

Tomomi Imura / Slack

*Delivering a Global Teaching Method:
Because we learn things differently*



wifi: huonesgguest p: tryharder



Because We All Learn Things Differently

Supporting Diverse Developers

Tomomi Imura (@girlie_mac)

#DevRebSummit



Tomomi Imura

@girlie_mac

Slack

2017



Slack API

2016



Nexmo API

2014



PubNub API

2012



HTML5 & Windows Mobile

2010



webOS Mojo.js / Enyo.js

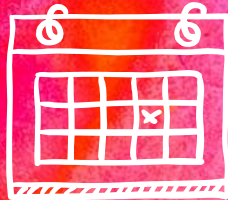


A vibrant watercolor background in shades of pink, red, and orange. The background is splattered and textured. In the upper center, there are three white line-art icons: an airplane on the left, a planet with rings on the right, and two five-pointed stars positioned between them.

#DevRelLife

Globetrotting
(ooh yeah!)





#RealDevRelLife

- × Create awareness
- × Give inspiration
- × Outreach
- × Engineering
- × Dev product feedbacks
- × Create developer ecosystem
- × Improve developer experiences
- × Support
- × Developer education etc.

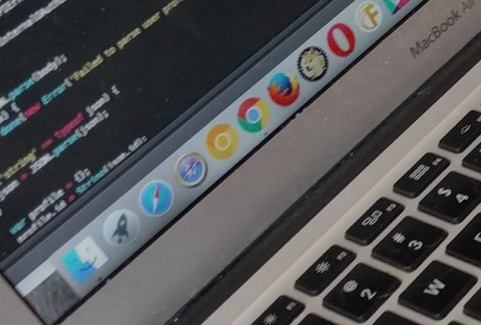




Creating instructional materials for developers



```
function foo() {  
  // ...  
}  
  
function bar() {  
  // ...  
}  
  
function baz() {  
  // ...  
}
```



Goal

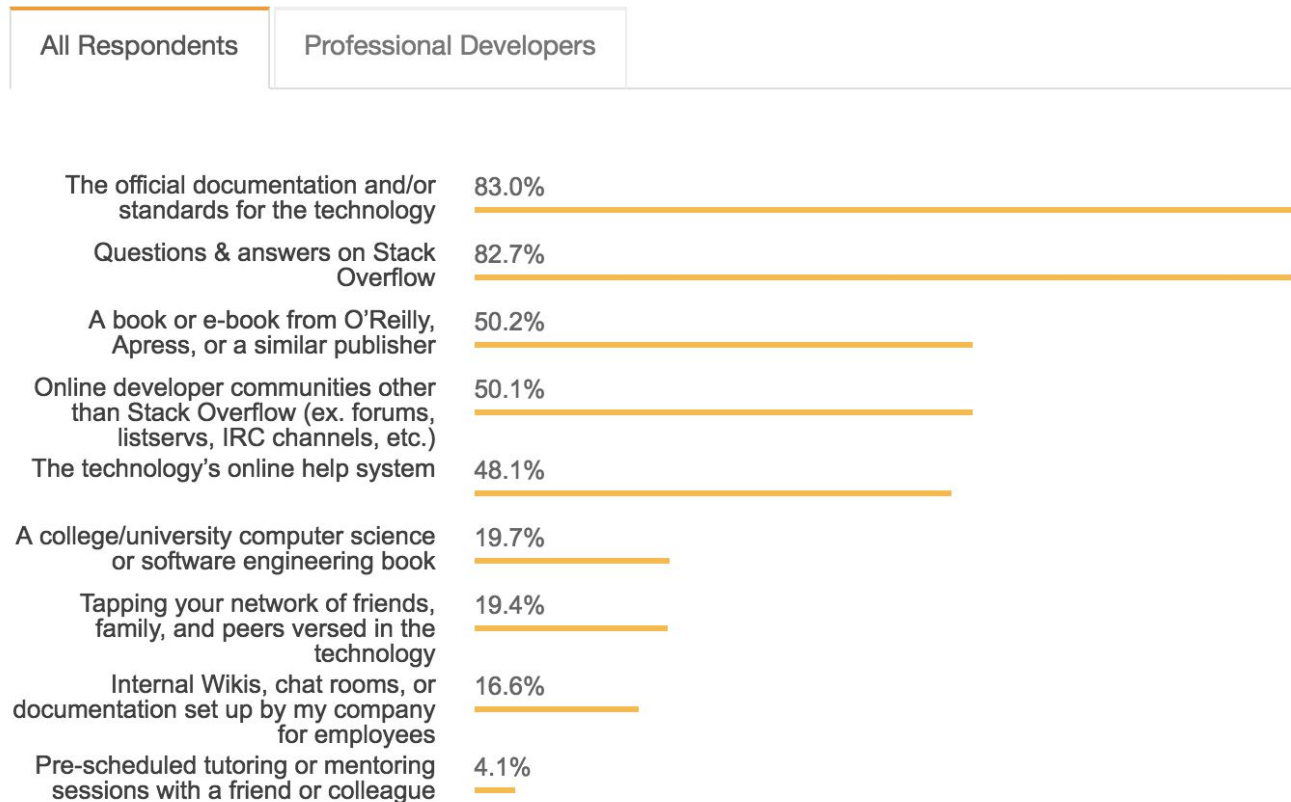
Make it easy for developers to understand the (APIs | SDKs | tools | platform | technology) to build (apps | services)



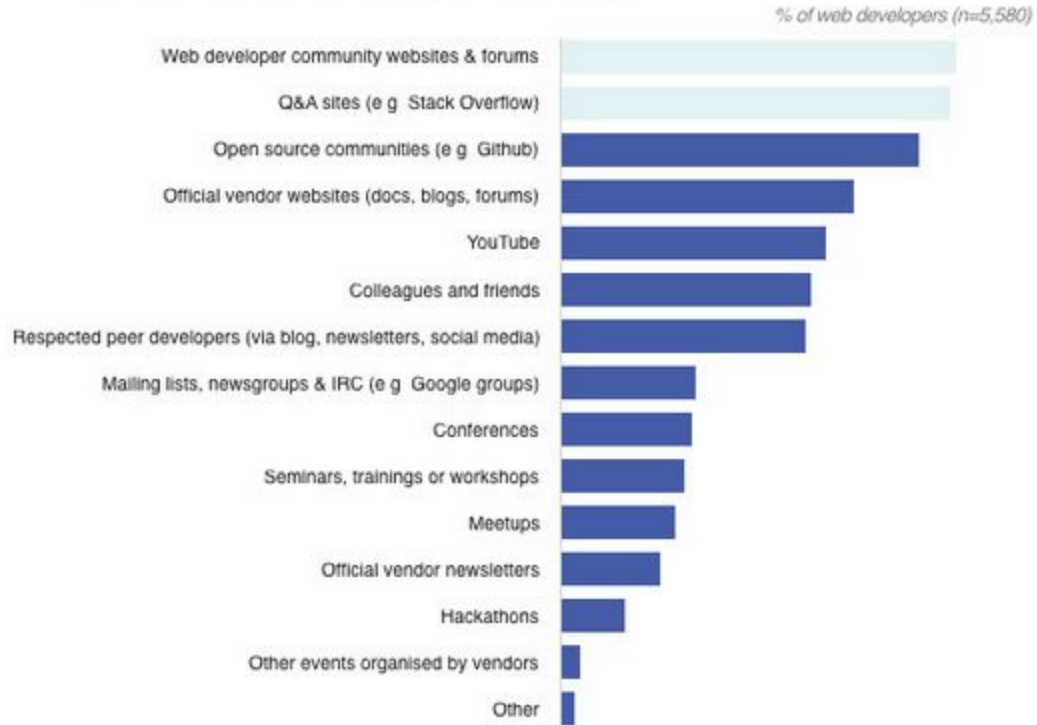
How/Where Do Developers Learn?



