

**RustLab** (19-21 November 2023)





# Rust Meetup Tunisia



presented by:

Nour Omri

Eya Derbali



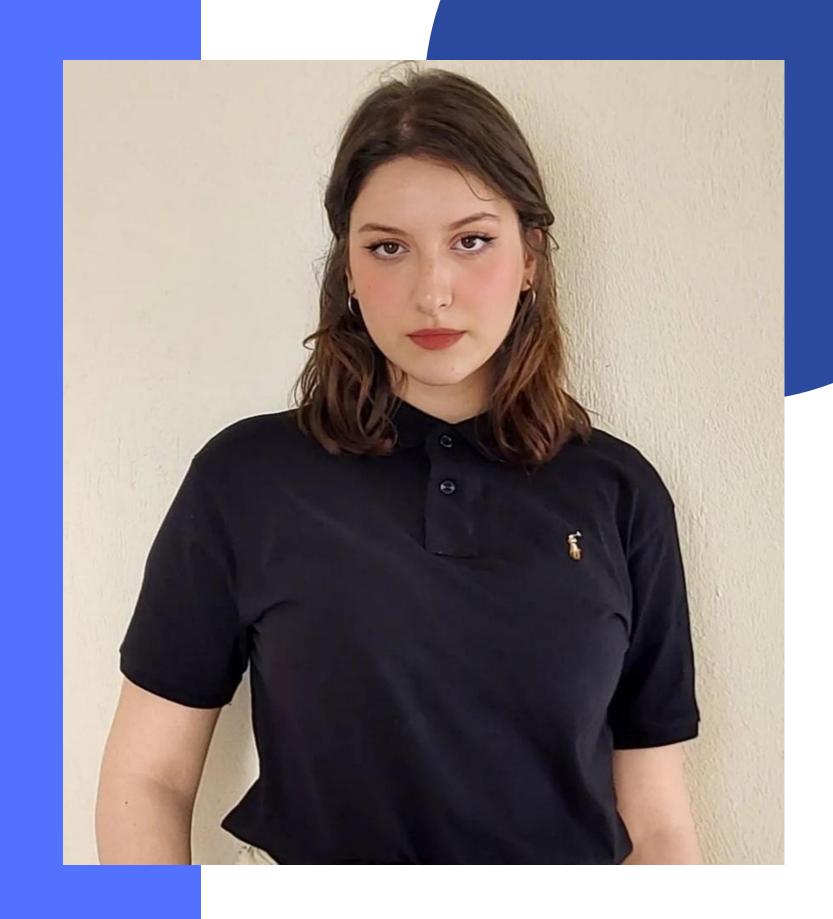
### EYA DERBALI

MASTER'S RESEARCH STUDENT



## NOUR OMRI

SOFTWARE ENGINEERING STUDENT



### About our project

we chose to work on Rust for our final project.



we implemented agile methodologies, We conducted regular online meetings at each project step.

we held daily reviews to keep everyone on the same page.

# Memory Safety Vulnerabilities Per Year 200 150 50

2020 (11)

2019 (10)

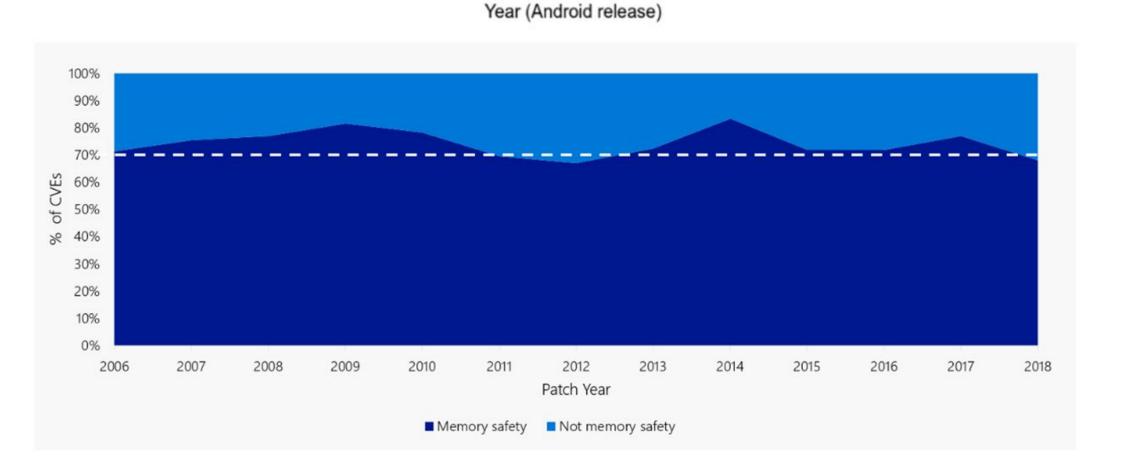
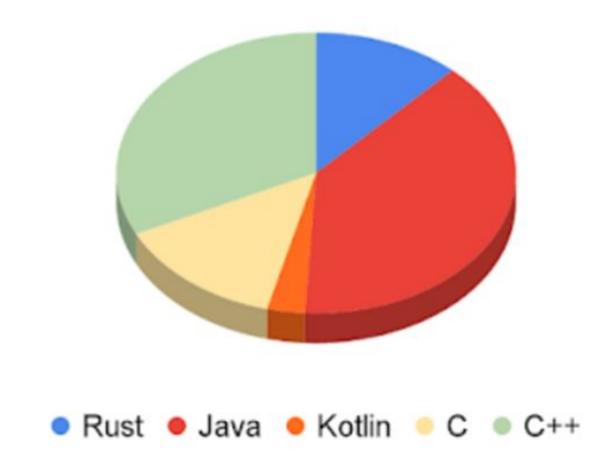


