Automate the Boring Stuff with Slackbot

Takanori Suzuki

PyCon Thailand 2019 / 2019 Jun 15

Who am I?

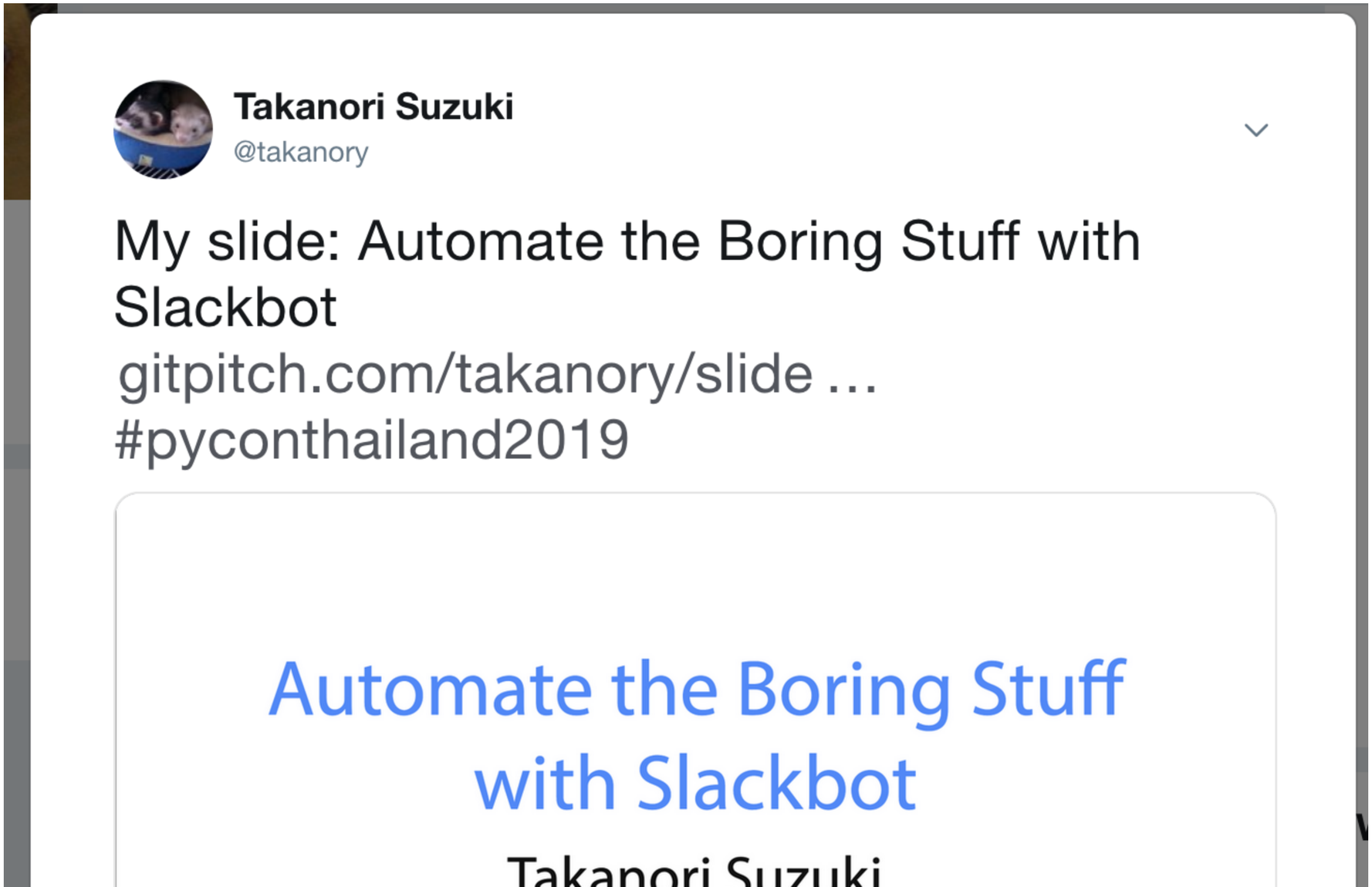
- 鈴木たかのり / Takanori Suzuki
- Twitter: @takanory
- Vice Chair of PyCon JP Committee: #pyconjp
- Director of BeProud Inc.
- Organizer of Python mini Hack-a-thon: #pyhack
- Captain of Python Bouldering Club: #kabepy

PyCon JP

- https://pycon.jp/2019
- Date: 2019 Sepember 16, 17
- Venue: Tokyo, Japan

Slide URL

- https://gitpitch.com/takanory/slides?p=20190615pyconth



Background and Motivation

Conference Tasks

- I held PyCon JP(2014-2016) as Chair
- Conference tasks:
  - Keynotes, Talks and Trainings arrangement
  - Ticket sales and reception
  - Venue and facility(WiFi, Video...) management
  - Foods, Coffee, Snacks and Beers

Staff ask me the same things

- 40+ staff
- **New** staff:**Old** staff = 50:50

Programmer is Lazy

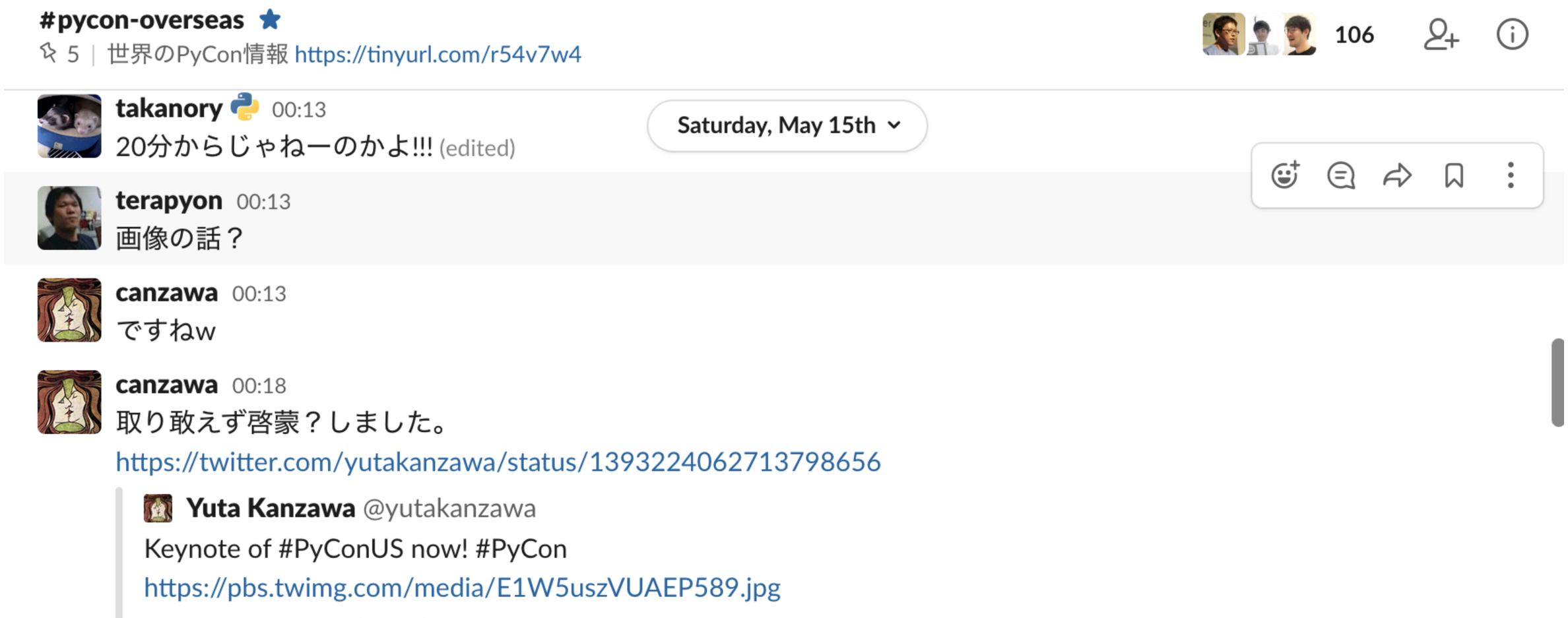
Let's create a secretary!!

