

MINDSHARE

2025 10-11
SEP

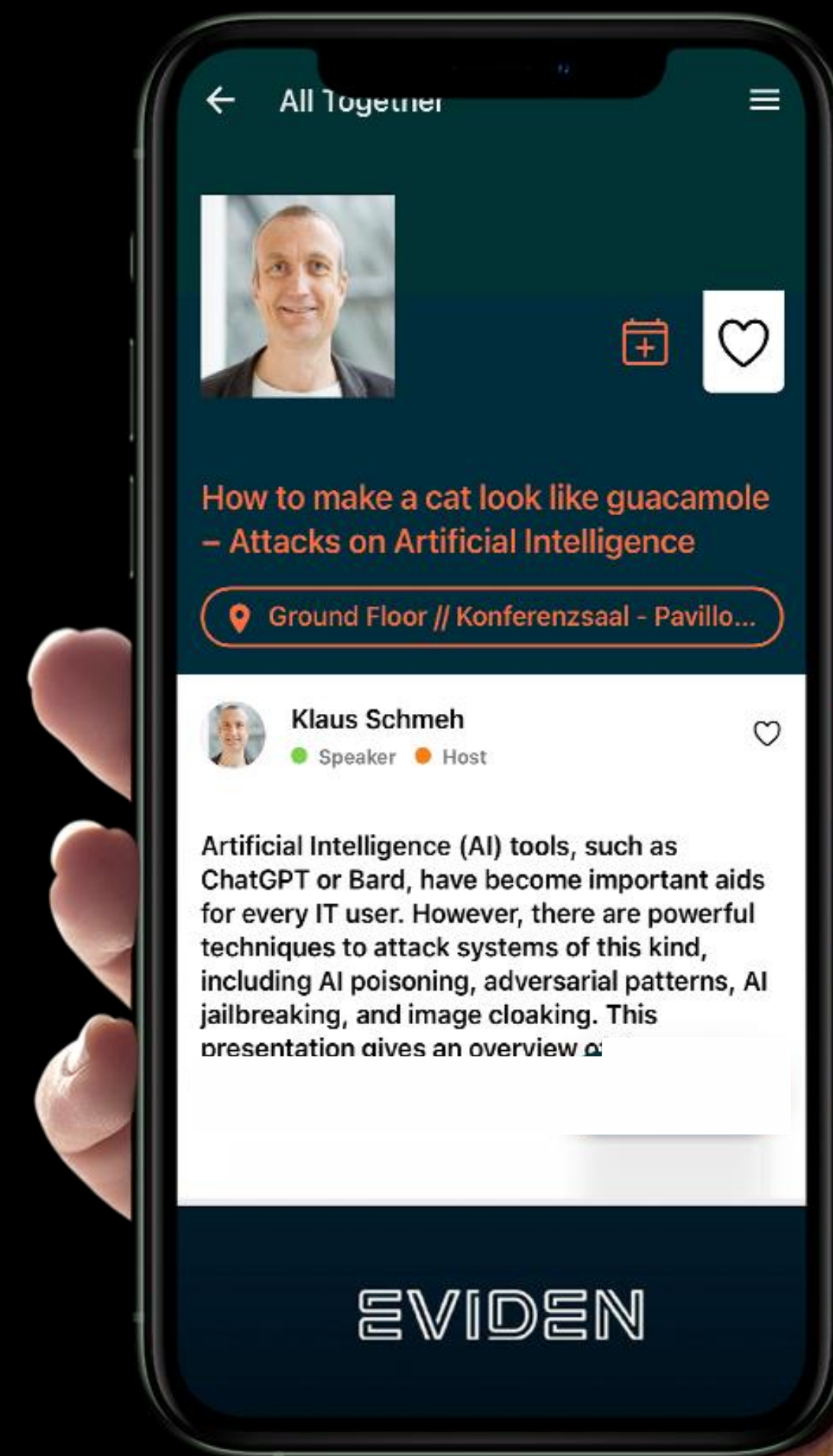
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MINDSHARE AGENDA



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CASA
CYBER SECURITY IN THE AGE
OF LARGE-SCALE ADVERSARIES



Jens Opdenbusch,
Ruhr University Bochum

Enabling Security
Champions – Heroes of
Secure Software
Development

About Me

PhD Student @ Ruhr University Bochum



- B. Sc. And M. Sc. In IT-Security
 - Industry Experience (e.g., Audit & Compliance)
- Research Focus on Challenges for IT-Security Practitioners in Organizations and Economics of IT-Security
- Doing (Almost) Exclusively Research with Industry Partners
- Part of an Interdisciplinary Team

