Open Source @ TUM

TUM Developers

Visit us at tum.dev

Technische Universität München

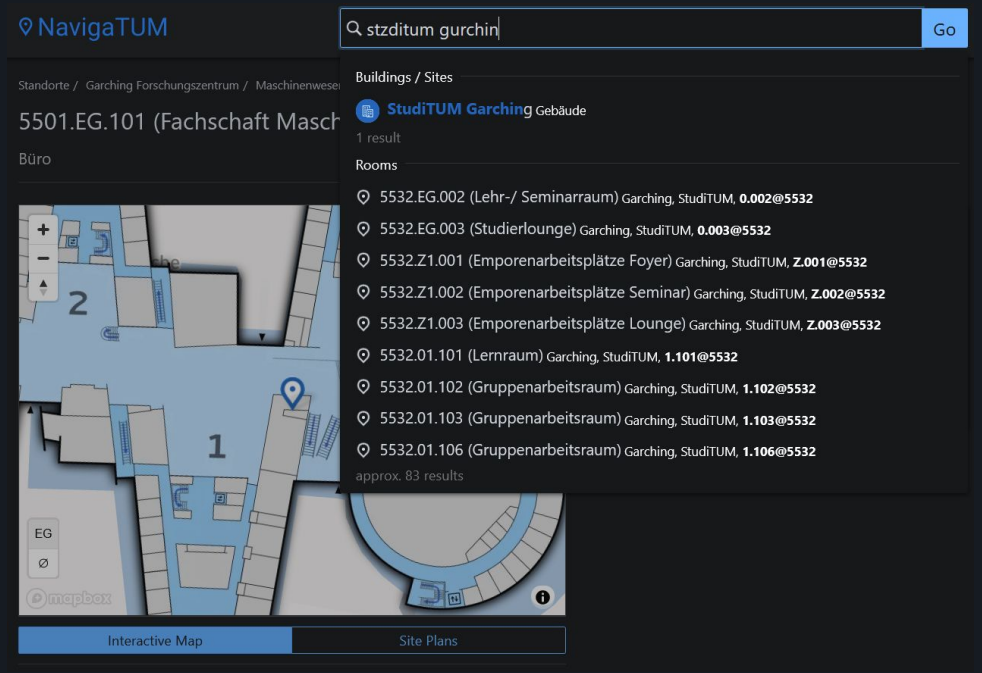
whois TUM Dev

Technische
Universität
München

NavigaTUM

Rooms Data Mining

- All rooms since 1868
- API and Website



python

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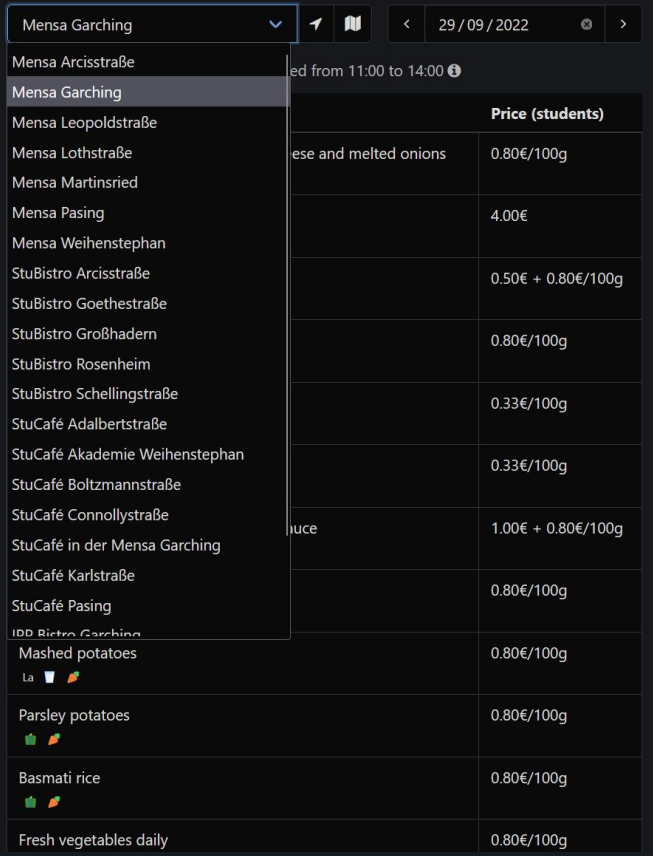
eat-api