Figure 1: ~70% of the vulnerabilities Microsoft assigns a CVE each year continue to be memory

2021 (12)

2022 (13)

New Code By Language in Android 13



#### Memory safety issues

# Garbage collection

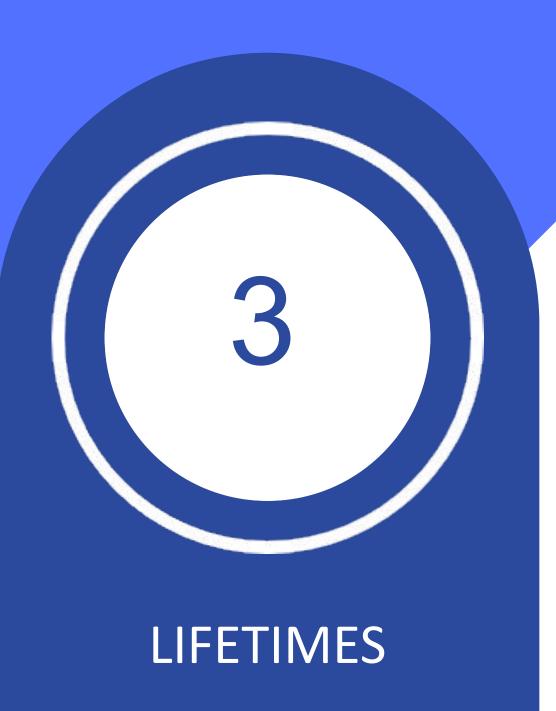
unlike other languages, Rust takes a different approach to memory management. Instead of using garbage collection, Rust relies on a system of ownership, borrowing, lifetimes