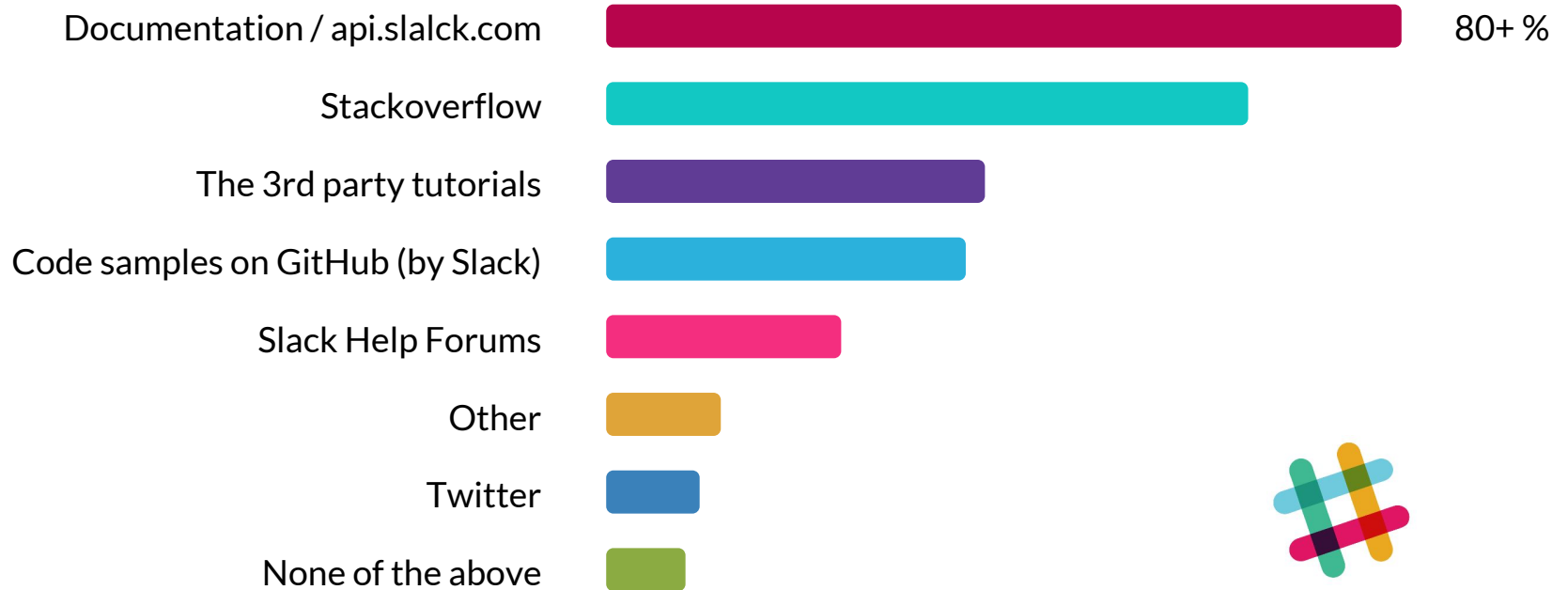
Ways Developers Learn on Their Own



Web developers look to community sites & forums and Q&A sites



Where do you currently get help and info about building on Slack?



What? not 100% devs read docs!?

“RTFM!!!”

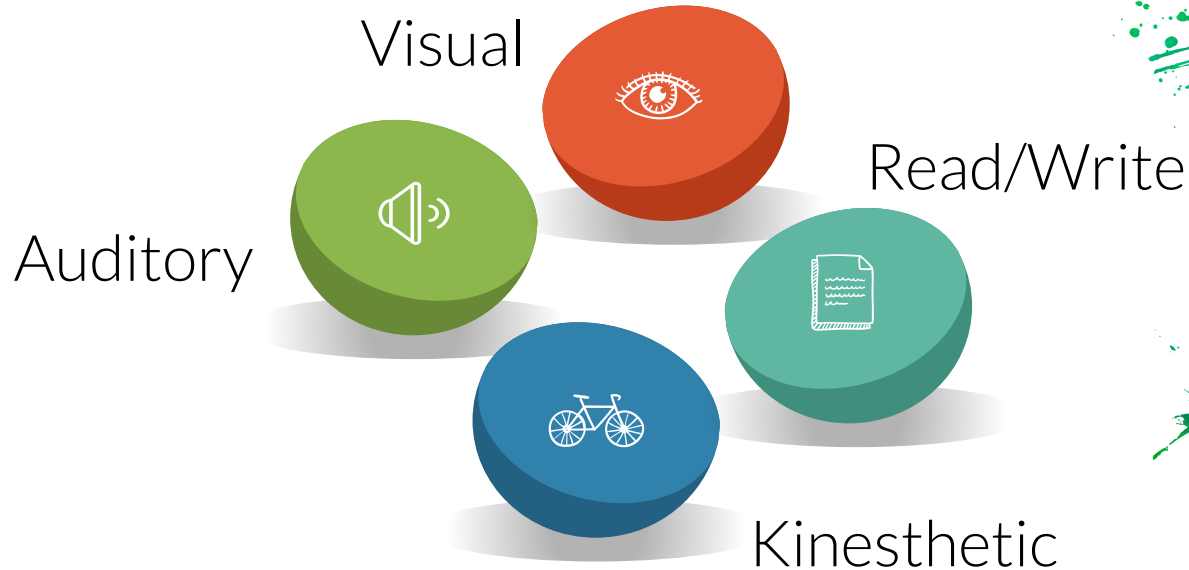
Read the F-ing Manual! or maybe docs are not the best approach for everybody...

How do people
learn most
efficiently?



General Learning Styles

VARK Model Theory - Fleming and Mills (1992)



Visual (V)

Prefers the **depiction** of information in maps, diagrams, charts, graphs, flow charts, and all the symbolic arrows, circles, hierarchies and other devices



Leave a gap at the top.



Smear a line of wasabi.



Add ingredients.



Press to the seaweed.



Tighten into a roll.



Auditory (A)

Prefers information that is “**heard or spoken.**”

They learn best from lectures, group discussion, radio, email, using mobile phones, speaking, web-chat and talking things through.



How To Roll Sushi Rolls - How To Make Sushi Rolls

Read/Write (R)

Prefers information displayed as **words**.

This preference emphasizes text-based input and output – reading and writing in all its forms but especially manuals, reports, essays and assignments.



@girlie_mac

Kinesthetic (K)

Perceptual preference related to the use of **experience** and **practice** (simulated or real).

Either through concrete personal experiences, examples, practice or simulation.