Goal

- How to create **simple chatbot**
- How to create **interactive bot**
- How to **extend bot** using libs and APIs

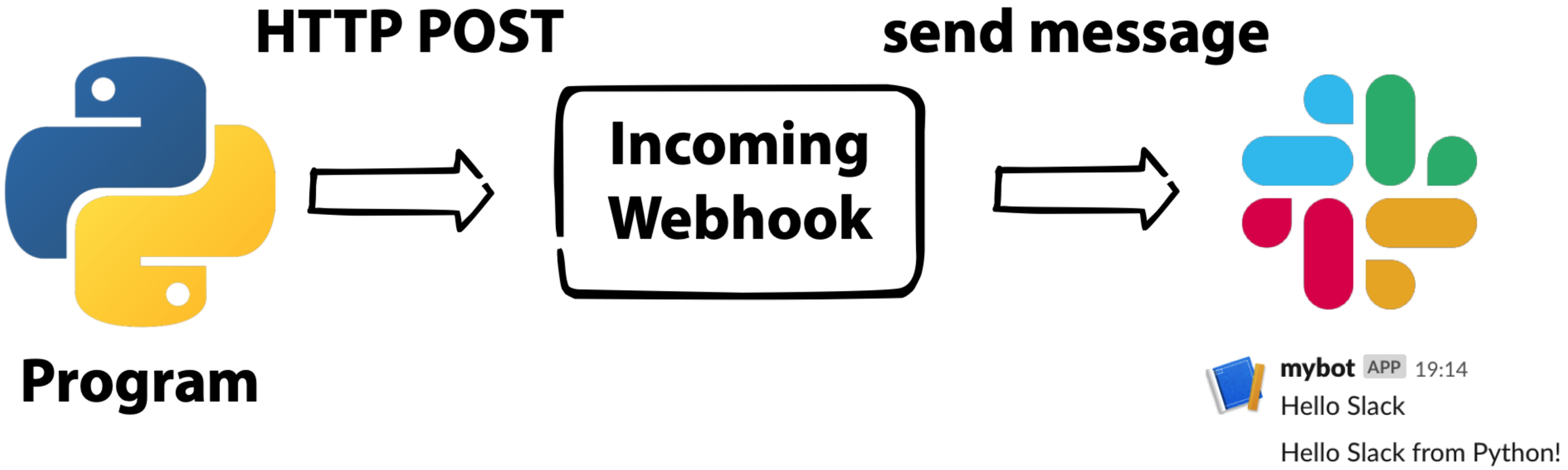
Why Slackot

- Launching the Slack application at any time
- Easy to access Slack
- To do everything in Slack



Simple integration with Incoming Webhooks

System overview



- see: https://api.slack.com/incoming-webhooks

Create Incoming Webhooks Integration

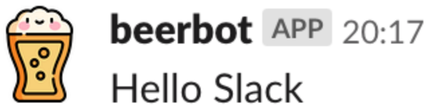
- Generate Webhook URL
  1. Create a Slack app
  2. Enable Incoming Webhooks in the app
  3. Create an Incoming Webhook
- Webhook URL like this:

```
https://hooks.slack.com/services/T00000000/B000000000/XXXXXXXXXX
```

- see: Getting started with Incoming Webhooks

Post message with cURL

```
$ curl -X POST -H 'Content-type: application/json' \
> --data '{"text": "Hello Slack"}' \
> https://hooks.slack.com/services/T00000000/B00000000/XXXXXXXX
```



Post message with Python

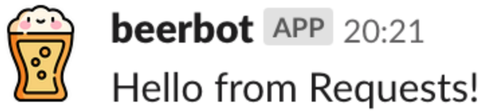
```
import json
from urllib import request

URL = 'https://hooks.slack.com/services/T00000000/B00000000/XXX
data = json.dumps({'text': 'Hello from Python!'}).encode('utf-8
req = request.Request(URL, data=data, method='POST')
request.urlopen(req)
```

beerbot APP 20:19

Hello from Python!

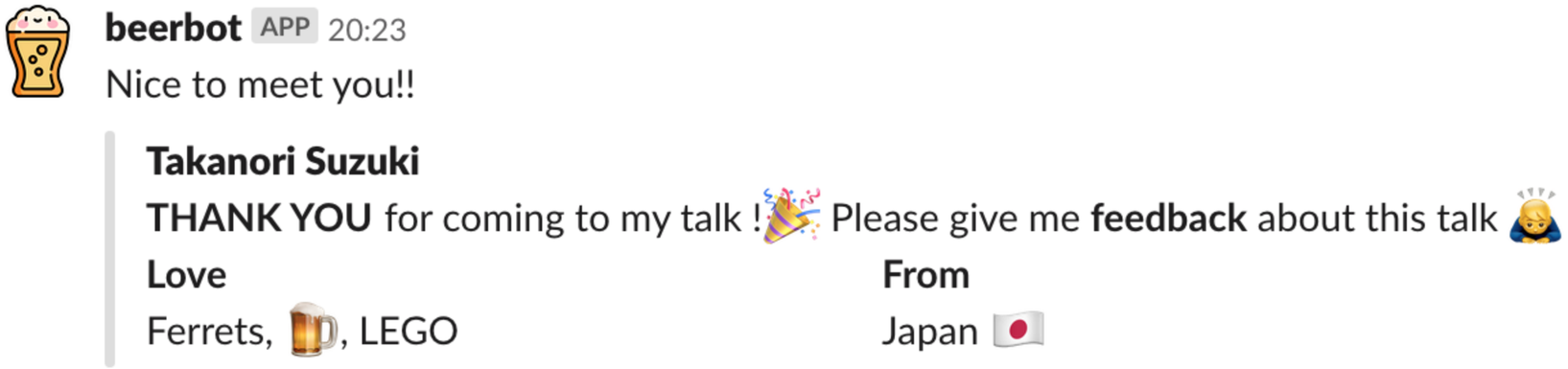
Post message with Requests

```
import json
import requests

URL = 'https://hooks.slack.com/services/T00000000/B00000000/XXX
requests.post(URL, json={'text': 'Hello from Requests!'})
```