BORROWING





#### Détails

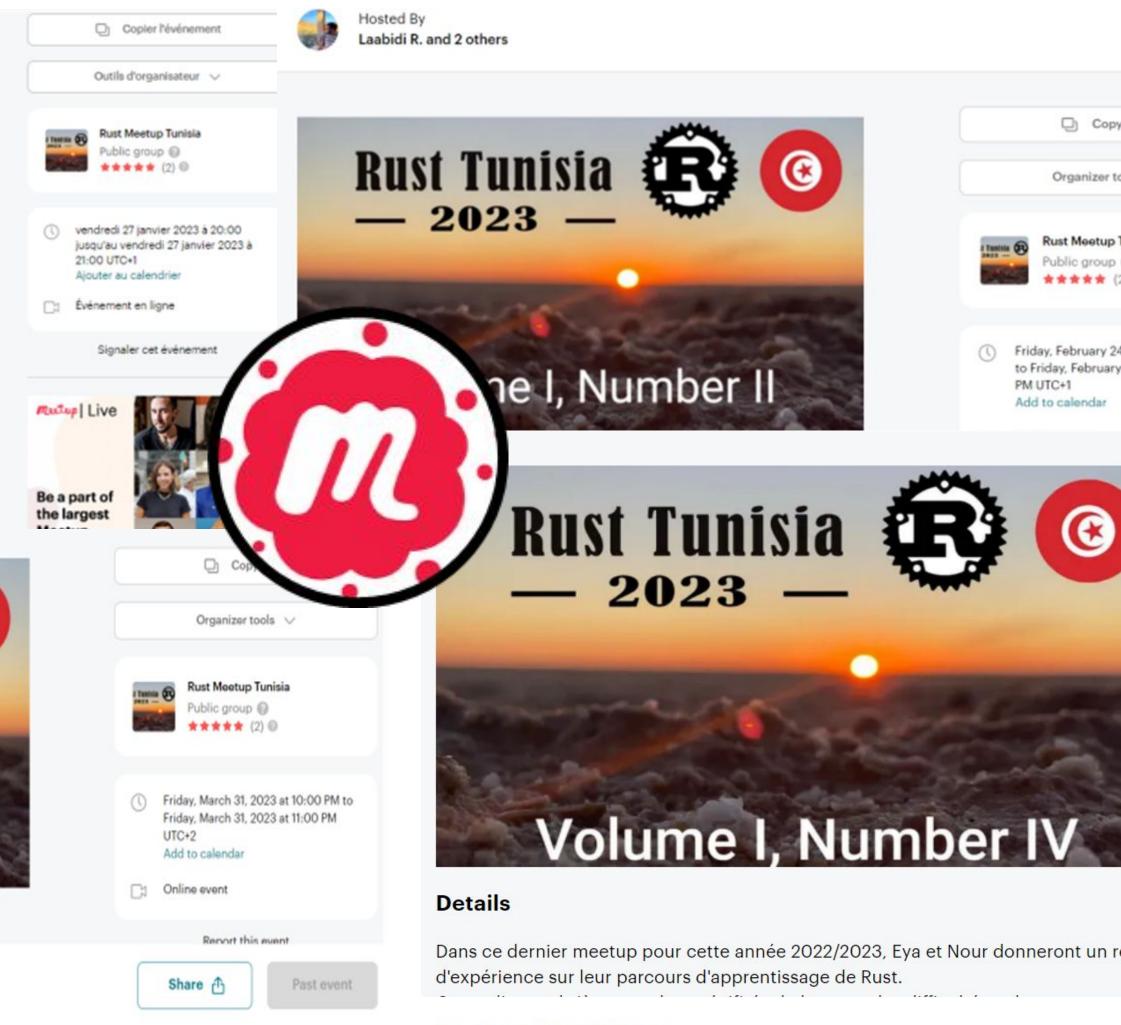
Ce vendredi 27 janvier nous aurons notre premier meeting autour du langage Rust. Nous parlerons des origines du langage, de son utilité et de ce qui le différencie des autres langages.

Le meetup est beginner friendly. Aucune expertise préalable n'est requise.

27 JANV. 20 Rust Meet

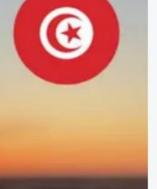


FRI, MAR 31 - 10:00 PM UTC+2 Rust Meetup Tunisia - Volume I, Number III



Copy event Organizer tools V Rust Meetup Tunisia ublic group @ (I) Friday, February 24, 2023 at 8:00 PM to Friday, February 24, 2023 at 9:00 ne I, Number II PM UTC+1 Add to calendar

Rust Tunisia 2023



Dans ce dernier meetup pour cette année 2022/2023, Eya et Nour donneront un retour d'expérience sur leur parcours d'apprentissage de Rust.

#### **Rust Meetup Tunisia:**

- Established the Meetup group "Rust Tunisia", the first community in Tunisia exclusively dedicated to Rust.
- Throughout our meetup series, we covered the fundamental concepts of Rust, particularly focusing on essential aspects like memory management security.
- Our primary objective is to introduce Rust to Tunisian programmers through monthly online meetings.
- The group has rapidly grown to 129 members, with each meetup gathering an active participation ranging from 10 to 15 members.
- We prioritize active knowledge-sharing, where members not only share their experiences but also provide direct feedback on what they've learned in Rust.



#### Innovating with Rust: A Different Path in Final Year Project

- Our final year project takes a unique direction, differentiating itself from the mainstream. We're immersing ourselves in Rust, an innovative language for systems programming.
- What sets us apart is our collaboration with a professional in the field. This is noteworthy as our institution lacks dedicated professionals in our specific domain.
- While most students opt for web or mobile application development, we've chosen a distinctive path.
- Opting for a different topic, learning Rust, and organizing meetups concurrently is our approach.
- As pioneers within our institution, we're enthusiastic about sharing our Rust journey and unique insights with fellow students





# hank you for your attention