Applying the theory for **developers**



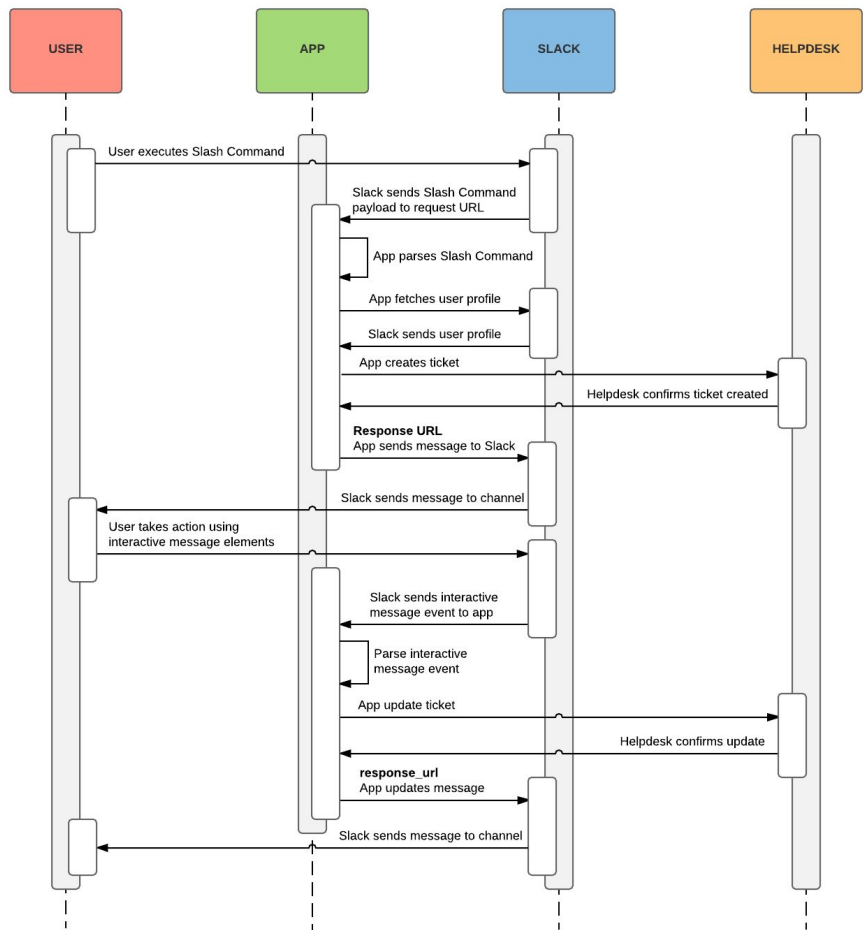


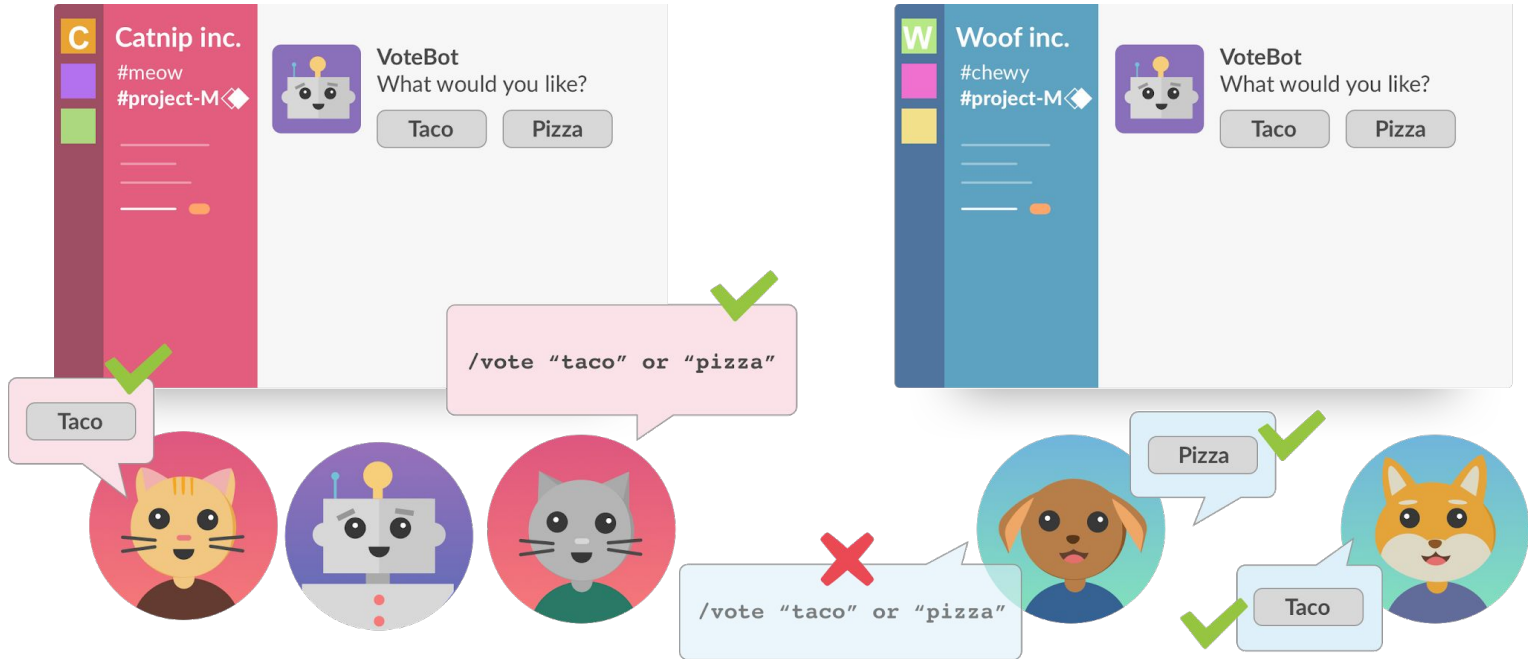
Visual

Effective Elements for Visual Learners

- ★ Diagrams
- ★ Images
- ★ Screenshots
- ★ GIF animations
- ★ Videos
- ★ Screencasts







Hooli ▾
● Tomomi Imura

All Threads

Channels +

cats

general

random

secret-cats

Direct Messages +

♥ slackbot

● Tomomi Imura (you)

● hwz

+ Invite People

Apps +

● announcebot

○ birthdaybot

● Clipt

● polly

#cats
☆ | 👤 1 | 🗨️ 0 | ➦ Add a topic


📞 ⓘ ⚙️ 🔍 Search @ ☆ ⋮

Today

Clipt APP 11:39 AM
was added to this conversation by Tomomi Imura.

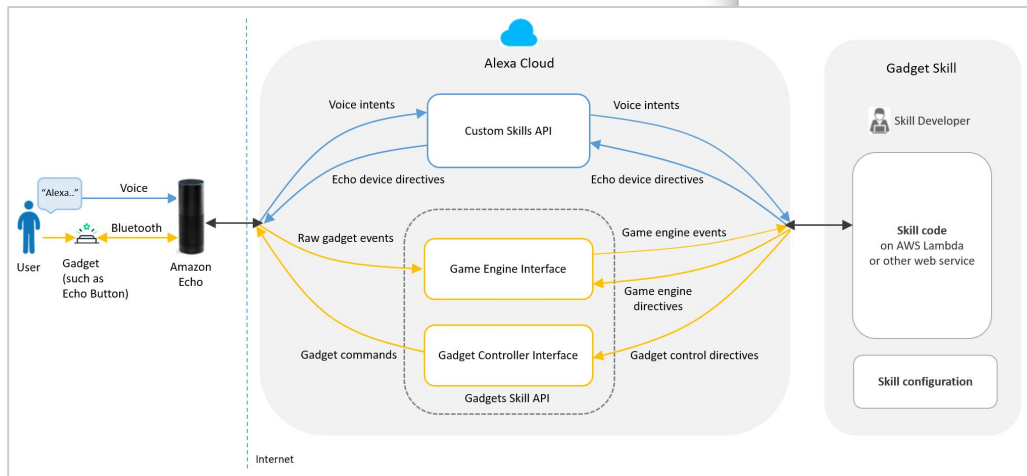
Tomomi Imura 12:05 PM
It is raining

Tomomi Imura 2:56 PM
https://cdn.pixabay.com/photo/2018/02/25/15/22/mammal-3180832_1280.jpg (5 kB) ▾



+ Message #cats @ 😊

Amazon Alexa Tutorials w/ a lot of screenshots & diagrams



The screenshot shows the Amazon Developer console page for "Get a Refresh Token | Alexa Voice Service". The page title is "amazon alexa" and the URL is <https://developer.amazon.com/docs/alexa-voice-service/get-a-refresh-token.html>. The page content includes a terminal window with the following commands:

```
cd /home/pi/  
sudo bash startsample.sh
```

Below the terminal window, the text reads: "Once the App starts, startup debug messages will start scrolling through the window rapidly, and you'll see a notification that your device is checking for Authorization. Look for the box with the URL and the code you need to authenticate your device:"

The screenshot also shows two terminal windows. The left one displays the output of the `startsample.sh` script, with a red box highlighting the code that needs to be entered into the Amazon app. The right one shows the Amazon app's "Register Your Device" screen, which prompts the user to enter the code from the terminal.