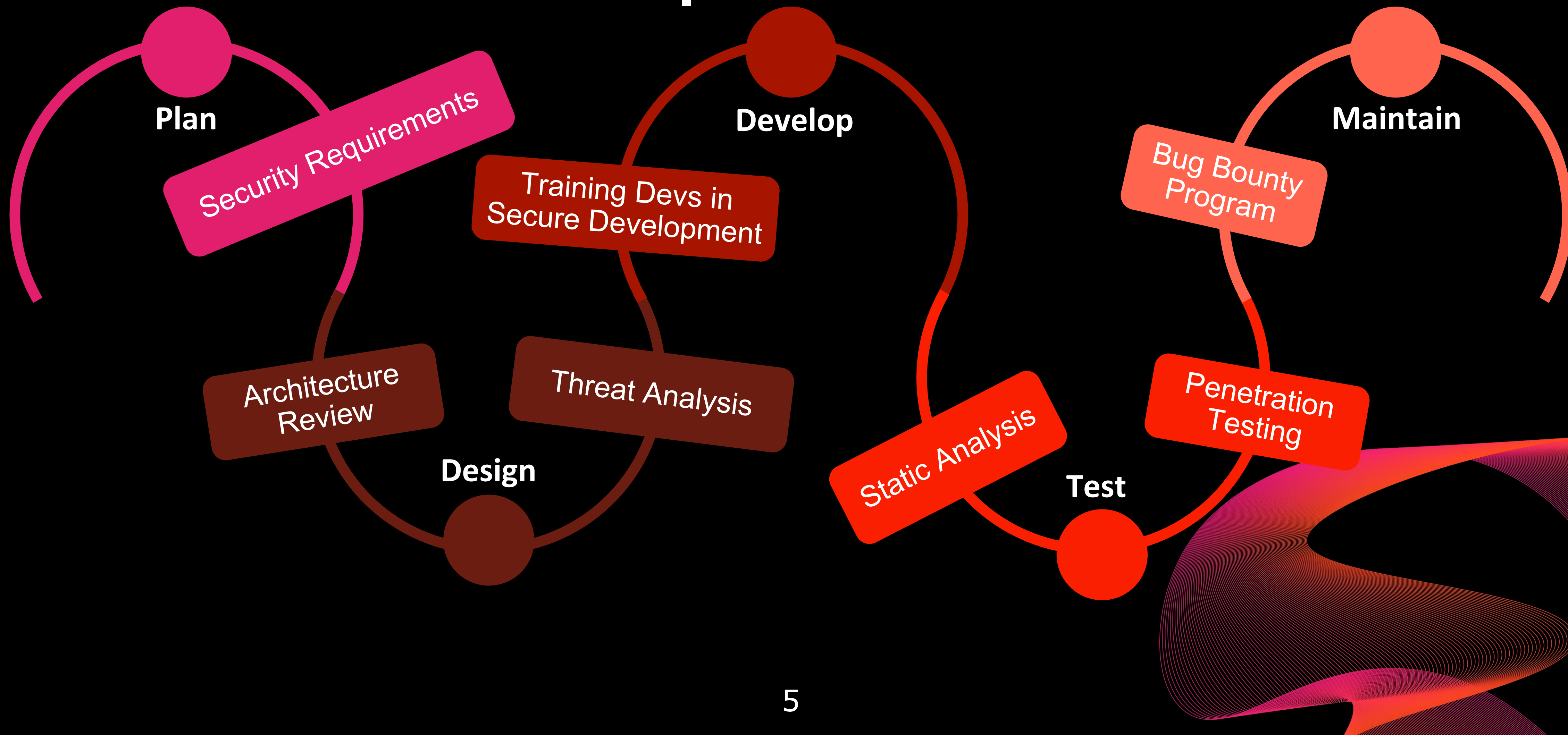
The Challenge:

Secure Software Development



The Challenge:

Secure Software Development




The Challenge:

Secure Software Development

- Lots of (Potential) Security Tasks in the Development Life Cycle
- Limited Security Knowledge in Development Teams
- Limited Security Personnel in Security Organization
- Two Options:
 - Hire more Security Staff
 - Enable Developers to Have a “First Glance” Through the **Security Lens**

Security Champions

Finding Security Champions
in Blends of Organisational Culture



**ZERO TO HERO: A
ESTABLISHING A
S PRO**



PROJECTS CHAPTERS EVENTS ABOUT Q

OWASP Security Culture

Home > V10 > 4-Security Champions

Security Champions

It can be hard to introduce security e
Information Security people do not s



SAFECode
Software Assurance Forum for Excellence in Code
Driving Security and Integrity