Canteen Data Mining

- All dishes since 2017
- JSON API



python

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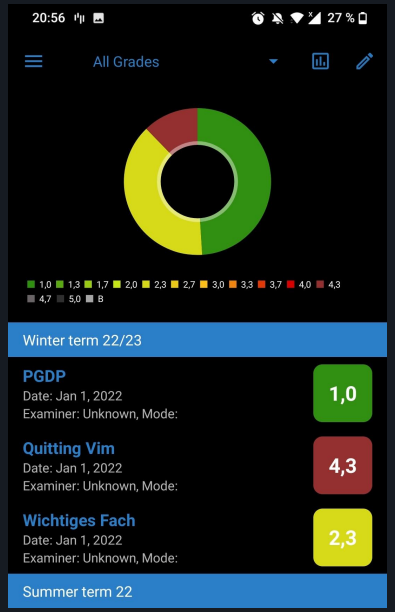
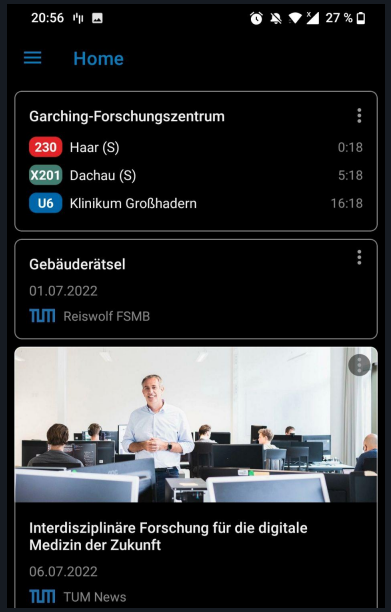
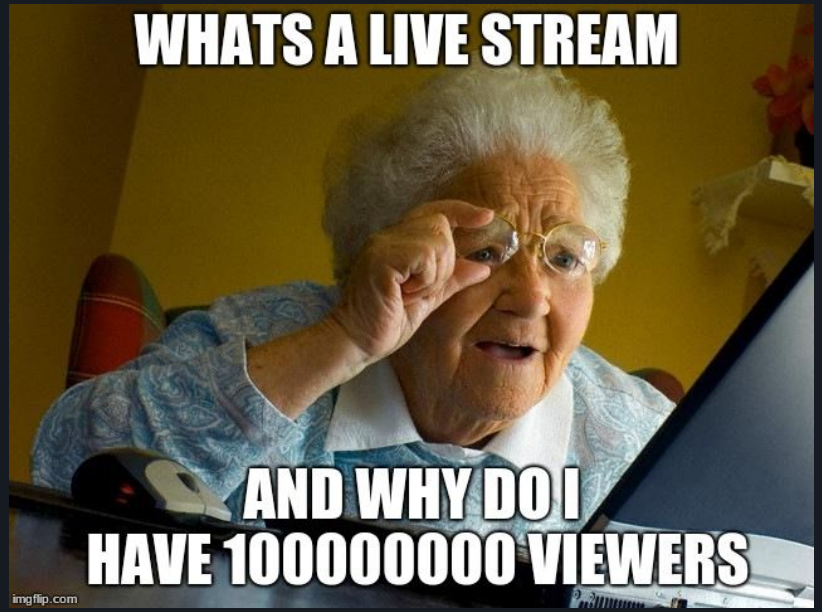
Campus App

- Lectures
- Grades
- Calendar
- Canteens
- TUM News
- Departures
- ...





TUM-Live

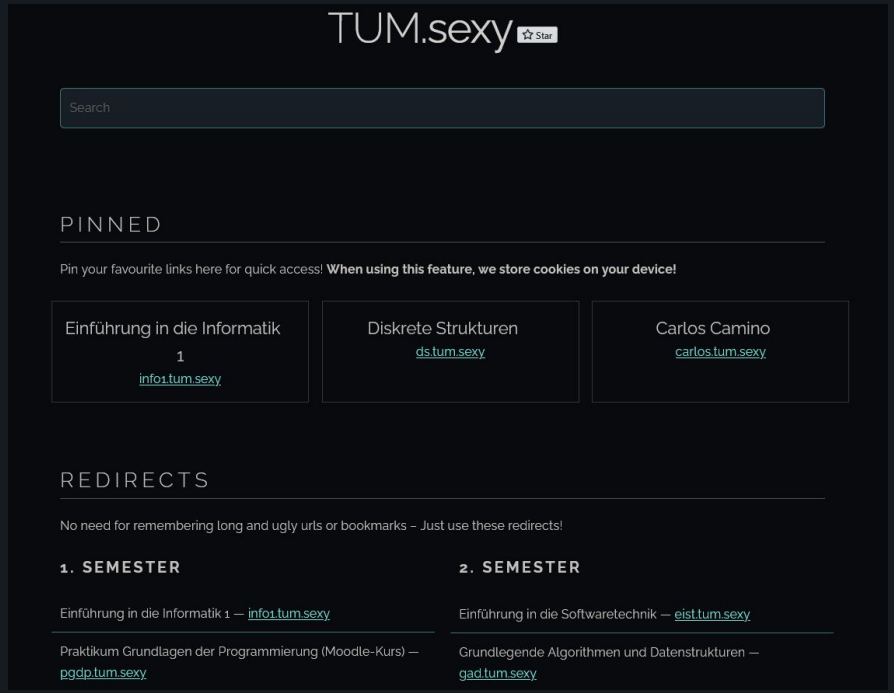


- Watch lectures online
  - Live streams
  - Recordings
  - Chat
- Used for most larger CS, Maths and Physics lectures

