

#### alex.yaml apiVersion: v1 kind: Person неtadata: name: Alex Bissessur spec: Hork: сонрапу: La Sentinelle role: Kubernetes Person location: Mauritius contact: Hebsite: alexbissessur.dev mastodon: moris.social/@AlexB github: github.com/xelab04 interests: hobbies:

"I do fun things with Kubernetes."



#### Agenda

- 1. What is meetup.mu
- 2. Development of meetup.mu
- 3. How I scrape your community
- 4. Deployment of meetup.mu
- 5. CI/CD of meetup.mu

#### What is Meetup.mu

- Initially an aggregator for all tech meetups.

  Born from clashing with frontendmu for the 100th time
- Now an alternative to meetup.com
- Organisers can create events directly on meetup.mu and attendees can RSVP directly

#### The Meetup.mu project

- PHP + Laravel project with TailwindCSS
   the same setup as projects at LSL
- Deployed through a FrankenPHP Dockerfile
- Contributed to by around 5 people from different community groups.
- Hosted on my homelab, running on Kubernetes.

## Show: Dockerfile



#### **MAURITIUS TECH MEETUPS**

ALL THE TECH MEETUPS FROM THE MANY LOCAL COMMUNITY GROUPS, IN ONE PLACE!

#### OLETA DIBBERT ELYSSA RUNTE

Enim laborum sunt dicta. Est est et nisi deserunt. Cumque repudiandae libero ex nulla enim enim quia. Officiis natus quia et repudiandae voluptatem ea. Dolores quod id tempore est.

Adipisci qui id impedit distinctio error rem rerum veniam. Vero maxime eum reiciendis magnam illo eum nulla. Sint reprehenderit quia explicabo in.

#### ARDEN PACOCHA AIYANA ROBEL

YOST-DIBBERT 1970-03-06

Inventore justo est omnis. Fugit nihil quis nesciunt, Ipsa fuga exercitationem labore voluptas nobis. Earum id ea cupiditate ad. Voluptas commodi quasi asperiores in ut eveniet error.

Ullam nisi et sunt numquam harum. Ipsam perspiciatis voluptas itaque. Odio pariatur in iure sit sapiente aut nulla dolorem. Ullam fugit iste facilis e...

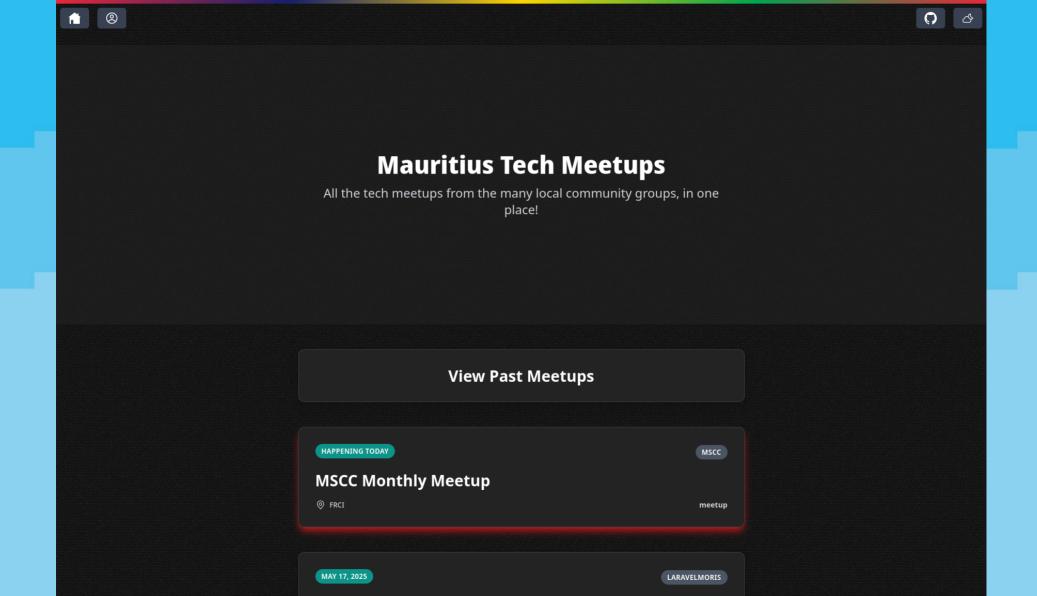
CONNELLY-GERLACH 1975-09-03

#### DR. MICHAELA ZIEME ABDIEL KOELPIN

Et est quas commodi velit tempora sint quia totam. Cumque eos amet a dolorum modi nihil suscipit. Adipisci sunt ducimus unde rerum cum.

Laborum id ut inventore. Temporibus voluptatibus sapiente quia rerum laborum ut. Placeat officia hic enim totam. Porro impedit quia dolorem ullam cons...