Care and Feeding of Your Security Champion

Martin Gilje Jaatun and Daniela Soar
Software Engineering, Safety and Sec
SINTEF Digital
Trondheim, Norway
martin.gjaatun, danielac@ Sintef

Security Champions Without Support: Results from a Case Study
with OWASP SAMM in a Large-Scale E-Commerce Enterprise

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Thrifty Guardians: Overco
Establishing Security Ch
Budget

Hannes Salin
School of Information and Engineering
Dalarna University
Borlänge, Sweden
hasa@du.se

large devel
easier said

**+ Unternehmenssicherheit: S
Champions als Wächter der si**

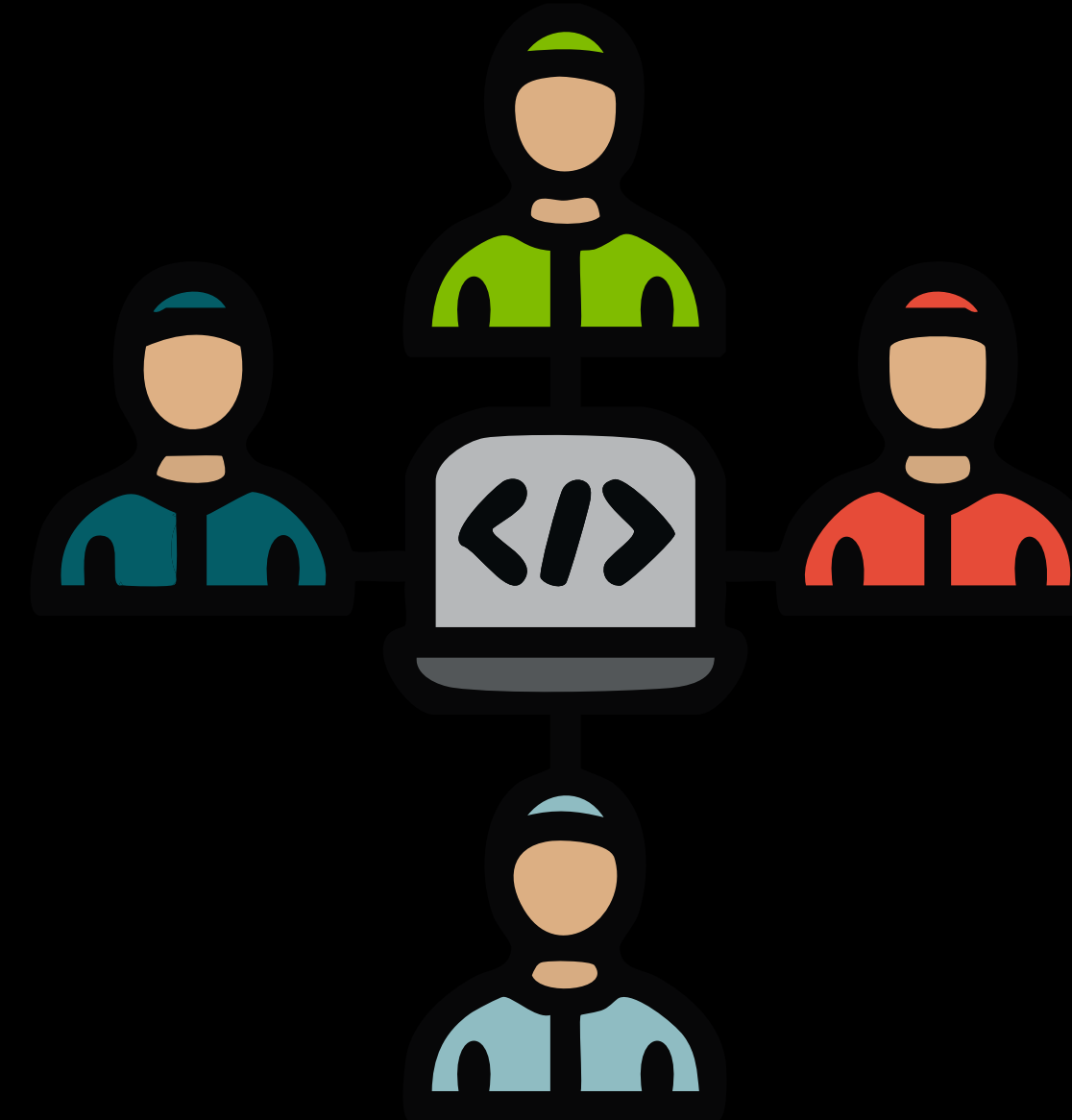
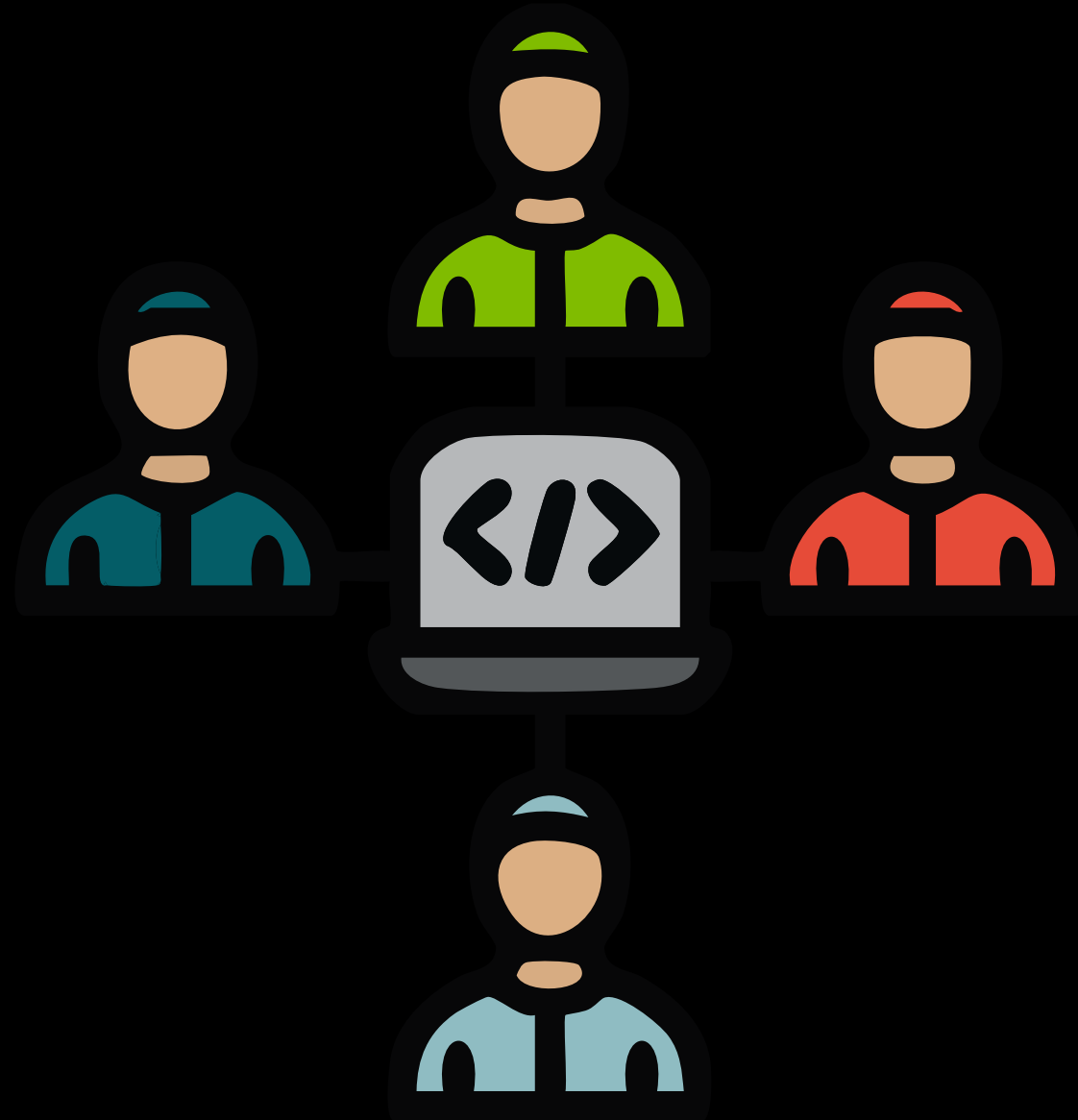
Security Champions sorgen mit bewährten Tools u
Softwareentwicklung dafür, dass Sicherheit von An

