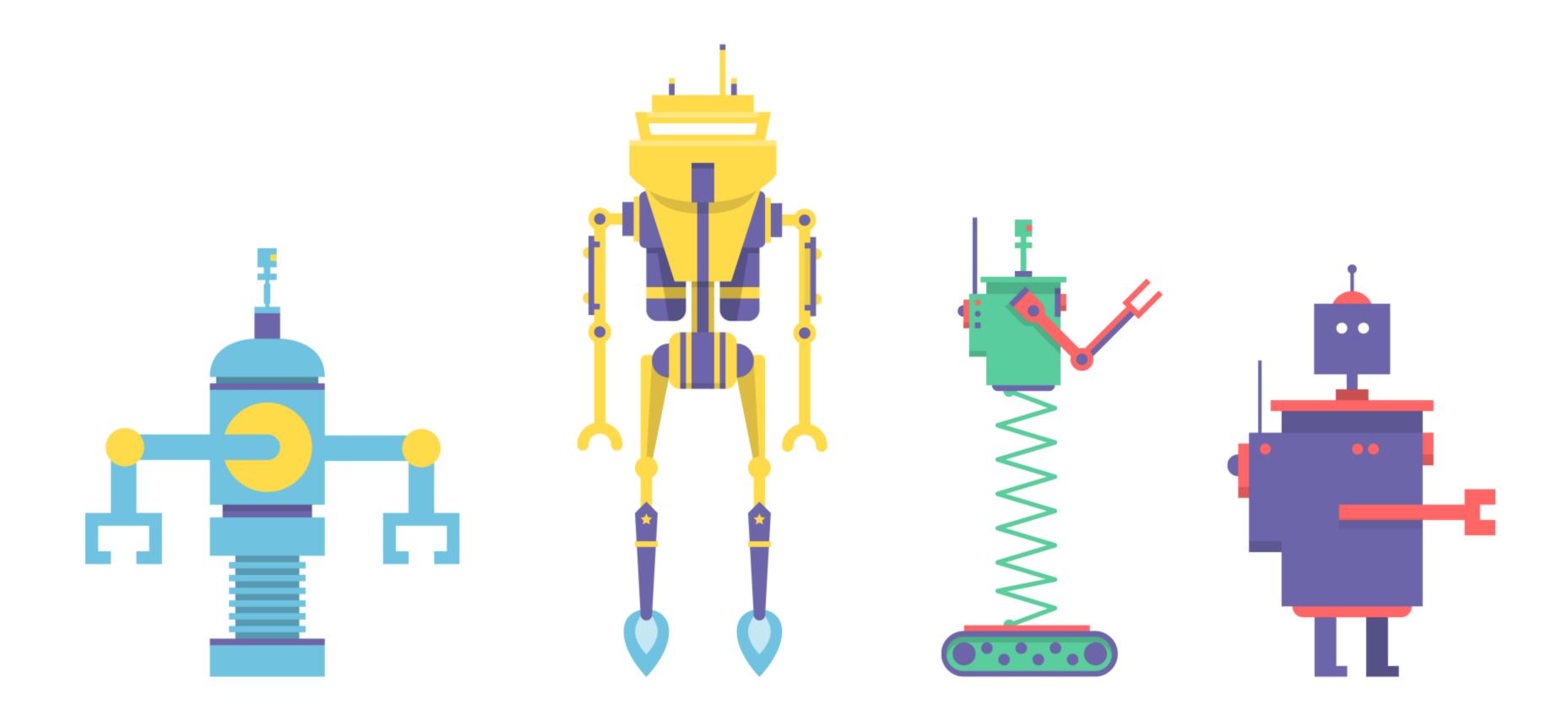
Vandex

Yandex Security

Security in developer's life. Knowledge is power

\$ whoami

- > Product security team lead in <u>Yandex</u>
- > OWASP Russia chapter leader
- (yandex|google)://oxdef



Automation is security's answer to the agile development problem

But...

Just writing secure code is better

Problems and questions

- > How to avoid questions about typical vulnerabilities?
- > How to make developers aware about security processes and controls?
- > How to make developers read security guides?
- > How to measure the result?
- > How to use these metrics in other security activities?