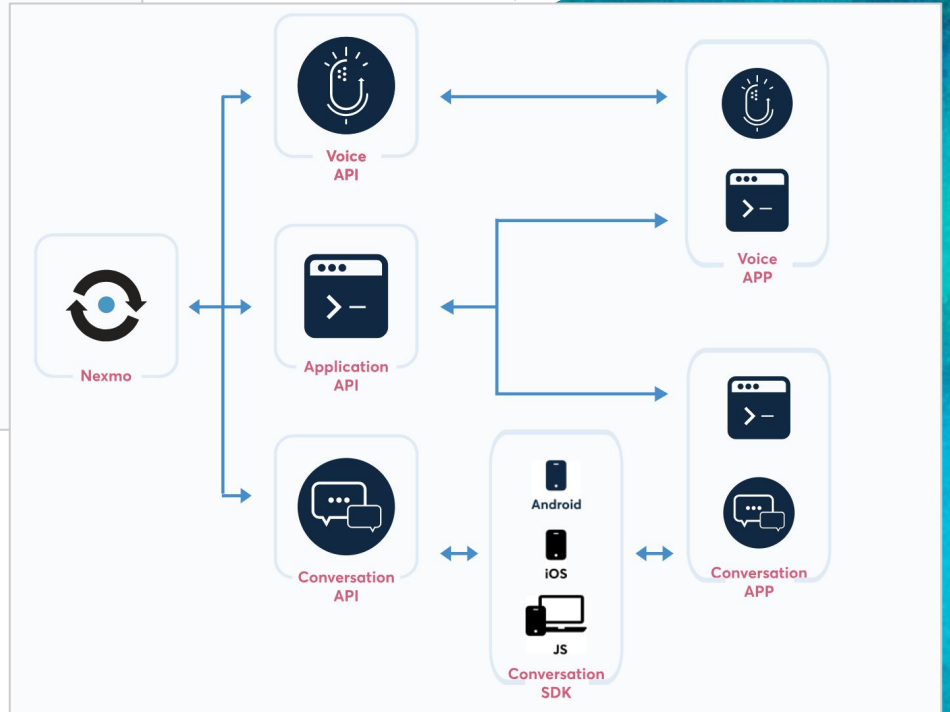
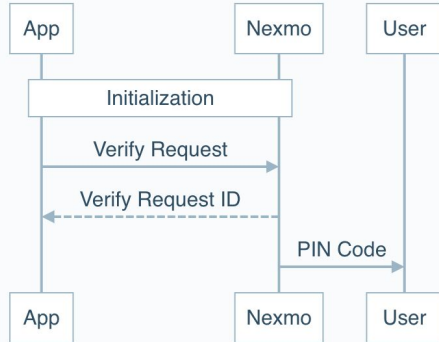
Note: If your terminal window repeatedly shows the **Checking for authorization** message, scroll up until you find the required code. You must keep the sample app running while you input the code.

Using any internet-connected device, go to amazon.com/us/code to log in with your credentials and input the code provided by your sample app. You'll get a success message, and your sample app should be ready to go!

Nexmo: Tutorials w/ flows & diagrams

Enforce phone number verification

Using Verify you send and validate a one time PIN using 2 API calls. In the first call you send the user's phone number, Nexmo generates the PIN and delivers it to the user's phone.



Adafruit

Lots of photos & visual helps



StarFlower Neopixel Strand with MakeCode

Clip 3d printed flowers
onto an addressable
Neopixel strand

[Introduction](#)

[Wiring Diagram](#)

[3D Printing](#)

[Assembly](#)

[Programming with
MakeCode](#)

3D PRINTING

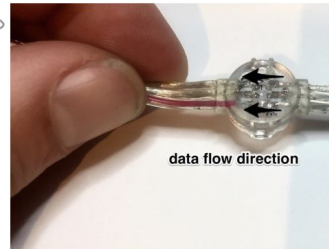
MAKECODE

CIRCUIT PLAYGROUND / EXPRESS



Assembly

by [Erin St Blaine](#)



NeoPixel color data must travel from the "in" end of the strand to the "out" end. Examine the backs of the pixels *very* closely. Printed on the PCB, you might see either some data direction arrows, or the words "IN" and "OUT" between pads. The weatherproofing epoxy makes things murky and you may need to look at several pixels before finding one. This is important! If you connect the microcontroller to the wrong end, the lights won't work.

If you have multiple LED strands, plug them into each other to create one long überstrand.

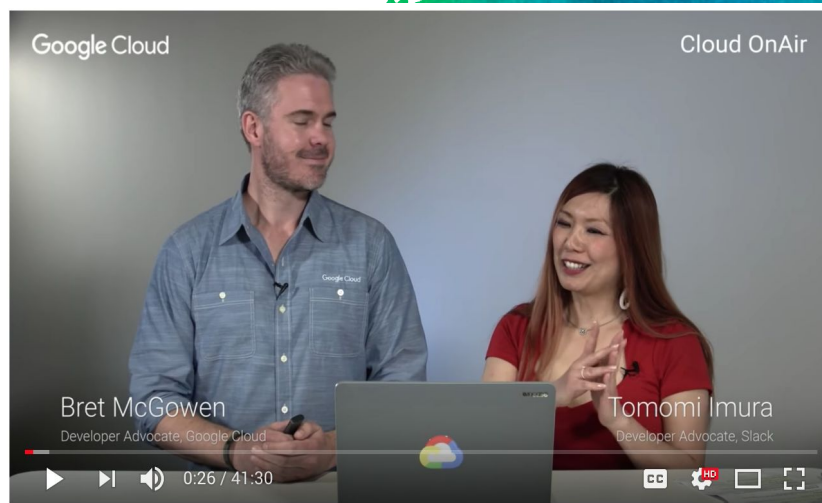


Auditory

Effective Elements for Auditory Learners

- ★ Lectures
- ★ Conferences
- ★ Meetups
- ★ Videos
- ★ Webinars / Livecast
- ★ Podcasts