**Software Security
Takes a Champion**

A Short Guide on Building and
Sustaining a Successful Security
Champions Program

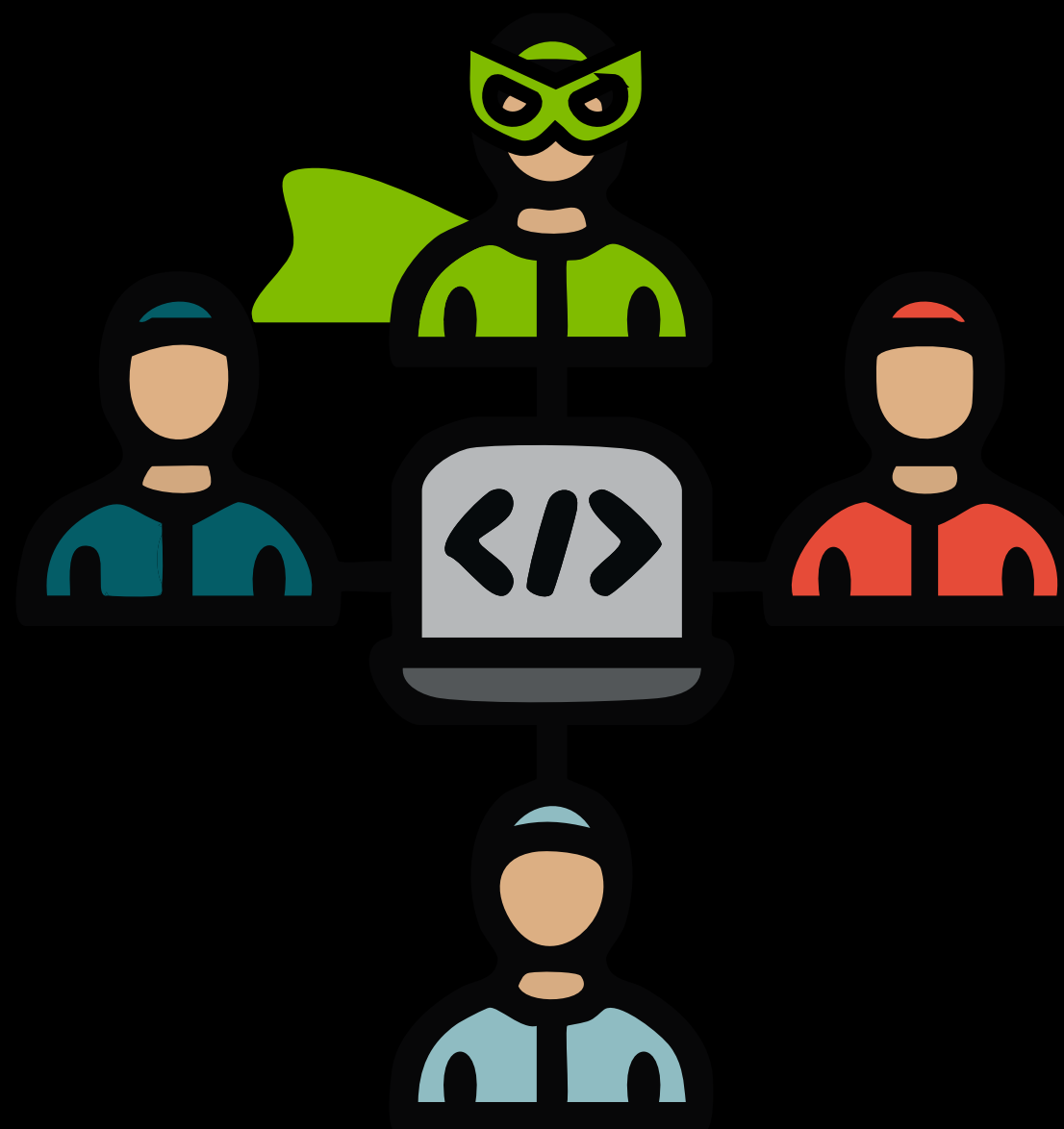
January 2019

What is the Concept of **Security Champions**?



