Z** Scaling step in afni_proc gives infinite values 3 6h
afni, afni_procpy, scaling
- fmrn** Fmripref references directory with "." at the end which does not exist (win10) 0 7h
■ Software Support fmrnprep
- neuroimaging** GSoC 2023 Project Idea 9.1 Multiscale brain circuit modeling using NetPyNE: model conversion and machine learning analysis (175/350 h) 4 8h
■ GSoC python, open-source, netpyne, neuron
- fsl** Brain Atrophy evaluation with FSL between T1 2D and T1 3D sequences 0 10h



The Discourse Model of Community Discussion

All Groups Filter by group type ▾

GSoC_2021_Students 1 GSoC 2021 Student group <a>Request	 GSoC Contributors 16 This is a group for all 2022 GSoC contributors interested in INCF projects. Contact @malin to be added. <a>Request	GSoC Mentors 39 This is a group for INCF mentors who have a project for Google Summer of Code Member	INCF Staff 4 <a>Request
moderators 17 Automatic	Neuromatch academy 5000 Closed	 OCNS Board of Directors 13 This is the group for board members of the Organization of Computational Neuroscience (OCNS). <a>Request	OCNS Student SIG 57 OCNS SIG for PhD students and postdocs in computational neuroscience. This group will be launched with suppor... <a>Request

Participants join groups and use badges for basic competencies

Badges / First Onebox

  **First Onebox**
This badge is granted the first time you post a link on a line by itself, which automatically expanded into a onebox with a summary, title, and (when available) picture.



b.alicea
Bradly Alicea

Granted Mar '22

[GSoC 2022 Project Idea 22.1: GNNs as Developmental Networks](#)

Others with this badge (349)

Discourse Style of Organizing Community Discussion

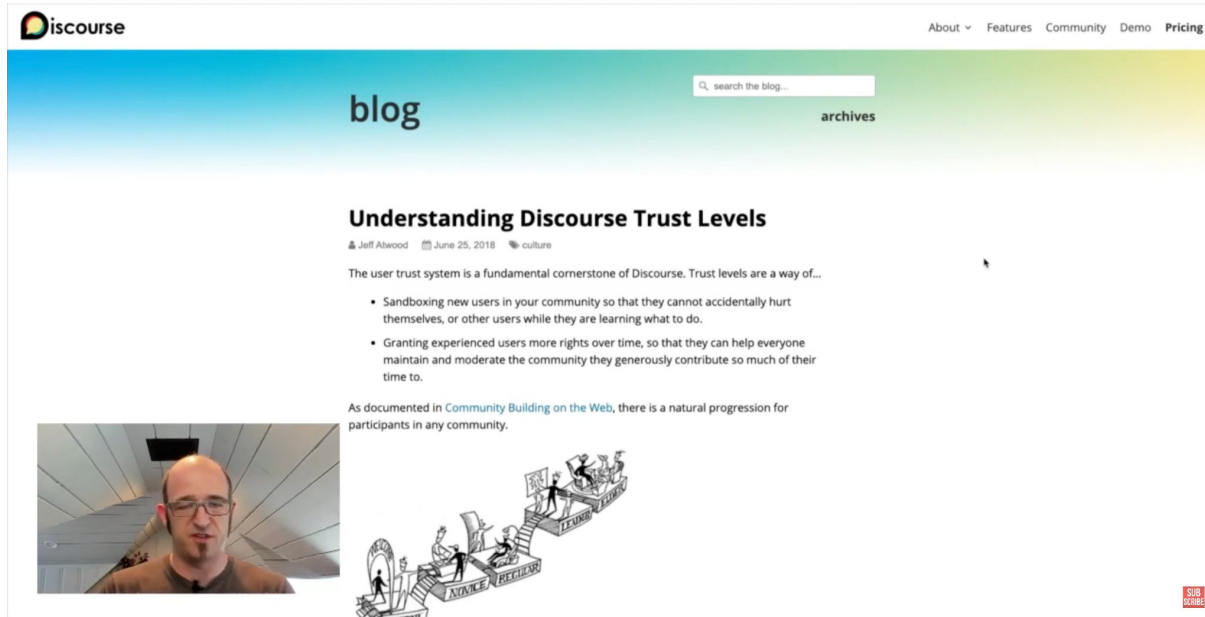
Visibility (interface design matters):

- themed buckets of discussion. Categorization using colored badges. Discovery of similar topics.
- use Markdown for message threads (images and stylized text in discussion).

If you have 1000 users, who is most active and how could you best leverage their efforts?

- most active community members → incentivized for effort.
- less active community members → incentivize to become more active.

Discourse Style of Organizing Community Discussion (con't)



The screenshot shows a Discourse blog post. At the top left is the Discourse logo. At the top right are navigation links: About, Features, Community, Demo, Pricing. Below the navigation is a search bar with the text 'search the blog...' and a link to 'archives'. The main heading of the post is 'Understanding Discourse Trust Levels'. Below the heading is the author's name 'Jeff Abwood', the date 'June 25, 2018', and a tag 'culture'. The post text begins with 'The user trust system is a fundamental cornerstone of Discourse. Trust levels are a way of...' followed by a bulleted list: 'Sandboxing new users in your community so that they cannot accidentally hurt themselves, or other users while they are learning what to do.' and 'Granting experienced users more rights over time, so that they can help everyone maintain and moderate the community they generously contribute so much of their time to.' Below the text is a video player showing a man with glasses and a goatee. To the right of the video is a diagram illustrating trust levels with a staircase and figures on different levels labeled 'NOVICE' and 'RETURN'. A small 'SUBSCRIBE' button is visible in the bottom right corner of the page.