SEXY
TIME!

🥰 Be Sexy, tum.sexy!

- 🔁 All your Redirects
  - So you can save 5 seconds googling for it!
- 🔮 Discover Helpful Stuff



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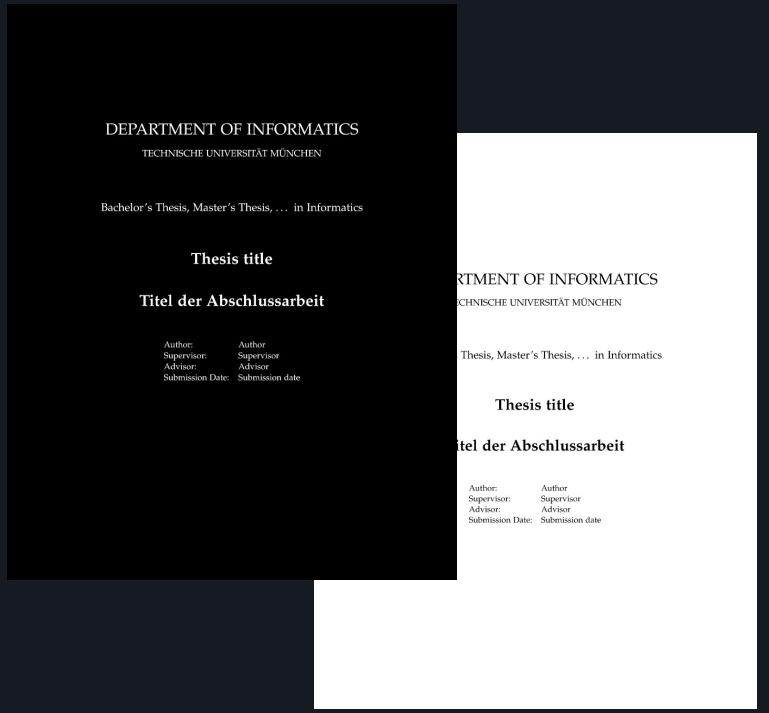
Template for TUM Theses

Make your thesis great (again)

- 🌙 Dark Mode
- ☀️ Light Mode



Facts

- Around for 10+ years
- several thousand active users
- *Excellent*™ ® companion apps for TUM students
- 10ish active developers
- Cover all areas: iOS, Android, Web, and Backend

We ❤️ Open Source

➡️ tum.app

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Limits of Open Source

Maintainer burnout

- Small project gain major popularity overnight
  - No processes available to funnel work
  - “Wanting to please everyone” syndrome
- Funding / single people vs. entire teams
- Automatically generated patches are making this worse
- Managing expectations with OS projects is hard

> Torvalds said that, while the community gets a lot of new contributors, it doesn't tend to get many new maintainers. The contributor and maintainer roles should be separated, he said.

From Reducing kernel-maintainer burnout on lwn.net

Companies and Open Source

- Open Source itself is not a business strategy
  - Licensing hell (Terraform, Redis, etc.)
  - Developers need to eat
- Motivation not clear when “for-profit company”?
  - User / customer trust
- => Lots of foundations that host software
  - Apache / Linux foundation
  - Cloud Native Computing Foundation (CNCF)
  - Others

Google

- Android Open Source Project
- Chromium
  - ChromeOS
- github.com/google
  - Over 2700 repositories, some actively maintained
- Not anymore: Kubernetes (first commits)

Projects I’ve been involved in

- github.com/google/googet
- github.com/google/go-patchutils
- Internal systems work very differently
- Doing open source is actually harder for me today
- Not a lot of benefits that would drive more os-work

So is everything bad?

Clearly: no!

- Open Source is a fantastic learning opportunity.
- OS allows anyone to understand why something might be broken.
- OS encourages collaboration.
- Technology like Android builds upon the Linux kernel.
  - Only possible because Free Software exists?

Other Benefits of OS

- Transparency
- Security
- Flexibility / Forking
- Crowdsource ideas and work

Answers!