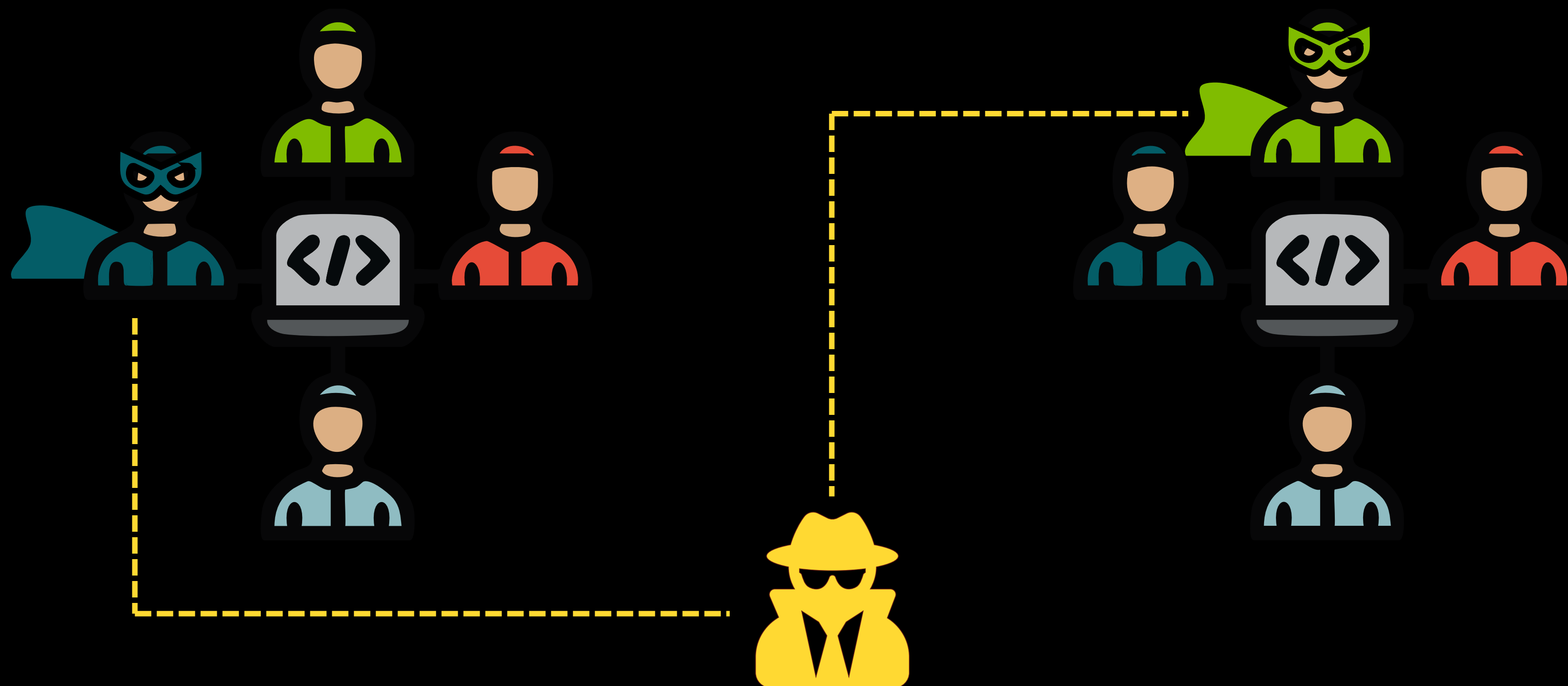


What is the Concept of **Security Champions**?