Security in developer's life

- > Interview
- > The first day at work
- > The first lines of code
- > The first security audit
- > The first security issues in the code

Interview

- > Learn about your new developers from the interview
- > If you use hire platform then add security related questions to it
- After the interview is completed you can automatically gather and analyze answers via API

The first day at work

- > "Welcome" meeting and small introduction talk about security processes
- > Internal staff portal with API
- > Use this API for monitoring new developers
- > Automatically send them "Welcome" letter

How to write secure code at Yandex

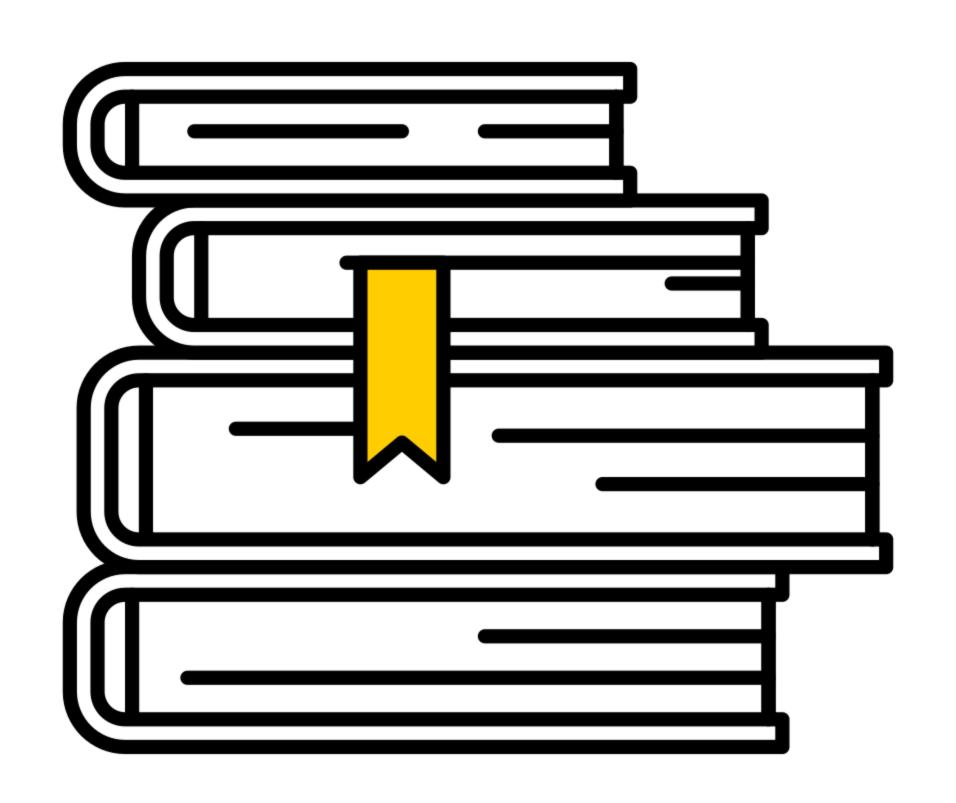
https://internal-portal/security/

Alexander, welcome to our team! Here at Yandex we make beautiful, functional, fast AND secure services! Security team had prepared security guides for you: https://internal-portal/security/guides/. Please, find some time to read them as soon as possible. If you have any questions feel free to contact us. Product Security Team



Internal security portal

- > Security guides
- > Quick links to security self-checking services
- > AskSecurity contact form
- > Latest posts from internal security blog
- Current projects



Structure

- > Separate guides for web, Android, iOS and C/C++ developers
- > From common topics and practices to typical issues and specific cases
- > Use cards as a format for publicating complex issues
- > Developers don't want to read "long read" articles
- > Content should be easily searchable based upon factors such as platform, programming language, framework, typical words, etc.
- > Integrated self-assessment quiz and feedback form