Complex message with Requests

```
fields = [{'title': 'Love', 'value': 'Ferrets, :beer:, LEGO', '
          {'title': 'From', 'value': 'Japan :jp:', 'short': Tru
requests.post(URL, json={'attachments': [{
    'pretext': 'Nice to meet you!!',
    'author_name': 'Takanori Suzuki',
    'author_link': 'https://twitter.com/takanory/',
    'text': '*THANK YOU* for coming to my talk !:tada: Please g
```



How to create complex message

- Block-Kit: new UI framework
- Introducing Block Kit
  - https://api.slack.com/block-kit
- Block Kit Builder
  - https://api.slack.com/tools/block-kit-builder

slack Block Kit Builder

Copy Code | Clear Code | Send to Slack

- Section
- Image
- Context
- Divider
- Actions

Section with...

- Image
- Button
- Select
- Multi-Select
- Overflow
- Datepicker
- Fields

Message Preview | Desktop | Select a Template

Your App APP 2:37 AM

Hello, Assistant to the Regional Manager Dwight! **Michael Scott** wants to know where you'd like to take the Paper Company investors to dinner tonight.

Please select a restaurant:

Farmhouse Thai Cuisine

⭐⭐⭐⭐ 1528 reviews

They do have some vegan options, like the roti and curry, plus they have a ton of salad stuff and noodles can be ordered without meat!! They have something for everyone here

Kin Khao

⭐⭐⭐⭐ 1638 reviews

The sticky rice also goes wonderfully with the caramelized pork belly, which is absolutely melt-in-your-mouth and so soft.

Ler Ros

⭐⭐⭐⭐ 2082 reviews

I would really recommend the Yum Koh Moo Yang - Spicy lime dressing and roasted quick marinated pork shoulder, basil leaves, chili & rice powder.

Farmhouse | Kin Khao | Ler Ros

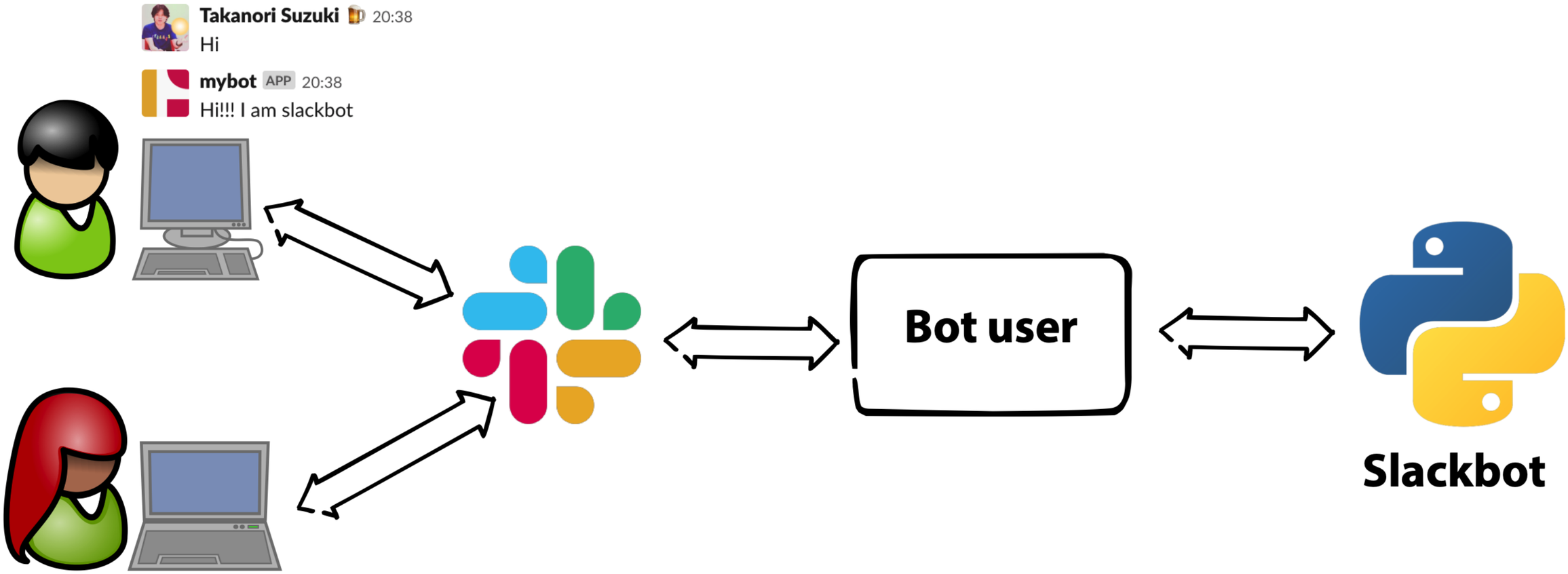

```
{
    "blocks": [
        {
            "type": "section",
            "text": {
                "type": "mrkdwn",
                "text": "Hello, Assistant to the Regional Manager Dwight! *Michael Scott* wants to know where you'd like to take the Paper Company investors to dinner tonight.\n\n *Please select a restaurant:*"
            }
        },
        {
            "type": "divider"
        },
        {
            "type": "section",
            "text": {
                "type": "mrkdwn",
                "text": "*Farmhouse Thai Cuisine*\n:star::star::star::star: 1528 reviews\n They do have some vegan options, like the roti and curry, plus they have a ton of salad stuff and noodles can be ordered without meat!! They have something for everyone here"
            },
            "accessory": {
                "type": "image",
                "image_url": "https://s3-media3.fl.yelpcdn.com/bphoto/c7ed05m9lC2EmA3Aruue7A/o.jpg",
                "alt_text": "alt text for image"
            }
        },
        {
            "type": "section",
            "text": {
                "type": "mrkdwn",
                "text": "*Kin Khao*\n:star::star::star::star: 1638 reviews\n The sticky rice also goes wonderfully with the caramelized pork belly, which is absolutely melt-in-your-mouth and so soft."
            },
            "accessory": {
                "type": "image",
                "image_url": "https://s3-media2.fl.yelpcdn.com/bphoto/korel-1YjNtFtJlMTaC26A/o.jpg",
                "alt_text": "alt text for image"
            }
        },
```

Summary of Incoming Webhooks

- **Easy to send** messages from programs
- We can create **complex messages**
- BUT **one way** only(program -> Webhook -> Slack)

How to create slackbot

System overview



Create bot user on Slack

- Create bot user
  1. Create a Slack app
  2. Enable Bots
  3. Add a **Bot User**
  4. Install App to Workspace -> **Authorize**
- Invite Bot User to Slack channels
- **Bot User OAuth Access Token** like this: `xoxb-123467890-XXXXXX-XXXXXXXXXXXX`
- see: Creating a bot user

