PythonMTC3

New MTC3 international cipher contest

Florian Marchal

November 1st, 2019

20+ Years of CrypTool

// Agenda

- MTC3 Recap
- PythonMTC3
- Status & Outlook
- Participation
- Demonstration
- Feedback

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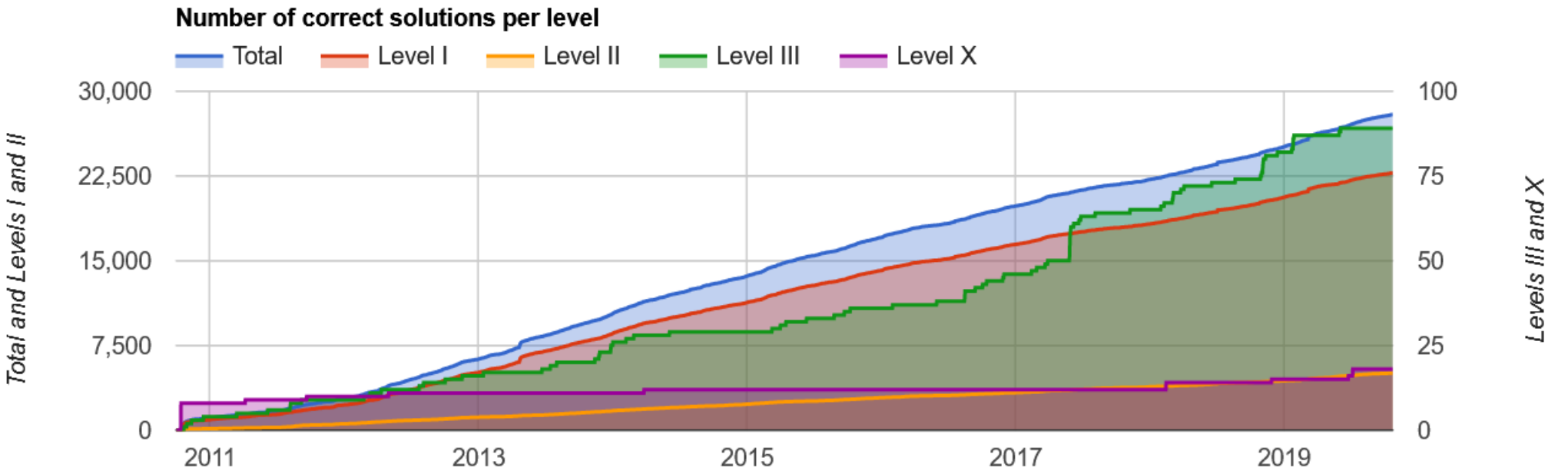
MysteryTwister C3 (https://www.mysterytwisterc3.org)

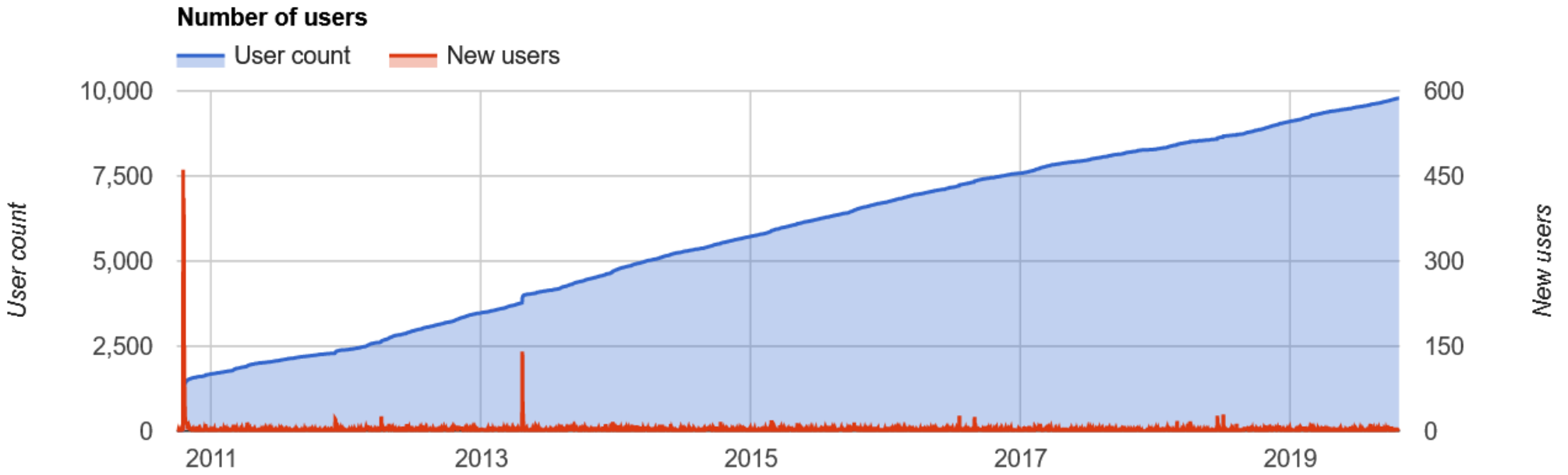
- Origin: design study “Crypto Challenge by CrypTool”
- Almost 10,000 active members
- Wide range of challenges (levels L1, L2, L3, X)
  created by more than 50 different authors
- For beginners and experts alike

// MTC3 Recap



MTC3 Statistics Oct 23, 2019

// MTC3 Recap



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Why redevelop MTC3?