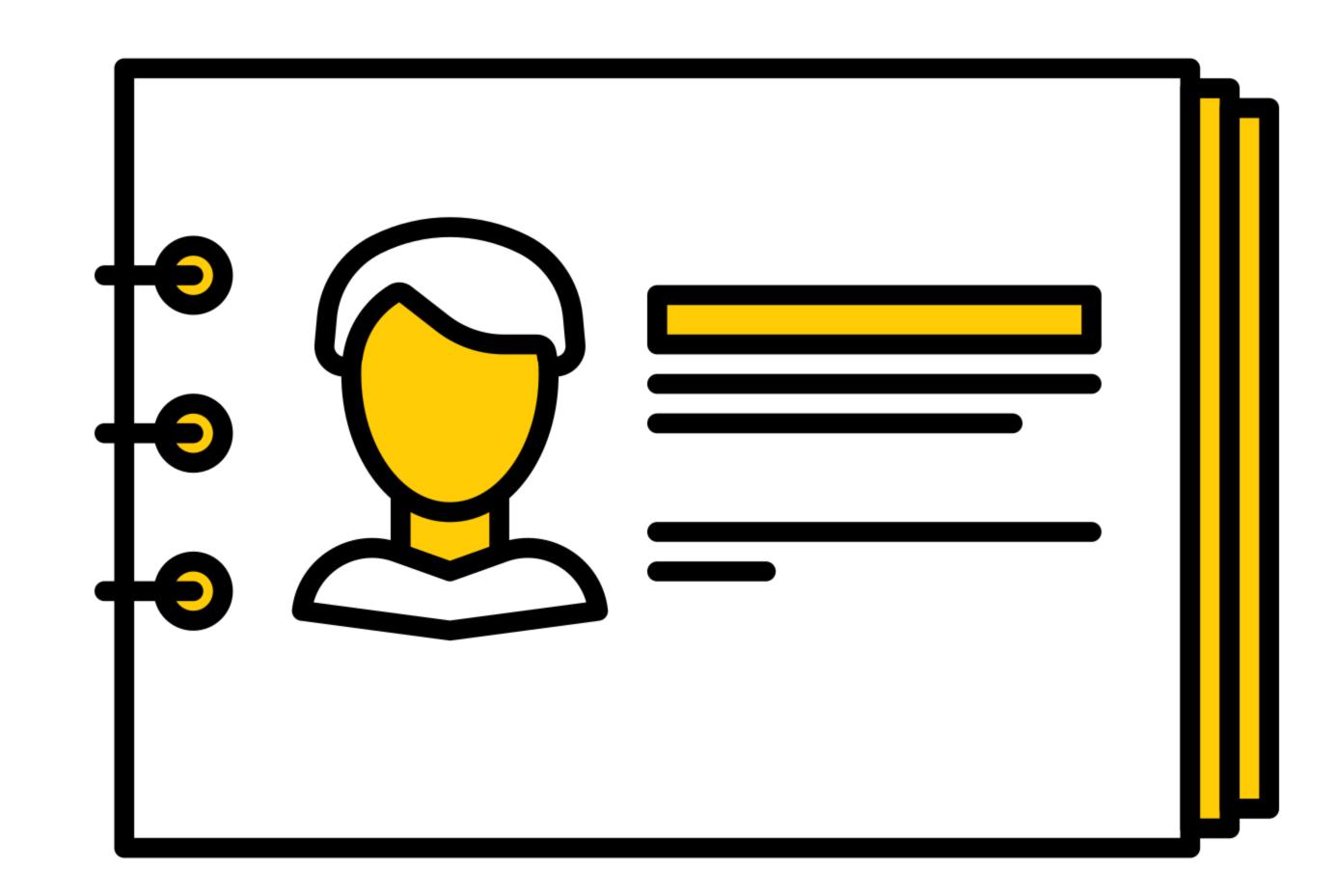
Content

- High-level best practices: authentication/authorization, input validation, output encoding, error handling, etc.
- > Security team internal processes, services and controls
- > OWASP Top 10 typical threads and mitigations
- > Specific internal topics



Quizzes and courses

- > To measure how well developers read the guides
- > Quiz should not take a lot of time
- > Quiz should not be boring!
- > Use FOSS, e.g. learning management system like <u>Moodle</u>
- Other interesting services: <u>OWASP Security Knowledge Framework</u>, <u>Hacksplaining</u>, <u>Codebashing</u>



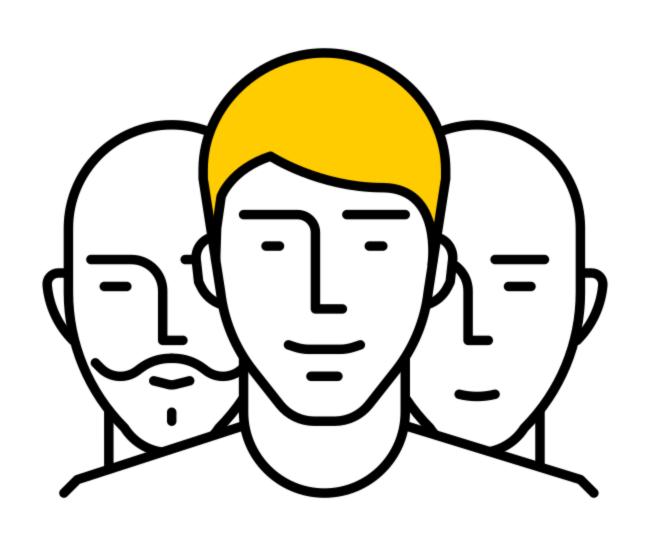
Developer's profile

- > Badges for various security activities
- > Special flags, e.g. for reading our guides
- > Security "karma"
- > Use this information to make more accurate threat analysis of new releases

Metrics

- > 60% developers briefed on security guides within the past year
- > No more questions about security issues
- > More followers in internal security blog

Let developers be security champions



Application security should be closer to developers. From the

first days and lines of code

Q&A

Contacts

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