Install slackbot

- https://github.com/lins05/slackbot

```
$ mkdir mybot
$ cd mybot
$ python3.6 -m venv env
$ . env/bin/activate
(env) $ pip install slackbot
:
:
```

Create a simple bot with slackbot

- slackbot_settings.py

```
API_TOKEN = "xoxb-123467890-XXXXXX-XXXXXXXXXXXXXX"  # Bot token
PLUGINS = ['mybot.plugins']  # Plugin packages
```

- run.py

```
from slackbot.bot import Bot

def main():
    bot = Bot()
    bot.run()

if __name__ == "__main__":
```

Simple Plugin

- mybot/plugins/__init__.py

```
(env) $ mkdir mybot
(env) $ mkdir mybot/plugins
(env) $ touch mybot/plugins/__init__.py  # empty file
```

- mybot/plugins/sample.py

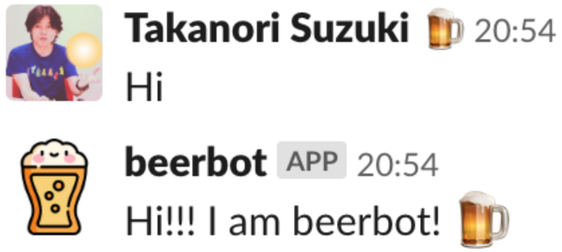
```
from slackbot.bot import listen_to

@listen_to('Hi')
def hello(message):
    message.send('Hi!!! I am slackbot')
```

Run slackbot

- Files for slackbot

```
mybot/
├── env/  # venv
├── mybot/plugins/
│   ├── __init__.py
│   └── sample.py
├── run.py
└── slackbot_settings.py
```

```
(env) $ python run.py
```



Extend slackbot

listen_to / respond_to decorator

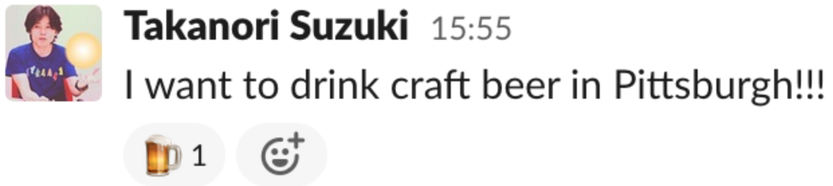
```
from slackbot.bot import listen_to, respond_to

@listen_to('Hi')
def hello(message):
    message.send('Hi!!! I am slackbot')

@respond_to('ping')  # mention
```

`listen_to` / `respond_to` decorator

emoji reaction

- Use `mesasge.react()` method

```
# -- snip--

@listen_to('beer')
def beer(message):
    message.react(':beer:')
```

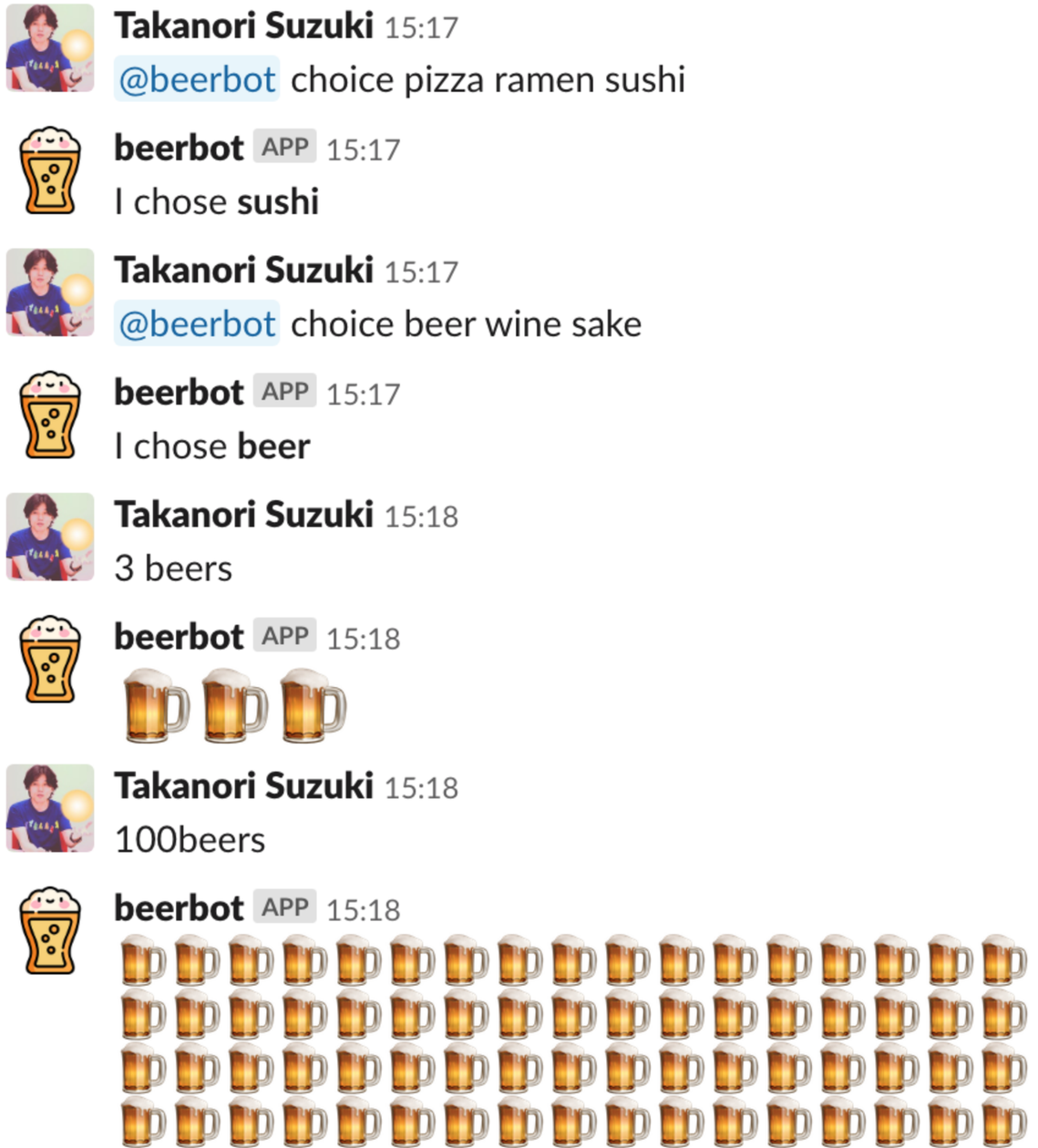


Extract parameters on chat message

- Use regular expressions

```
@respond_to('choice (.*)')
def choice(message, words):
    word = random.choice(words.split())
    message.send('I chose *{}*'.format(word))
```