YouTube



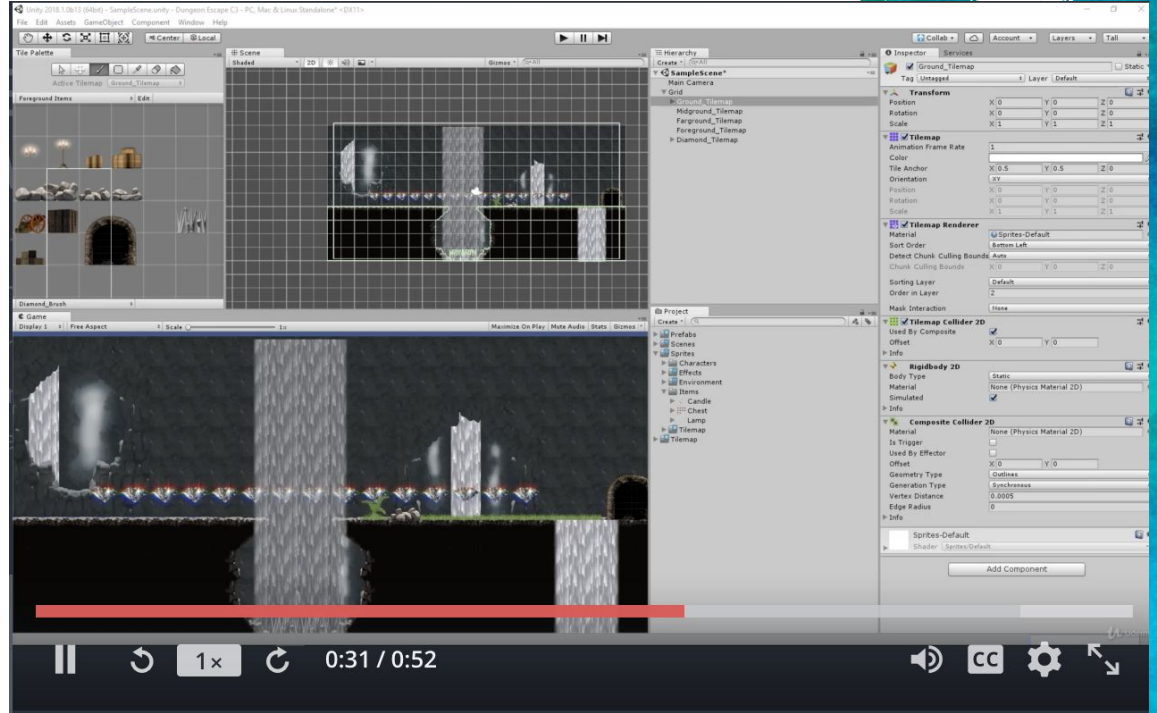
Serverless Chat Bots with Slack & Google Cloud

Microsoft Channel 9

The screenshot shows a web browser window with the URL <https://channel9.msdn.com>. The page features the Channel 9 logo and navigation links for 'all content', 'shows', and 'events'. A search bar and a 'sign in' button are also present. The main content area displays a large video player for 'The Xamarin Show' episode titled 'Prism Template Studio & Developer Toolkit for Visual Studio for Mac with Dan Siegel', with a duration of 17:27 and a 'view episode' button. To the right, there is a grid of five smaller video thumbnails:

- Internet of Things Show**: Provisioning IoT devices at scale - The Demo (09:56)
- The Open Source Show**: How to Meetup: Hosting and Finding Community Events (07:09)
- Five Things**: Episode 21: Five Things Kubernetes Can Do for You (06:31)
- AI | The Show**: Building an Intelligent Bot: Conference Buddy

Unity Course on Udemy





Read & Write

Effective Elements for Read/Write Learners

- ★ Docs
- ★ Written tutorials
- ★ Technical articles
- ★ Books
- ★ Source code (maybe)
- ★ Forums / Slack groups (maybe)



Kinesthetic

Effective Elements for Kinesthetic Learners

- ★ Real-life coding experiences
 - online (from code samples)
 - in-person
- ★ Workshops / Labs
- ★ Hackathons
- ★ Interactive docs & tutorials

Stripe: Interactive tutorials

Try Now

Try the Stripe API in seconds. Create your first customer, charge, and more by following the steps below.

- 1 Card
- 2 Customer
- 3 Charge
- 4 Plan
- 5 Subscription
- 6 Success!

As a first step, credit card information is sent directly to Stripe, ensuring sensitive data never hits your servers. The code below creates a *token* with Stripe Elements for the test card 4242 4242 4242 4242.

```
1 var stripe = Stripe('pk_test_g6do5S237ekq10r65Bnx06S0');
2 var elements = stripe.elements();
3
4 var card = elements.create('card');
5 card.mount('#card-element');
6
7 var promise = stripe.createToken(card);
8 promise.then(function(result) {
9   // result.token is the card token.
10 });
```

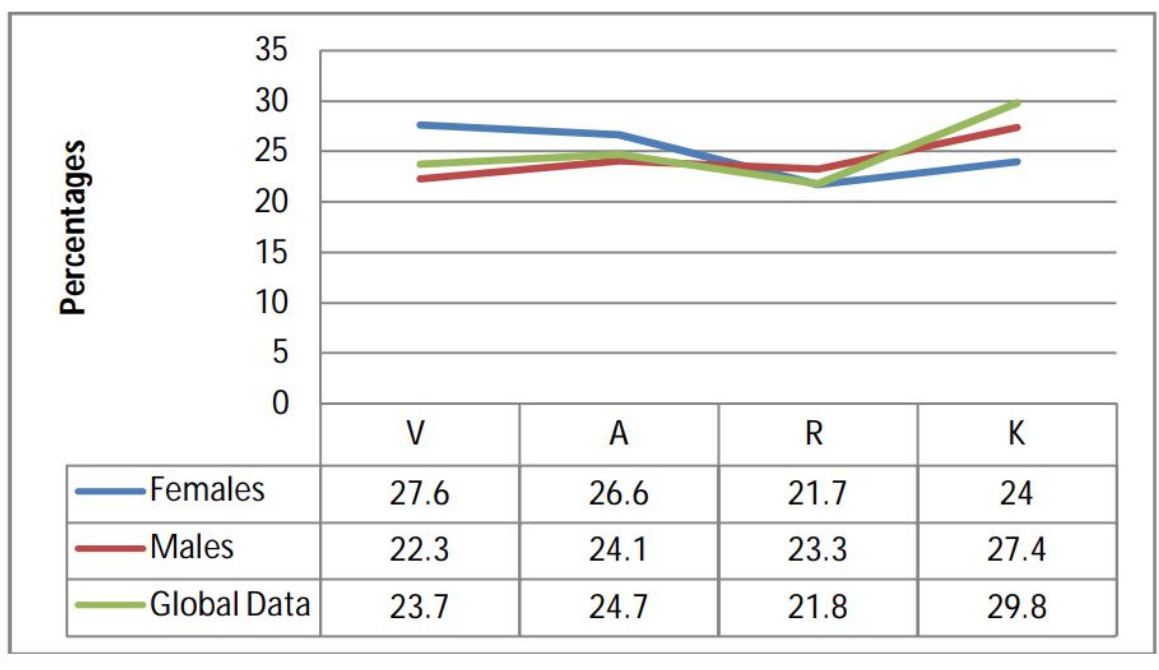
Name Jane Doe

Card Card number

MM / YY

Submit

Usage: Click "Submit" to create a token.

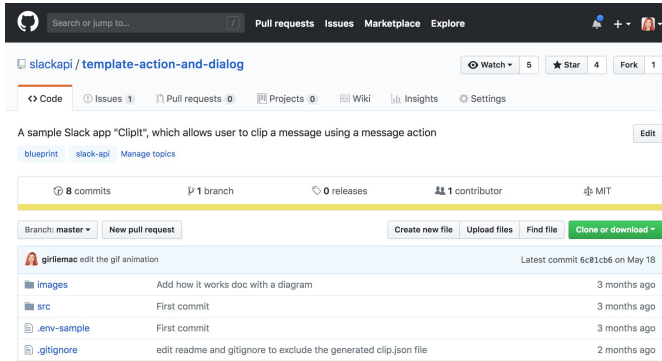


Percentages of V, A, R, and K scores from Questionnaire

“Understanding Engineering Students’ Learning Styles” (2017) Muna Abdulla O. Balfageeh . Ph.D.
International Journal of Linguistics and Communication

Recycling Content

Code once & create a few learning materials



Code samples



- ★ README.md (Doc)
- ★ Written tutorial
- ★ Video tutorial
- ★ Webinar
- ★ Talk / Presentation
- ★ Workshop



Cats ?