TREMBLAY LTD \ 2003-03-06



### Scraping Community Groups

and my hate for meetup.com

- Frontend.mu has open data on github for all their meetups.
- I added an API to Cloud Native MU's website
- MSCC, PYMUG, Laravel Moris, NUGM are on meetup.com (which doesn't like open data)

# Show: FrontendMU & CNMU data

# Scraping Community Groups Meetup.com

- Meetup.com provides an ical file to import into your calendar
- Python script to download and parse ical
- Extract data and send to database

```
BEGIN: VCALENDAR
VERSION: 2.0
PRODID:-//Meetup//Meetup Calendar 1.0//EN
CALSCALE: GREGORIAN
METHOD: PUBLISH
NAME: Mauritius Software Craftsmanship Community
X-WR-CALNAME: Mauritius Software Craftsmanship Community
BEGIN: VTIMEZONE
TZID: Indian/Mauritius
TZURL: http://tzurl.org/zoneinfo-outlook/Indian/Mauritius
X-LIC-LOCATION: Indian/Mauritius
BEGIN: STANDARD
TZOFFSETFROM: +0400
TZ0FFSETT0:+0400
TZNAME: +04
DTSTART: 19700101T000000
END: STANDARD
END: VTIMEZONE
BEGIN: VEVENT
UID:event 304373239@meetup.com
SEQUENCE: 1
DTSTAMP: 20250510T101239Z
DTSTART: TZID=Indian/Mauritius: 20250510T100000
DTEND; TZID=Indian/Mauritius: 20250510T160000
SUMMARY:MSCC Monthly Meetup
DESCRIPTION: Mauritius Software Craftsmanship Community\nThe MSCC is back w
 ith its physical Monthly Meetups! Join us every 2nd Saturday of the month
 to discuss\, learn\, and network!\n\nEach monthly meetup will have a theme
  and anyone interested in presenting is welcome to send their proposal [he
 re](https://docs.google.com/forms/d/e/1FAIpQLSeIC2tcCWgvzHY7k8HgIFLca6BWoZ
 MoLebR340wPMP5qVgnGA/viewform?usp=sharing).\n\nFor **May\,** the meetup wi
 ll be at **FRCI**\nThe theme is: GlobalAzure 2025\n\nThe following topics
 are featured for this meetup:\n\n* The Future of AI on Microsoft Azure - J
```

# The ical file holds all (?) the information I need.

DateRegistrationURL

VERSION: 2.0 PRODID:-//Meetup//Meetup Calendar 1.0//EN CALSCALE: GREGORIAN METHOD: PUBLISH NAME: Mauritius Software Craftsmanship Community X-WR-CALNAME: Mauritius Software Craftsmanship Community BEGIN: VTIMEZONE TZID: Indian/Mauritius TZURL: http://tzurl.org/zoneinfo-outlook/Indian/Mauritius X-LIC-LOCATION: Indian/Mauritius **MISSING** BEGIN: STANDARD TZOFFSETFROM: +040 TZOFFSETTO:+0400 TZNAME: +04 DTSTART: 19700101T000000 SOMETHING END: STANDARD END: VTIMEZONE BEGIN: VEVENT UID:event 304373239@meetup.co SEQUENCE: 1 DTSTAMP: 20250510T101239Z DTSTART: TZID=Indian/Mauritius: 20250510T100000 DTEND; TZID=Indian/Mauritius: 20250510T160000 **SUMMARY:**MSCC Monthly Meetup **DESCRIPTION:** Mauritius Software Craftsmanship Community\nThe MSCC is back w ith its physical Monthly Meetups! Join us every 2nd Saturday of the month to discuss\, learn\, and network!\n\nEach monthly meetup will have a theme and anyone interested in presenting is welcome to send their proposal [he

re](https://docs.google.com/forms/d/e/1FAIpQLSeIC2tcCWgvzHY7k8HqIFLca6BWoZ MoLebR340wPMP5qVgnGA/viewform?usp=sharing).\n\nFor \*\*May\,\*\* the meetup will be at \*\*FRCI\*\*\nThe theme is: GlobalAzure 2025\n\nThe following topics are featured for this meetup:\n\n\* The Future of AI on Microsoft Azure - J

BEGIN: VCALENDAR

The ical file holds all (?) the information I need.

- DateRegistrationURL
- ...?

#### Finding the Location

- Location is not present in the ical file
- I am too lazy to somehow parse the description
- Instead, ask my digital slave (AI)
- Introducing: hosting ollama on Kubernetes
  - helm chart provided for easy install
  - feed description into AI and get the location back

#### What's Helm?

- Helm is a "package manager" for Kubernetes
- Contains templates for your deployment
- Contains all components under one "parcel"
  - service, deployment, etc etc
- Used to easily distribute applications
- Ollama has a helm "package" to easily deploy Al models

#### Deploying Meetup.mu

- Run on Kubernetes on my homelab
- Components:
  - Deployment main pods for the Laravel app
  - Services expose app and does networking
  - PVCs provides persistent storage for app/db
  - Configmap for configuration, like .env
  - Secret sensitive configuration, like db creds
- Applications:
  - Laravel app
  - Database
  - Redis

## Show: meetup.mu manifests

#### Deploying Meetup.mu

- Manifests are usually deployed deployed with kubectl apply -f \*
- Manifests on GitHub you can run meetup.mu yourself
- Manifests can also be deployed with ArgoCD

#### ArgoCD

- The principle of GitOps Git is your source of truth
   Other \*Ops – ClickOps & ManualOps
- Allows 100% reproducible infrastructure
- No more changes through "kubectl apply -f"
  - everything through Git then synced

# Show: ArgoCD UI

#### Deploying Meetup.mu

- Meetup.mu exists as a Container Image
- Container image deployed in pods as part of a deployment
- Every update to meetup.mu:
  - build and push new version
  - update version in Kubernetes manifests
- I hate manual labour

#### Github Actions for CI

- On merge/push to main, trigger GH action
- Action checks version number from version.txt
- Build image with proper tag
- Push image to my Docker registry
- ArgoCD notices the change in version, deploys a new replicaset with 0 downtime

# Show: make change to meetup.mu

## Thank You!

alexbissessur.dev

t.me/alexbissessur