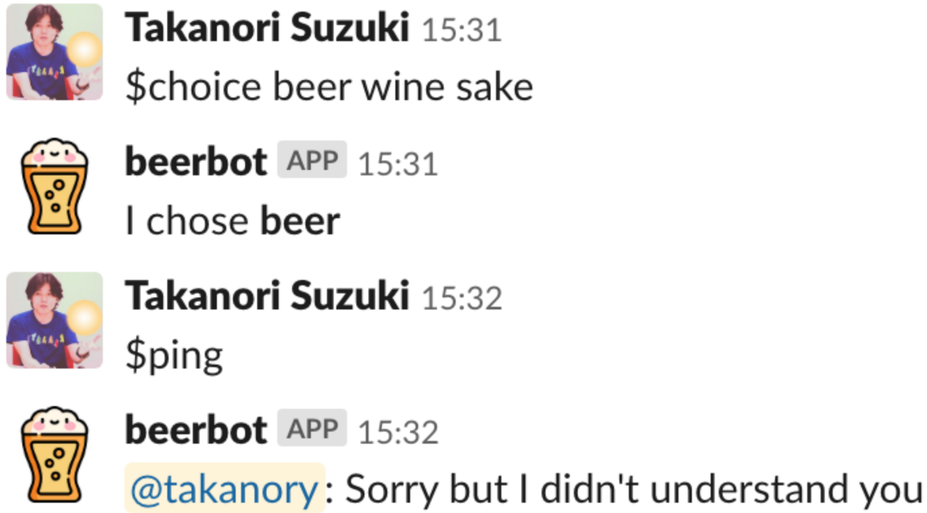
Extract parameters on chat message



settings

- `slackbot_settings.py` file

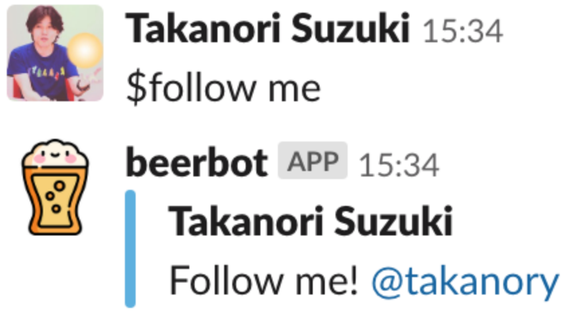
```
ALIASES = '$'   # Prefix instead of mention (@mybot ping -> $pin
ERRORS_TO = 'mybot-error'   # Some channel
DEFAULT_REPLY = "Sorry but I didn't understand you"
PLUGIN = ['mybot.plugins', 'other.plugins',]   # Pluing packages
```



- see: Usage of Slackbot

Attachments support

```
import json

@respond_to('follow me')
def followme(message):
    attachments = [{
        'author_name': 'Takanori Suzuki',
        'text': 'Follow me! <https://twitter.com/takanory|@taka
```



Summary of Slackbot

- We can **communicate** with Slackbot
- Slackbot can handle **arguments** in messages
- Slackbot can send messages in **various formats**

Case studies

Calculator function using SymPy

Calculator function using SymPy

- Motivation
  - I feel heavy to call a caluclator app on my smartphone
  - It seems useful if Slack as a calculator

Install SymPy

- SymPy: Python library for symbolic mathematics
- https://www.sympy.org/

```
(env) $ pip install sympy
:
Successfully installed mpmath-1.1.0 sympy-1.4
```

- mybot/plugins/calc.py

```
from slackbot.bot import listen_to
from sympy import sympify, SympifyError

@listen_to(r'^([-+*/^%!().\d\s]+)$')  # Formula like pattern
def calc(message, formula):
    try:
        result = sympify(formula)
```

Takanori Suzuki 15:45

1 + 1

beerbot APP 15:45

2

Takanori Suzuki 15:45

9500 / 3

beerbot APP 15:45

3,166.6666666666665

Takanori Suzuki 15:45

10^2 + 11^2 + 12^2

beerbot APP 15:45

365

Takanori Suzuki 15:45

10!

beerbot APP 15:45

3,628,800

Plusplus function using Peewee ORM

Plusplus function using Peewee ORM

- Motivation
  - In PyCon JP, I want to make a culture that appreciates each other staff

Install Peewee

- simple and small ORM.
  - a small, expressive ORM
  - python 2.7+ and 3.4+ (developed with 3.6)
  - supports sqlite, mysql and postgresql
- http://docs.peewee-orm.com/

```
(env) $ pip install peewee
:
Successfully installed peewee-3.9.6
```

Plusplus model

```
from pathlib import Path
from peewee import SqliteDatabase, Model, CharField, IntegerFie

dbpath = Path(__file__).parent / 'plusplus.db')
db = SqliteDatabase(dbpath)

class Plusplus(Model):
```

Plusplus command

```
from slackbot.bot import listen_to

from .plusplus_model import Plusplus

@listen_to(r'^(\w+)\+\+')
def plusplus(message, name):
    target = name.lower()
```

Takanori Suzuki 15:56

staff++

beerbot APP 15:56

Thank you staff! (count: 1)

Takanori Suzuki 15:56

Staff++

beerbot APP 15:56

Thank you Staff! (count: 2)

Takanori Suzuki 15:56

beer++

beerbot APP 15:56

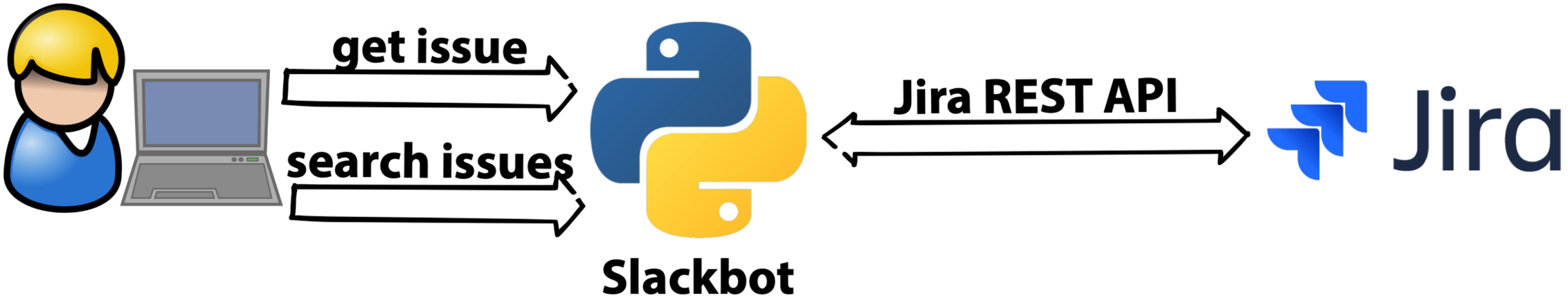
Thank you beer! (count: 1)

Display JIRA issue and Search issues

Display JIRA issue and Search issues

- Motivation
  - JIRA is very useful
  - JIRA Web is **very heavy**
  - I want to check issue details without JIRA Web