Cats & Technology

HTTP Status Cats (<http.cat>)



301

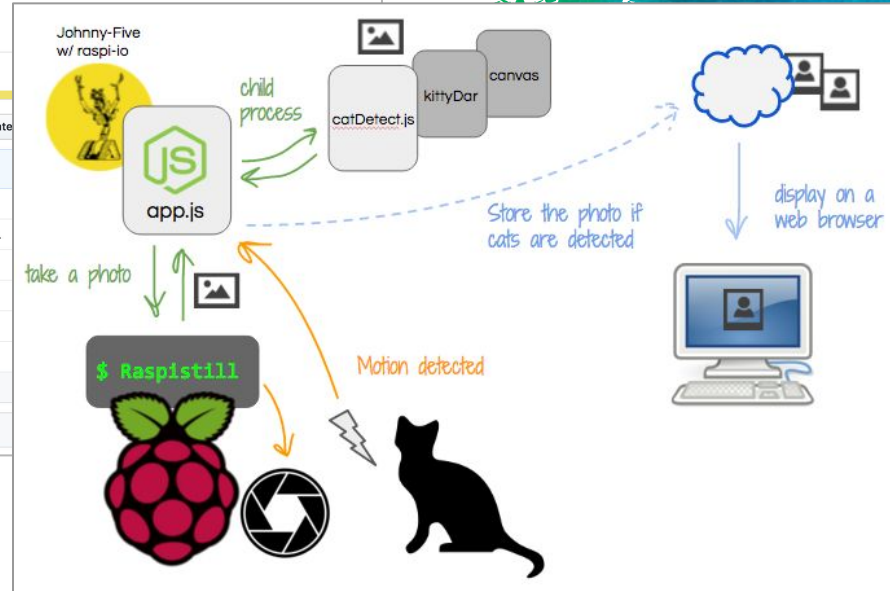
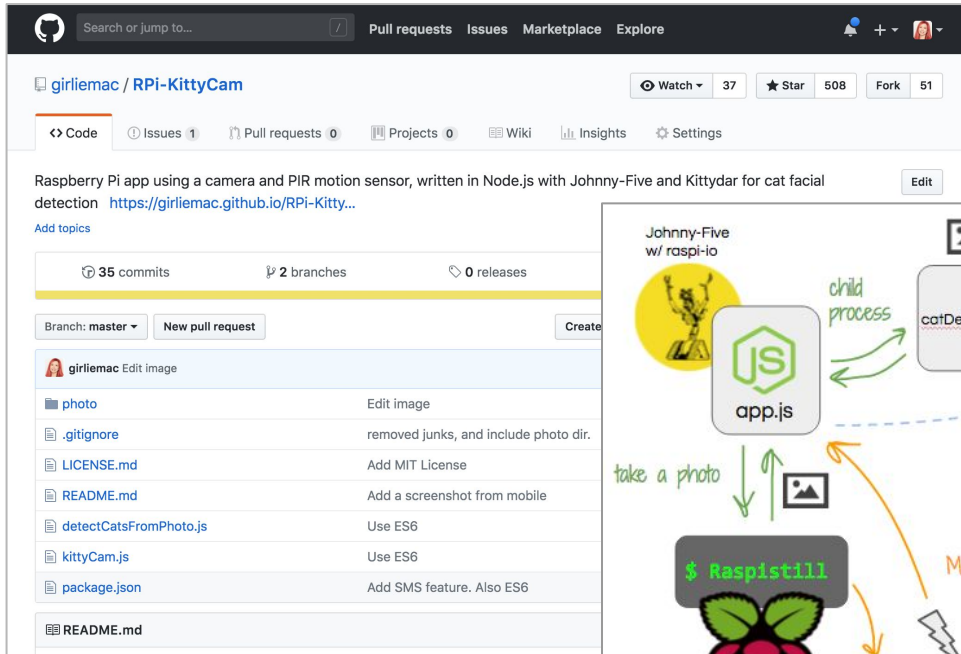
Moved Permanently



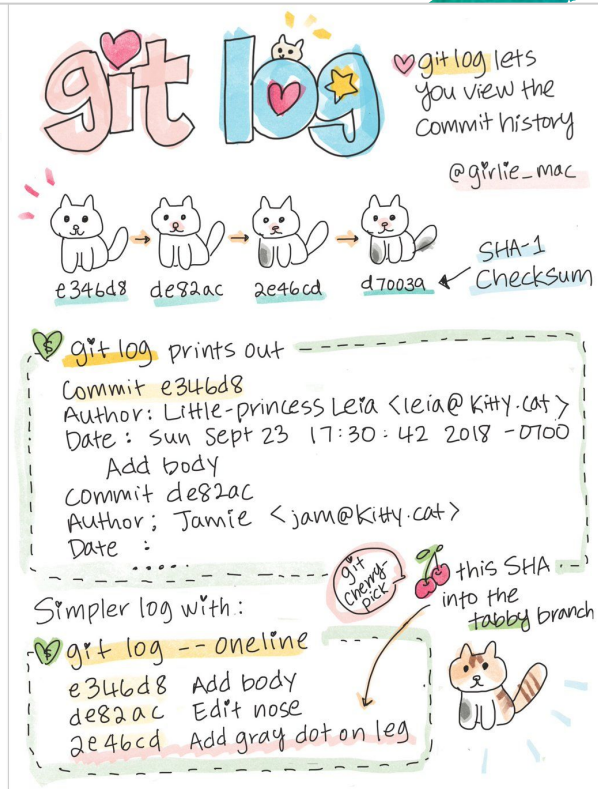
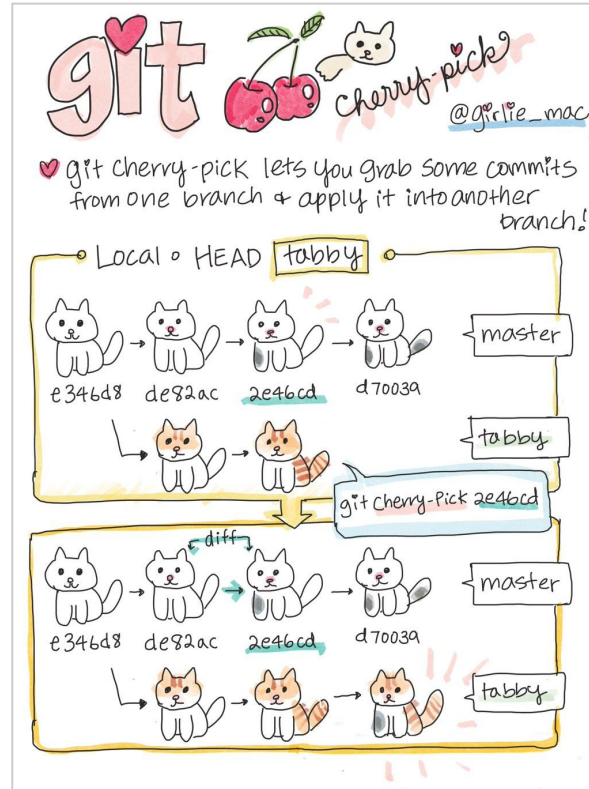
414

Request-URI Too Long

Cats & Technology - Raspberry Pi KittyCam



Git purr





Diverse Audiences

Developer Diversity

- ★ Gender, race, age...
- ★ Cultural background
- ★ Academic background - CS or not?
- ★ Coding proficiency / experiences
- ★ Industry - Software, hardware, non-tech like finance, medical, government...
- ★ Language - both code & spoken!