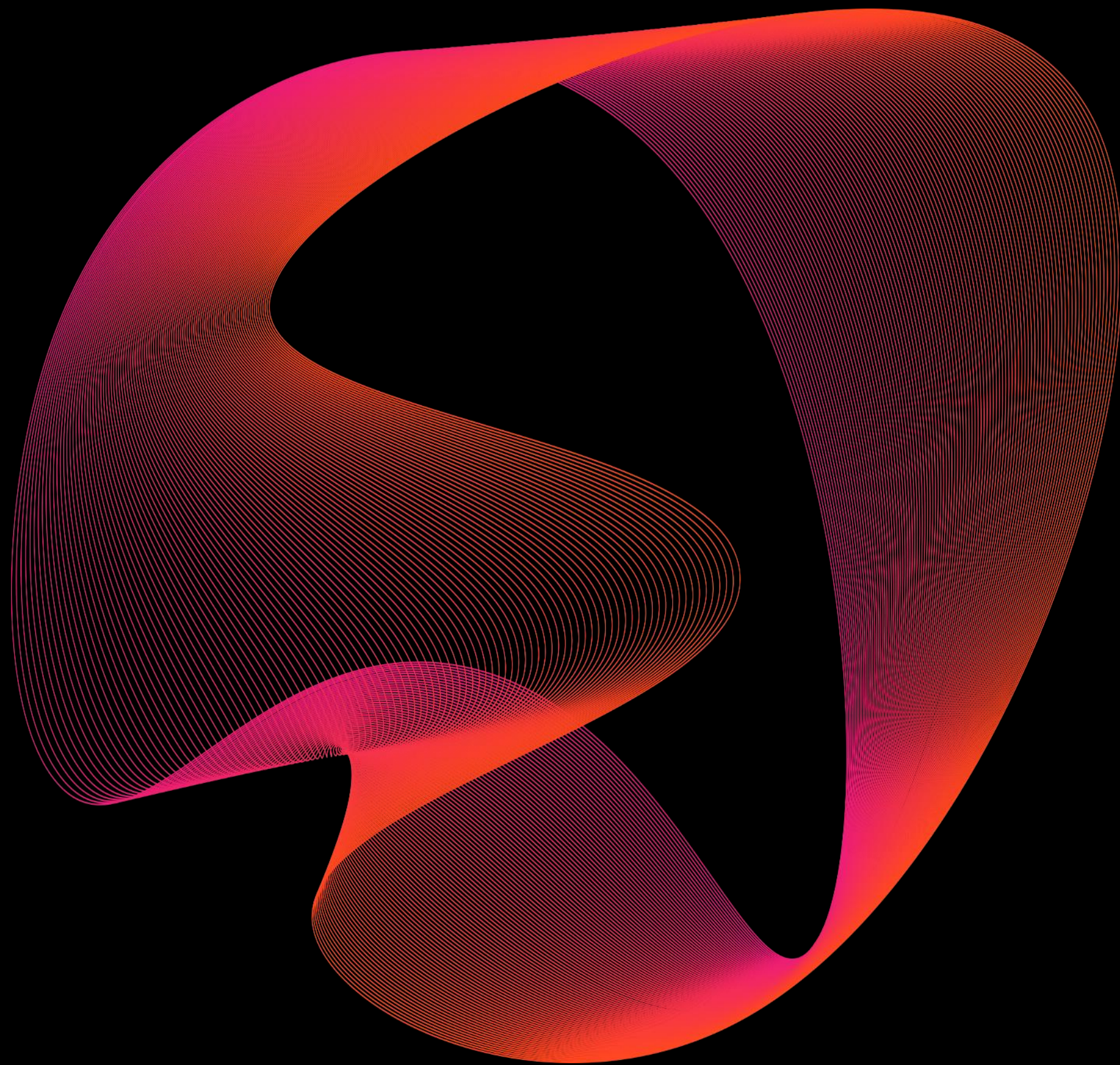


What is the Concept of **Security Champions**?