System Overview



Install Python JIRA

- Python library to work with JIRA APIs
- https://jira.readthedocs.io/

```
(env) $ pip install jira
:
Successfully installed asn1crypto-0.24.0 cffi-1.12.3 cryptograp
(env) $ pip list | grep jira
jira                 2.0.0
```

Authentication

```
from jira import JIRA

URL = 'https://jira.atlassian.com/'
jira = JIRA(URL, basic_auth=('user', 'pass'))
```

- see: 2.1.2. Authentication

Get Issue object

```
@listen_to(r'(ISSHA-[\d]+)')  # Issue id pattern
def jira_issue(message, issue_id):
    issue = jira.issue(issue_id)
    summary = issue.fields.summary
    status = issue.fields.status.name
    assignee = issue.fields.assignee.name
    issue_url = issue.permalink()
```

- see: 2.1.3 Issues

Takanori Suzuki 🍺 11:06

ISSHA-1484

mybot APP 11:06

ISSHA-1484 bot: amesh command

> **Assignee**
>
> takanory
>
> **Status**
>
> オープン

Search issues

```
@respond_to('jira (.*)')
def jira_search(message, keywords):
    # make JQL query string
    jql = f'project=ISSHA and text ~ "{keywords}" order by crea
    text = ''
    # get 5 recent issues
    for issue in jira.search_issues(jql, maxResults=5):
```

- see: 2.1.5 Searching
- JQL: JIRA Query Language
- see: Advanced searching - Atlassian Documentation

Takanori Suzuki 🍺 19:31

$jira pycon apac

mybot APP 19:31

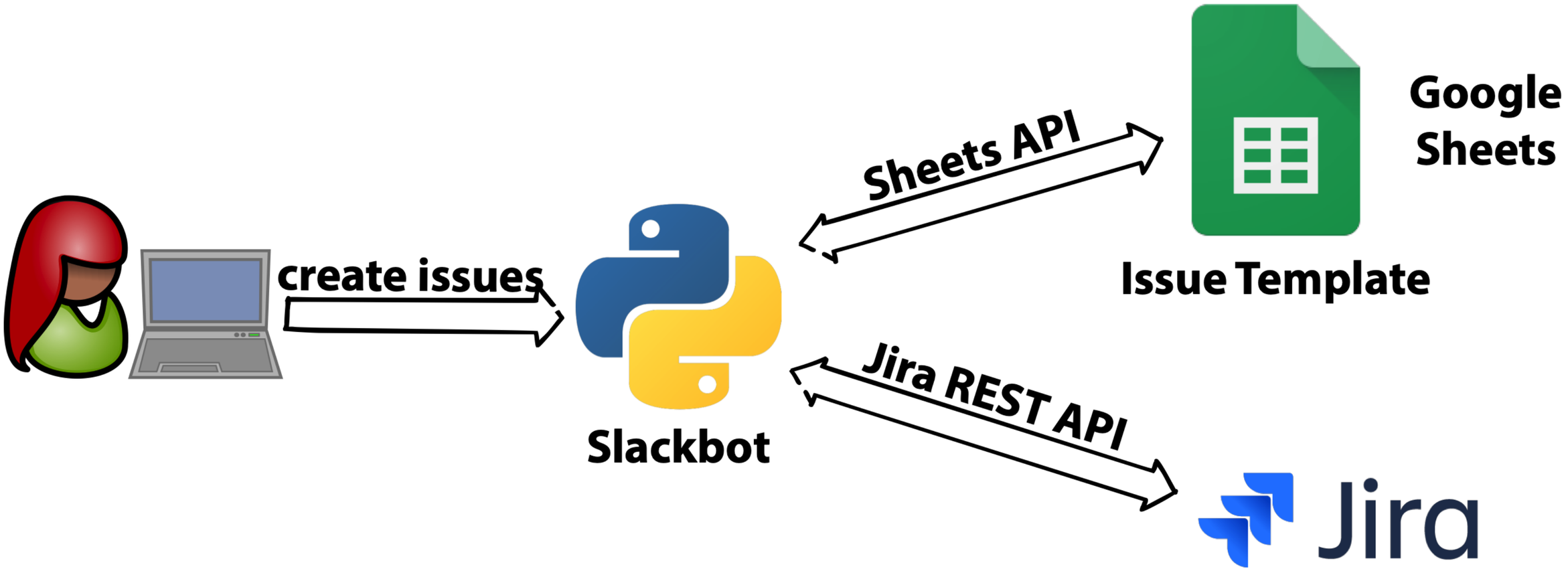
- ISSHA-1549 OSC沖縄申込み
- ISSHA-1457 運営会議#26 (2018年12月) の準備
- ISSHA-1301 PyCon JP 2019 座長募集を行う
- ISSHA-1031 PyCon APAC 2018 シンガポール参加ツアーの段取り
- ISSHA-1024 一般社団法人PyCon JPの2017年の会計について報告する

Create multiple issues from a template

Create multiple issues from a template

- Motivation
  - In pycamp event, **20+ issues** are required for each event
  - It is very painful for me to **copy issues** manually
  - JIRA Web is **very heavy**(again)

System Overview



Google Authorization is VERY Complex(1/2)

- create Google Cloud Platform project
  - enable API(in this case: Google Sheets API)
  - download `credentials.json`
- Install Google Client Library

```
(env) $ pip install google-api-python-client \
                    google-auth-oauthlib
:
Successfully installed cachetools-3.1.1 google-api-python-clien
(env) $ pip list | grep google
google-api-python-client 1.7.9
google-auth              1.6.3
```

Google Authorization is VERY Complex(2/2)

- download `quickstart.py`
  - quickstart.py on GitHub
- run `quickstart.py`
  - select your Google account in Web browser
  - Click the Accept button
  - get `token.pickle` file(finish!!)

```
(env) $ python quickstart.py
Please visit this URL to authorize this application: https://ac
Name, Major:
Alexandra, English
:
Will, Math
```

- see: Python Quickstart | Sheets API | Google Developers

Get Spreadsheet Data

```
from googleapiclient.discovery import build
SHEET_ID = '1LEtpNewhAFSXXXXXXXXXXXXX'

creds = None
if os.path.exists('token.pickle'):
    with open('token.pickle', 'rb') as token:
        creds = pickle.load(token)
```

- see: Method: spreadsheets.values.get

Create JIRA Issue

```
duedate = datetime.date.today + datetime.timedelta(days + 14)
issue_dict = {
    'project': {'key': PROJECT},
    'components': [{'name': COMPONENT}],
    'summary': SUMMARY_TEXT,
    'description': LONG_DESCRIPTION,
    'assignee': {'name': NAME_OF_ASSIGNEE},
```