Discourse (user) trust levels

Jono Bacon YouTube: <https://www.youtube.com/watch?v=UkxNL-- Q88>

Discourse Blog: <https://blog.discourse.org/2018/06/understanding-discourse-trust-levels/>

Discourse Style of Organizing Community Discussion (con't)

Discourse trust levels (compare with Wikipedia Contribution Type Counts)

Three types and five levels of community member:

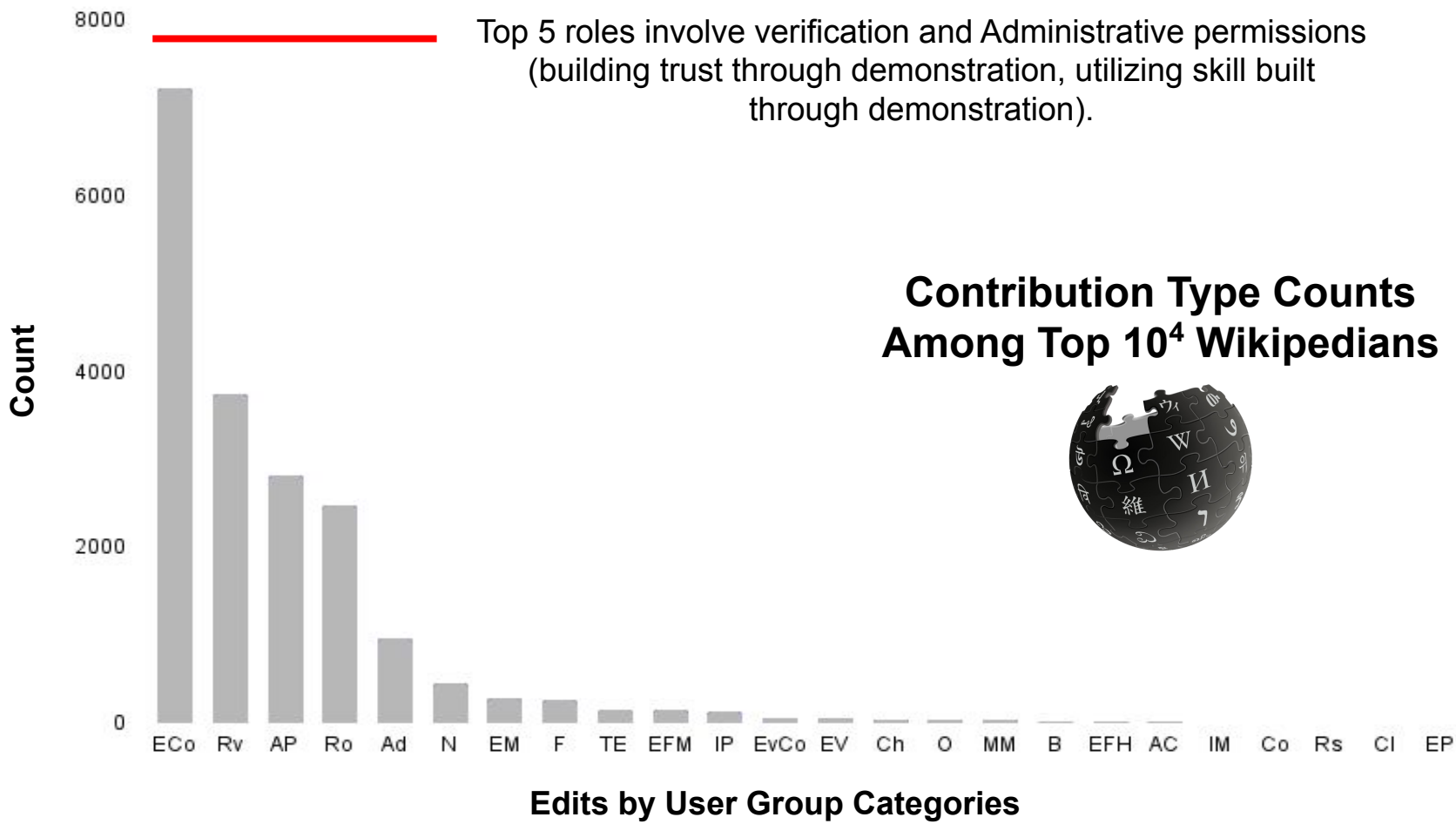
- types: casual, regular, and core.
- levels: visitor, novice, regular, leader, elder.

Criterion for becoming a “member”:

- badges: visiting on at least 15 days (not sequentially), casting or receiving at least 1 like, replying to at least 3 different topics, entering at least 20 topics, reading at least 100 posts, spend a total of 60 minutes reading posts.

Badges enable community members to do greater things, become more involved (higher on the community commitment curve).

Top 5 roles involve verification and Administrative permissions (building trust through demonstration, utilizing skill built through demonstration).



Minimum Viable Community: <https://www.commsor.com/post/minimum-viable-community>



The smallest (but not bare-bones) group of people supporting programs where members will find value.

The smallest group of people needed to come together for a shared purpose.

Minimum Viable Community (con't)

Tips

- start small and scale as you have more insight into what really works for your members.
- communities are inherently unique in terms of audience, size, and scope.
- take an iterative approach to build community and build over time, but don't be minimalist to start.

Benefits

- resources don't need to be stretched.
- a better understanding of customer needs.
- get feedback and scale faster.