Content Checklist

- ❑ Don't bias! Be inclusive!
 - ❑ “Developer” is *not* “he”
- ❑ Avoid [US]-centric cultural references
- ❑ Newbie friendly content
- ❑ Support more langs - JS, Python, Ruby...
- ❑ Nice-to-have: Localized content

A collection of colorful, diverse toy animals including dinosaurs, horses, and bears scattered around the text. The background is a solid yellow color. The toys are in various colors and patterns, including solid colors, polka dots, and glitter. The animals include dinosaurs (orange, green, pink with polka dots, blue, purple, brown), horses (blue with polka dots, black, pink), and bears (blue, purple with polka dots).

A diverse DevRel team
inspires diverse developers!

Not lost in translation

Reaching broader audiences & communities

Multi-lingual DevRel
members and/or
community members



Helen in Taipei



Tomomi in Tokyo

But the reality is...

- × Hard to hire multilingual people
- × Can't translate docs because-
 - × hard to find technical translators
 - × may lose the brand tone of voice
 - × losing timeliness
 - × the docs are updated too frequently
- × No budget 📁

Something to Try

In budget-conscious ways



Get helps from Local Companies & Community

at regional meetups and events:

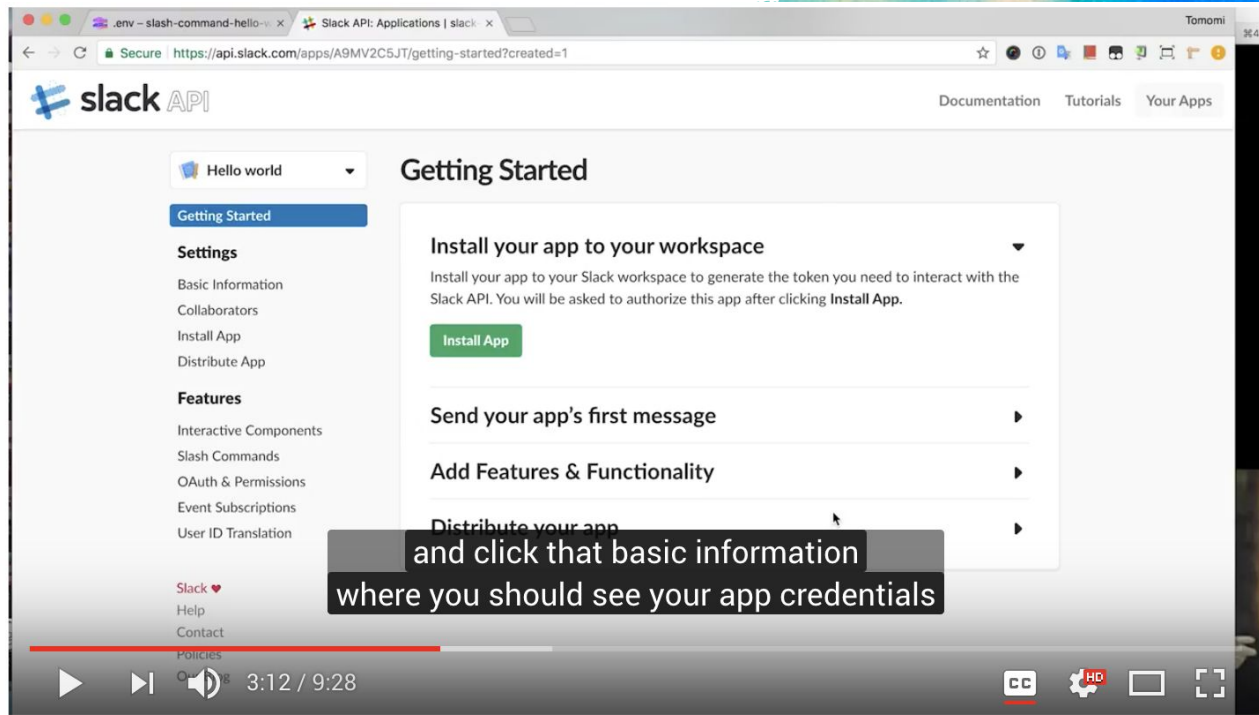
- ★ Community members - *e.g. local JS meetup organizers & speakers*
- ★ Partners
- ★ Customers

Accessible Video Content

Take advantage with YouTube features:

- ★ Closed-caption
- ★ Translations
- ★ Localization meta data

Closed Captions



The screenshot shows a web browser window displaying the Slack API 'Getting Started' page. The page has a sidebar with navigation options: 'Hello world', 'Getting Started', 'Settings' (with sub-items: Basic Information, Collaborators, Install App, Distribute App), and 'Features' (with sub-items: Interactive Components, Slash Commands, OAuth & Permissions, Event Subscriptions, User ID Translation). The main content area is titled 'Getting Started' and contains three sections: 'Install your app to your workspace' with an 'Install App' button, 'Send your app's first message', and 'Add Features & Functionality'. A fourth section, 'Distribute your app', is partially visible. Overlaid on the bottom of the page is a video player interface with a red progress bar and a play button. Two lines of white text on a black background are overlaid on the video player: 'and click that basic information' and 'where you should see your app credentials'. The video player shows a timestamp of 3:12 / 9:28 and includes icons for closed captions, settings, and full screen.

and click that basic information
where you should see your app credentials

Translations

Slack API - Hello World Draft

Built-in commands:

- /remind
- /invite
- /leave
- /away
- /shrug

もしかして Slack に初期設定で搭載されているコマンドは既にお使いかもしれませんね

0:21 / 9:28

Community-Driven Translations



Editable Content


Dev.Opera



Dev.Opera — Работа с уведомл...

Secure <https://dev.opera.com/articles/ru/web-notifications-pubnub/>

Dev.Opera Blog Articles Extensions TV Search Dev.Opera


Tomomi Imura

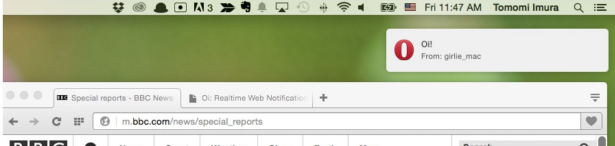
Published on 24 February 2015 in [Articles](#). Available in Russian, English. Translated by Anton Nemtsev . [Edit this article on GitHub](#). Licensed under a [Creative Commons Attribution 3.0 Unported license](#).

[communication](#) · [javascript](#)

Работа с уведомлениями с помощью потоков данных PubNub

Уведомления — отличный способ показать, что у приложения появилась новая информация, например, что вы получили сообщение в Твиттере.

Спецификация [W3C Web Notifications API](#) позволяет браузерам тоже создавать уведомления: это отличный способ привлечь внимание пользователя, ведь уведомления показываются даже если страница неактивна — однако надо иметь в виду, что она все же должна быть открыта в одной из фоновых вкладок, чтобы создать уведомление. W3C не оговаривает, как уведомления должны выглядеть, так что Opera решила использовать нативные уведомления, чтобы браузер казался полностью интегрированным в операционную систему.