- see: 2.1.3 Issues

Sample of template command

- `$pycamp create`: Create issues for pycamp event

pycampチケットテンプレート

ファイル 編集 表示 挿入 表示形式 データ ツール アドオン ヘルプ 最終編集: 2018年11月27日（Ryuji Tsutsui さん）

fx カテゴリー

Category Assignee Due date Summary Description

	A	B	C	D	E
1	カテゴリー	担当者	日付	タイトル	本文
2	1.事前準備	コアスタッフ	-30	connpassイベント公開(現地スタッフ)	h2. 目的 * 参加者を募るために、イベント本体、懇親会のconnpassイベントを作成して公開する * イベント開催の一ヶ月前くらいには公開したい h2. 内容 * connpassイベントを過去イベントからコピーしてベースを作成(コアスタッフが実施) ** タイトルを変更する ** 日時を変更する ** 参加人数を消す ** 場所を未設定状態にする ** ロゴ畫像を削除する ** アンケートを過去イベントからコピーする * 現地スタッフは以下を記述 ** ロゴ設定 ** 会場設定 ** 説明文の修正(場所、講師など) * 公開前にコアスタッフに内容のレビュー依頼をSlackでする * 公開のタイミングは平日の昼間が狙い目（多くの人に見てもらえる） * 懇親会のconnpassは場所未定で公開でもOKです。公開後に早めに場所を決めてください 以下、イベント公開に関するマニュアルも参照してください。 http://bootcamp-text.readthedocs.io/organize/1_manual.html#id8
3	1.事前準備	講師	-30	ホテル、移動の手配(講師)	h2. 目的 * 現地往復の交通手段を事前に予約する * ホテルの予約をする h2. 内容 * 予約した内容と金額の記載をする * 支払いは、Python Boot Camp 終了後に別チケットで行います
4	1.事前準備	コアスタッフ	-21	事前打ち合わせ(主: コアスタッフ)	h2. 目的 * 現地スタッフ、コアスタッフ、講師のやること認識合わせのために事前打ち合わせを実施する * Slack の Call を使う想定 h2. 内容 * pyconjp-fellow.slack.comに#地域名（県単位）のチャンネルを作っておく * 作ったらpyconjp.slack.comの#pycampで現地スタッフ・TA・講師に報告する
	2.広報	現地スタッフ	-14	事前ブログ執筆(現地スタッフ)	h2. 目的

親タスク サブタスク

ISSHA-1521

Python Boot Camp in 和歌山を開催

編集 | コメント | 割り当て | 処理中止 | 課題の解決 | 課題のクローズ | 管理

タイプ:	タスク	ステータス:	進行中 (ワークフローを表示)
優先度:	重度	解決状況:	未解決
コンポーネント:	Python Boot Camp		
ラベル:	なし		

説明

目的

- Python Boot Camp in 和歌山を開催するのに必要なタスクとか情報をまとめる親タスク

内容

- 日時: 2019-04-20(Sat)
- 会場: T-LABO
- 現地スタッフ: 落合大輔
- 講師: Masataka Arai
- TA: 堀口日向, Shimasan
- イベントconnpass: https://pyconjp.connpass.com/event/120116/
- 懇親会connpass: https://pyconjp.connpass.com/event/120117/

JIRAの使い方については以下マニュアルを参照してください。
http://bootcamp-text.readthedocs.io/organize/1_manual.html#id28

1.事前準備

- ISSHA-1522 CLOSED connpassイベント公開(現地スタッフ)
- ISSHA-1523 OPEN ホテル、移動の手配(講師)
- ISSHA-1524 IN PROGRESS 事前打ち合わせ(主: コアスタッフ)

2.広報

- ISSHA-1525 CLOSED 事前ブログ執筆(現地スタッフ)
- ISSHA-1526 IN PROGRESS メディアスポンサー経由での告知(コアスタッフ)
- ISSHA-1527 CLOSED Twitter定期通知(コアスタッフ)
- ISSHA-1528 IN PROGRESS 現地メディア経由での告知(現地スタッフ)

3.イベント直前、当日

- ISSHA-1529 OPEN 参加者への事前連絡(現地スタッフ)
- ISSHA-1530 OPEN お茶、お菓子購入(現地スタッフ)
- ISSHA-1531 OPEN 案内スライド作成(現地スタッフ)
- ISSHA-1532 OPEN 座席表作成、印刷(現地スタッフ)
- ISSHA-1533 IN PROGRESS ランチミーティング(主: 現地スタッフ)
- ISSHA-1534 OPEN 参加者アンケート実施(現地スタッフ)

4.事後処理

- ISSHA-1535 OPEN 精算処理(現地スタッフ)
- ISSHA-1536 OPEN 精算処理(講師)

Source code of pycamp command

- see: https://github.com/pyconjp/pyconjpbot/blob/master/pyconjpbot/plugins/pycamp.py

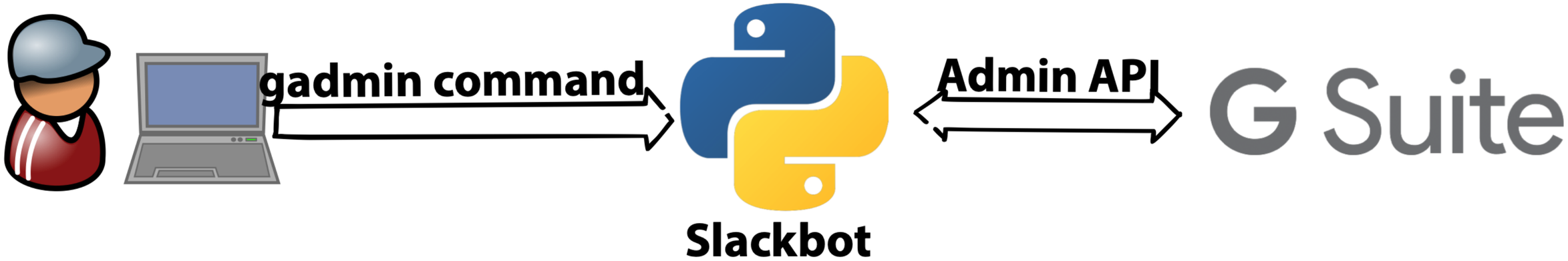
I never have to copy issues again 

Account management of G Suite

Account management of G Suite

- Motivation
  - PyCon JP use `pycon.jp` domain with G Suite
  - I only use Google Admin web occasionally
  - I forgot to use admin screen

System Overview



Update Google Authorization

- update Google Cloud Platform project
  - add G Suite Admin API
  - re-download `credentials.json`
- re-run `quickstart.py`
  - get new `token.pickle`

```
(env) $ python quickstart.py
Please visit this URL to authorize this application: https://ac
Name, Major:
Alexandra, English
:
Will, Math
```

Get user list

```
# build service
DOMAIN = 'pycon.jp'
service = build('admin', 'directory_v1', credentials=creds)

# get user list
users_list = service.users().list(orderBy='email', domain=DOMAI
for user in users_list.get('users', []):
```

- see: Users: list | Directory API

Insert user

```
body = {
    'primaryEmail': EMAIL_ADDRESS,
    'password': PASSWORD,
    'name': {
        'givenName': FIRST_NAME,
        'familyName': LAST_NAME,
    },
```

