Code review
for Beginners and Experts:
Tips & Tricks

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Who am I?

- Software Engineer
- Technical Team Leader
- Author of "Idiomatic Python Performance" (Apress)
- Speaker @ EuroPython, PyCon UK, PySS & local meetups
  - Pythonic code vs. performance
    http://lukkol.pl/performance/ep2018
  - Brace yourself, python2 is retiring
    http://lukkol.pl/python3/pyconuk2018
Agenda

- Introduction
- General tips & tricks
- Different perspectives
- Q&A / discussion
Introduction
What is the code review?

- Software quality assurance step
- Reading and analyzing source code
- Performed by human
- Not done by author*
- Not done by manager
- Everyone in the team should both get and give code reviews
Purpose of the code review

- Finding defects
- Finding better solutions
- Quality at early stage
- Improving code quality
- Code ownership
- Knowledge transfer
- Reduces bus factor
General tips & tricks
Tooling

- Use built-in code review tools
- Use code style checking tools (pylint, pyflakes, pycodestyle, etc.)
- Use code formatting tool (black)
- Set up Continuous Integration
- Add pre commit hook
Tips & tricks for author

• Be the first reviewer

• Keep changes small

• Annotate most important changes

• If code is too complicated, walk through it with reviewer

• If you disagree with the reviewer, take the discussion offline (remember about summarizing comment)

10 lines of code, 32 comments

1000 lines of code, no comments, looks fine
Tips & tricks for reviewer

- Read the ticket
- Take your time
- Limit time for code review
- Look carefully for both logical and design mistakes
- Test the code
- Be professional and leave constructive feedback
Different perspectives
Author perspectives

Beginner / Newcomer

Expert
Reviewing beginner's code

• Be polite and professional

• Explain clearly what the mistake is about

• Explain why is it better your way

• Show them your appreciation
Reviewing expert's code

- Quidquid latine dictum sit, altum videtur
- Don't take the code as perfect
- Fountain of information
- Don't be afraid to ask questions
Thank you!

Idiomatic Python Performance
Stay tuned - early 2020

http://lukkol.pl/ep2019-code-review

http://bit.ly/2O4Kk0X