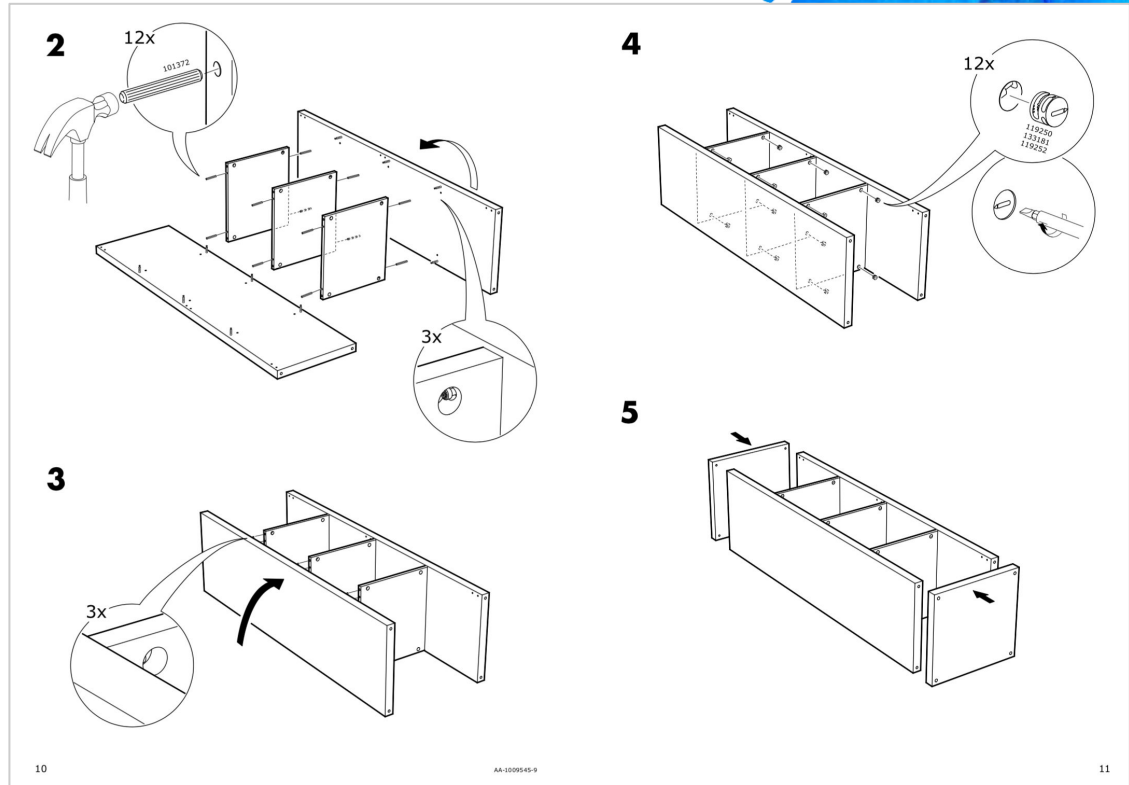
A Picture == 1000 words

A picture is worth a thousand words.

Not just “V” learners of VARK, but
no-word instructions are universal.

Universal Design by IKEA

Assembly Instructions



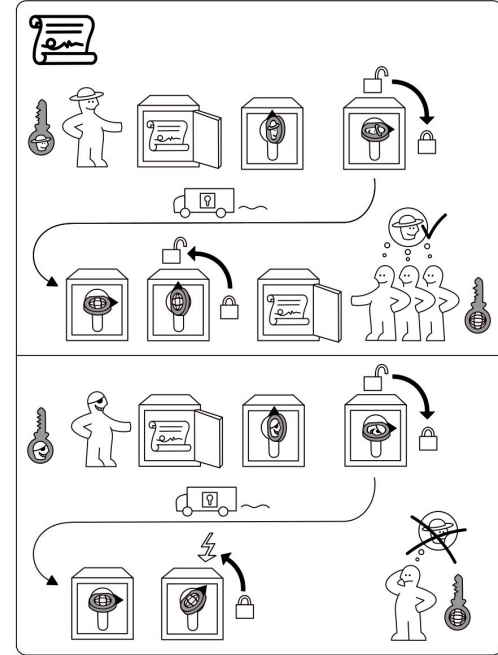
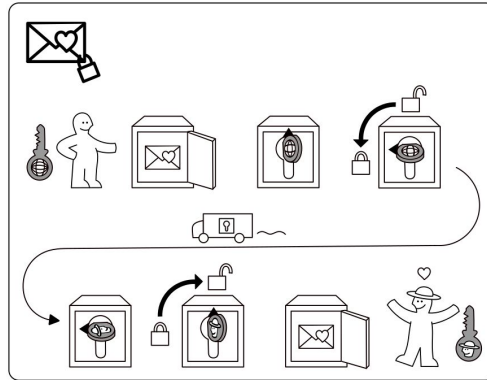
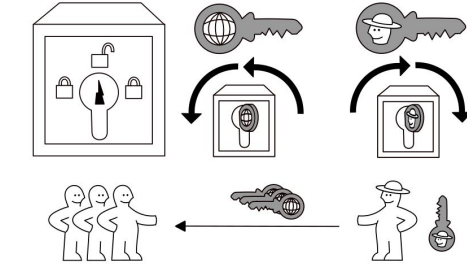
Inspired by
IKEA 🤖

How public key
encryption works

PUBLIC KEY KRÜPTO

idea-instructions.com/public-key/
v1.0, CC by-nc-sa 4.0

IDEA





Japan Dev Community Interesting Facts

bonus slides!

Meetups & Conferences



Dev conferences on weekend

Engineers can't take day off on weekdays



Food served in the end of an evening meetup

Hungry developers



Auld Lang Syne means GTFO!

Anime & Kawaii

- 📖 Kawaii swags & self-publishing manga
- 🐱 Anime costumes
- 👧 Impersonations & “Characters”



kintone developer JP

@kintonedevjp

Follow



明日の **#技術書典5** では、kintone同人誌をお買い上げで「kintoneちゅーとりあるVol.1」に加え、同人サークル編の「kintoneちゅーとりあるVol.2」も差し上げます！

Vol.2は数が少ないので、お早めに！

techbookfest.org/event/tbf05/ci...

Translate Tweet



5:00 PM - 6 Oct 2018

@girlie_mac

<https://twitter.com/kintonedevjp/status/1048724598815043585>



W3C Developer meetup in Tokyo

Apple Safari

サファリ

美しく格好良い。スマートフォンに標準搭載されているブラウザ。

<http://apple.com/jp/safari/>



Mozilla Firefox

ファイヤーフォックス

拡張性が高く、自分好みにカスタマイズできるのが特徴。

<http://mozilla.jp/firefox/>



Google Chrome

クローム

素早さから人気を集める。
ストレスの少ないウェブブラウジングが可能。

<http://google.co.jp/chrome/>



<https://ameblo.jp/memasite/entry-10914407296.html>

GitHub

Kawaii is the key to
success in Japan

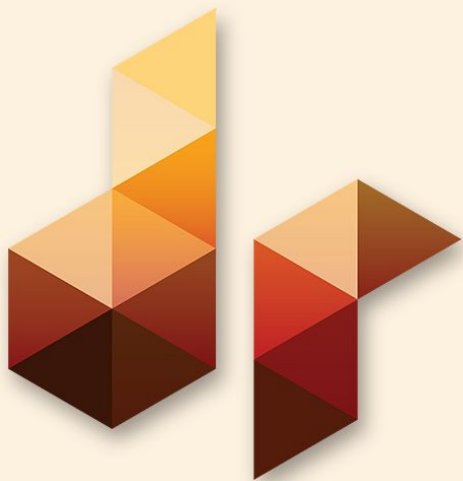
...maybe?





Thank you!

@girlie_mac



Dev Rel Summit

2018 - Singapore



wifi: huonesgguest p: tryharder