- see: Users: insert | Directory API

Suspend, Resume, Delete user

```
suspend = {'suspended': True}
service.users().update(userKey=EMAIL, body=suspend).execute()

resume = {'suspended': False}
service.users().update(userKey=EMAIL, body=resume).execute()

service.users().delete(userKey=email).execute()
```

- see: Users: update | Directory API
- see: Users: delete | Directory API

Takanori Suzuki 11:25
$gadmin help

pyconjpbot APP 11:25
ユーザー管理

- `$gadmin user list`: ユーザーの一覧を返す
- `$gadmin user insert (ユーザー) (名前) (名字)`: ユーザーを追加する
- `$gadmin user delete (ユーザー)`: ユーザーを削除する(停止中のみ削除可)
- `$gadmin user reset (ユーザー)`: ユーザーのパスワードをリセットする
- `$gadmin user suspend (ユーザー)`: ユーザーを停止する(停止中にする)
- `$gadmin user resume (ユーザー)`: ユーザーを再開する(アクティブにする)

メールのエイリアス管理

- `$gadmin alias list (ユーザ)`: ユーザーのエイリアスの一覧を返す
- `$gadmin alias insert (ユーザ) (エイリアス)`: ユーザーにエイリアスを追加する
- `$gadmin alias delete (ユーザ) (エイリアス)`: ユーザーからエイリアスを削除する

グループ管理

- `$gadmin group list`: グループの一覧を返す
- `$gadmin group insert (グループ) (グループ名)`: 指定したグループを追加する
- `$gadmin group delete (グループ)`: 指定したグループを削除する

グループのメンバー管理

- `$gadmin member list (グループ)`: 指定したグループのメンバー一覧を返す
- `$gadmin member insert (グループ) (メール1) [(メール2...)]`: 指定したグループにメンバーを追加する
- `$gadmin member delete (グループ) (メール1) [(メール2...)]`: 指定したグループからメンバーを削除する

Takanori Suzuki 🍺 11:27

$gadmin user list

pyconjpbot APP 11:27

pycon.jpドメインのユーザー一覧(39ユーザー)

- 20[redacted]con.jp PyCon JP 2015事務局
- 20[redacted]con.jp PyCon JP 2016
- 20[redacted]con.jp PyCon JP 2017
- ac[redacted]ssociation@pycon.jp 一般社団法人会計
- ac[redacted]event@pycon.jp イベント会計
- ac[redacted]ycon.jp user admin
- an[redacted]@pycon.jp Ai
- ar[redacted]on.jp Masatak
- cc[redacted]pycon.jp JP P
- ha[redacted]o@pycon.jp Y[redacted]ASHIMOTO
- ia[redacted]s@pycon.jp Ia
- iq[redacted]con.jp Iqbal A
- ki[redacted]ycon.jp Mak[redacted]a
- ki[redacted]ycon.jp Fumik[redacted]a
- ko[redacted]o@pycon.jp To[redacted]obayashi
- ko[redacted]pycon.jp Kao[redacted]oto
- m[redacted]ent@pycon.jp [redacted]ーム
- m[redacted]noda@pycon[redacted] Manami
- m[redacted]@pycon.jp Ry[redacted]u
- m[redacted]ycon.jp メディ[redacted]
- pr[redacted]@pycon.jp プロ[redacted]ーム
- py[redacted]pycon.jp Boo[redacted]ython
- py[redacted]pycon.jp pyc[redacted]
- ry[redacted]kamiya@pycc[redacted]chiro Kamiya
- sh[redacted]wa@pycon.jp[redacted] Shimizukawa
- sp[redacted]pycon.jp スポ[redacted]当
- su[redacted]@pycon.jp Suy[redacted]
- sy[redacted]@pycon.jp Ac[redacted]ka
- sy[redacted]n@pycon.jp V[redacted]、管理用2016以降用
- sy[redacted]@pycon.jp Shu[redacted]shida
- ta[redacted]@pycon.jp Tak[redacted]uki
- te[redacted]@pycon.jp Yuy[redacted]
- te[redacted]ycon.jp Mana[redacted]
- ts[redacted]ycon.jp Mamik[redacted]

Takanori Suzuki 11:30
$gadmin group list

pyconjpbot APP 11:30
pycon.jpドメインのグループ一覧(21グループ)
- 20[redacted]@pycon.jp 2015グループ(2ユーザー)
- 20[redacted]@pycon.jp 2016グループ(9ユーザー)
- 20[redacted]@pycon.jp 2017グループ(6ユーザー)
- 20[redacted]day-staff@pycon.jp 2018当日スタッフDocs権限用(16ユーザー)
- 20[redacted]staff@pycon.jp 2019コアスタッフDocs権限用(11ユーザー)
- acc[redacted]min@pycon.jp 一般社団法人会計責任者グループ(2ユーザー)
- acc[redacted]ociation-group@pycon.jp 一般社団法人会計用グループアドレス(5ユーザー)
- acc[redacted]ent-group@pycon.jp イベント会計用グループアドレス(3ユーザー)
- app[redacted]n.jp AppleDeveloperProgram管理(2ユーザー)
- bo[redacted]n.jp 法人理事会(7ユーザー)
- co[redacted]up@pycon.jp contactグループ(4ユーザー)
- des[redacted]on.jp デザイン(5ユーザー)
- hir[redacted]pycon.jp PyCon mini Hiroshima(1ユーザー)
- ma[redacted]t-group@pycon.jp 事務局グループ(8ユーザー)
- me[redacted]@pycon.jp メディアグループ(6ユーザー)
- pro[redacted]up@pycon.jp プログラムグループ(6ユーザー)
- pycamp-[redacted]@pycon.jp Python Boot Camp(4ユーザー)
- pyc[redacted]@pycon.jp pyconjp@pycon.jpの転送用グループ(3ユーザー)
- spo[redacted]up@pycon.jp スポンサーグループ(4ユーザー)
- sym[redacted]roup@pycon.jp 2016(以降)のWebsiteのアラート送付先(4ユーザー)
- ven[redacted]@pycon.jp 会場グループ(15ユーザー)

Takanori Suzuki 11:30
$gadmin member list pycamp-[redacted]

pyconjpbot APP 11:30
pycamp-[redacted]@pycon.jp グループのメンバー(4ユーザー)
- ko[redacted]@pycon.jp
- o6z[redacted]@pyconjp.slack.com
- ry[redacted]@gmail.com
- ta[redacted]@pycon.jp

I can completely forget Google Admin web site 

Source code of gadmin command

- see: https://github.com/pyconjp/pyconjpbot/blob/master/pyconjpbot/google_plugins/gadmin.py

Summary

- Incoming Webhooks
- Slackbot
- Slackbot with Libraries
- Slackbot with APIs

Next steps

- Let's make **your own Slackbot**
- Let's connect with libraries and APIs
- Automate your Boring Stuff with Slackbot

Slide URL

- https://gitpitch.com/takanory/slides?p=20190615pyconth

Thank you!

Question?