- Security (no external CMS)
- Responsiveness (mobile users)
- Maintainability
- Performance
- Some new features in the GUI

Why redevelop MTC3 using Python and Django?

- Python is easy to read and write
- Django is sort of state-of-the-art
- Django takes care of a lot of the heavy lifting

Frontend vs. backend

- Python (3.6.8) + Django (2.15)
- RabbitMQ and Celery (async)

- HTML + CSS + Bootstrap (4)
- JavaScript (as little as possible)

Pitfalls

- No prior experience with Django
- Django often has its own way of doing things
- Transformation of database into Django models
- General inconsistencies in the existing database

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Status

- Static content is almost finalized
- Account management is production-ready
- Database transformation is a work-in-progress

... therefore a lot of functionality is still missing

Outlook

- Database is not fully finalized
- Configuration of production environment
- TESTING!!!

... going live is planned for end of November

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// Participation

Any help appreciated!

- Code is not open-sourced yet
- Private GitLab Repository: https://gitlab.com/flomar/pythonmtc3
- Just ask for privileges: florian@marchal.de

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// Demonstration

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Questions and Answers

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// Appendix – PythonMTC3 Screenshots

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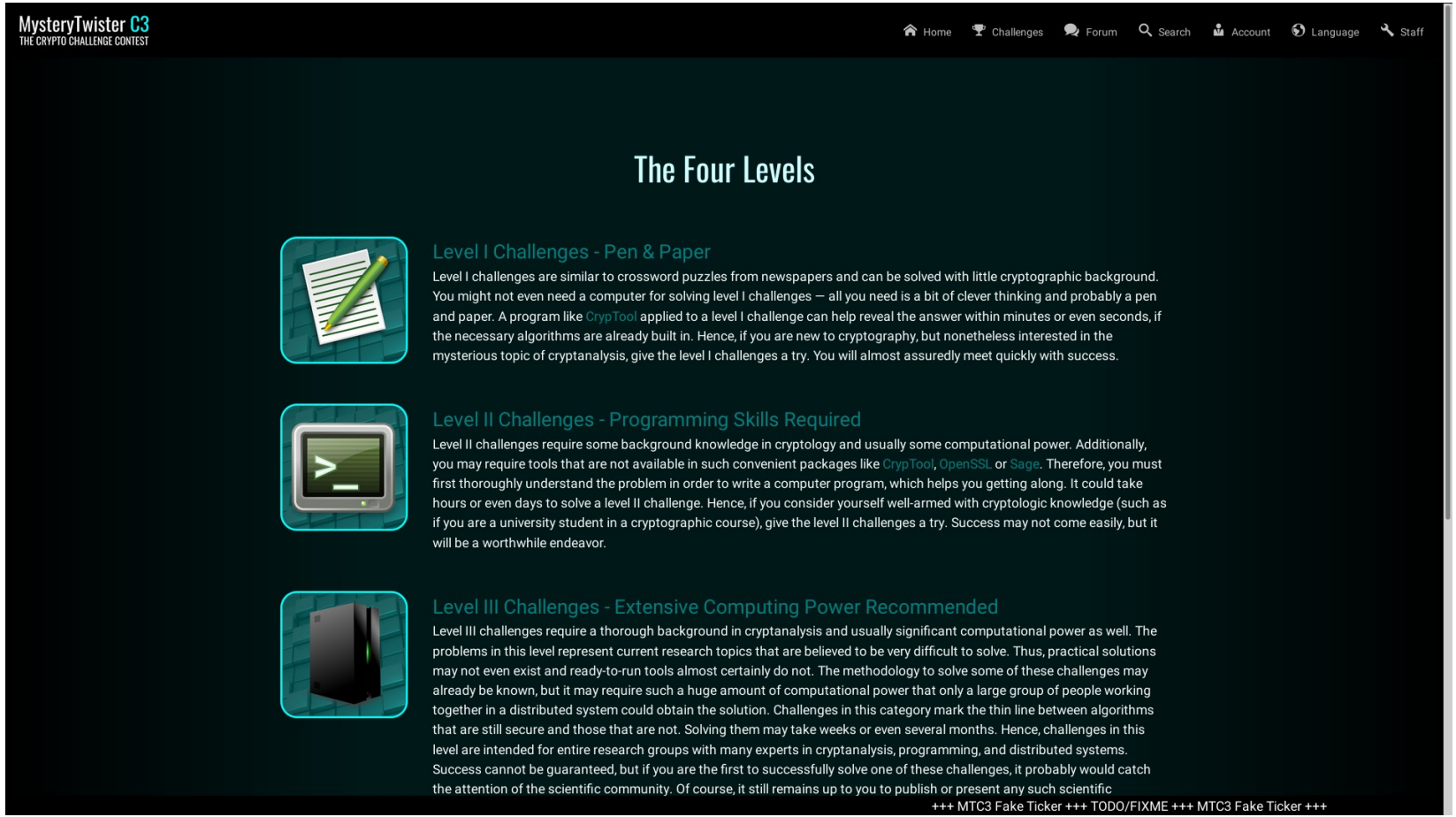

// Appendix – PythonMTC3 Screenshots