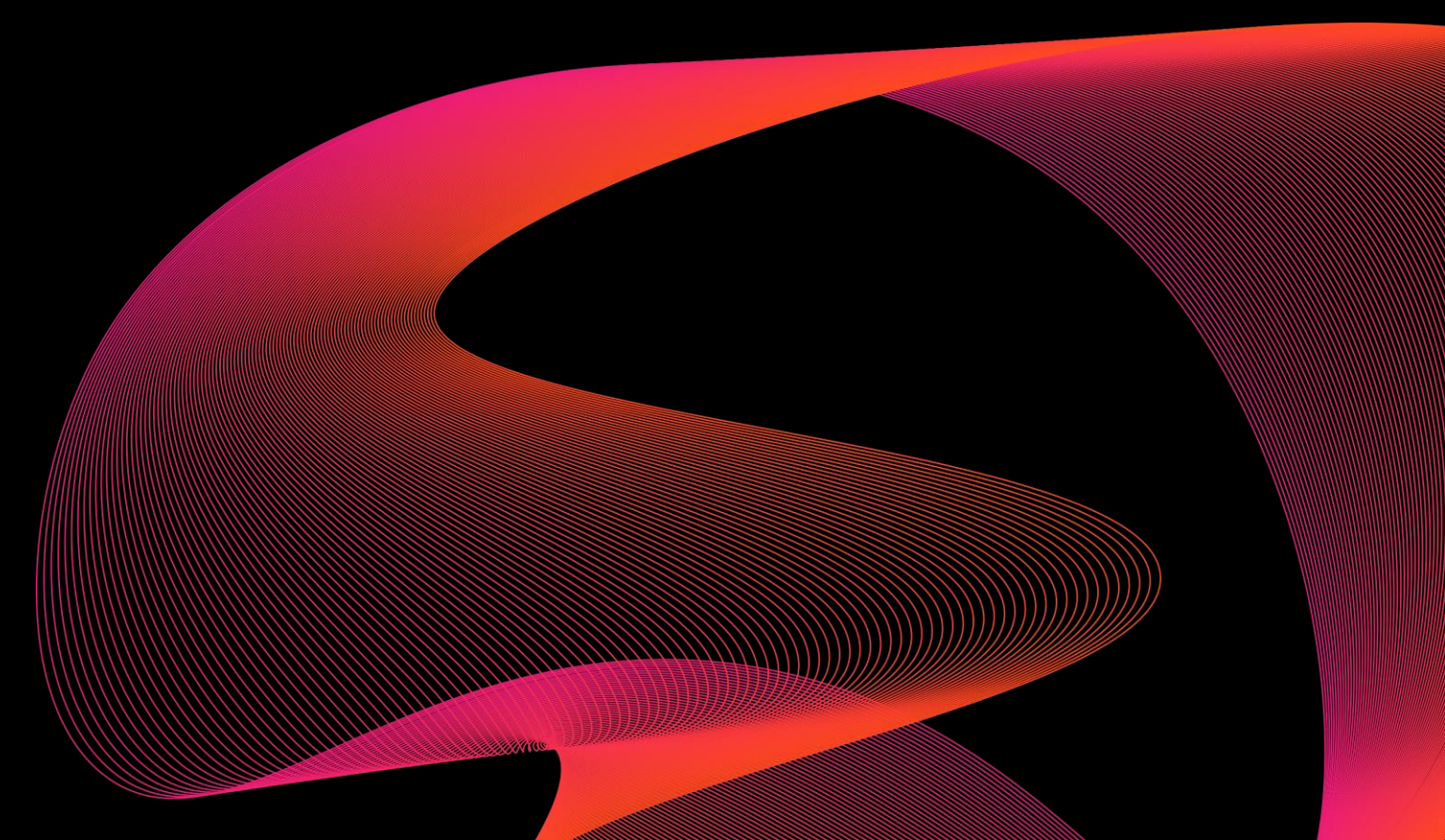


Security Champions in a Nutshell



- Developers Interested in IT-Security
- Connected to the IT-Security Department
 - Regular Exchange
- Security Training:
 - E.g., Threat Modeling, Vulnerability Assessment, Pen-Testing, Secure Secret Management, ...

What Could go Wrong?





Obstacles Identified by Research

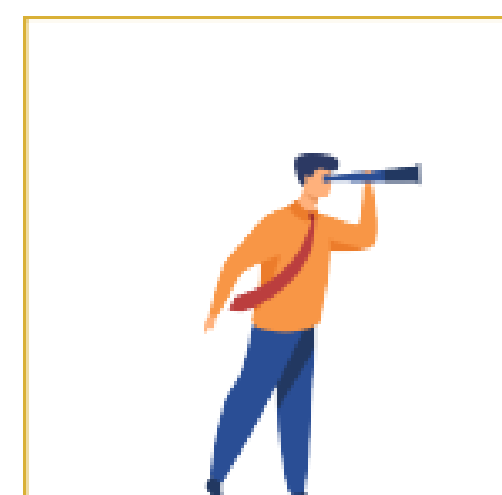
- **Missing Management Support and Guidance for Security Champions**
 - Conflicting Responsibilities and Lack of Time
- **Missing Communication Channels Between Security Champions**
- **Differing Required Security Skills for Different Business Divisions**
 - Finding Suitable Training for Security Champions
- **Achieving Equal Motivation (and Skills) Across Security Champions**
- **Missing Security Strategy & Goals**

Security Champions Guide by OWASP

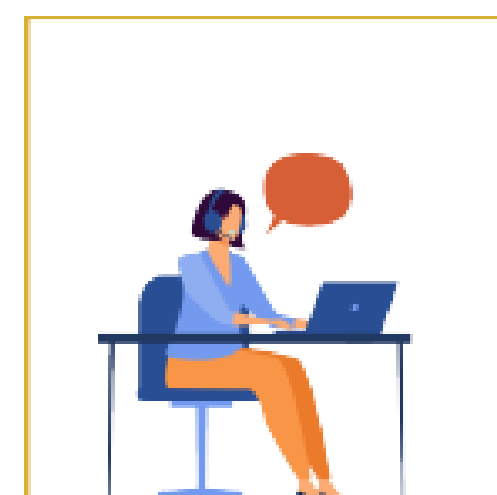
THE SECURITY CHAMPIONS MANIFESTO



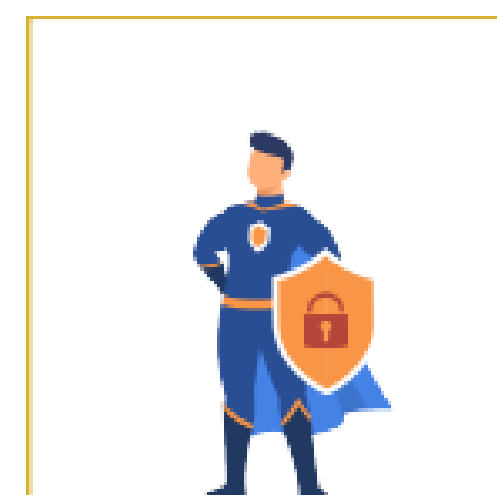
Be Passionate
About Security



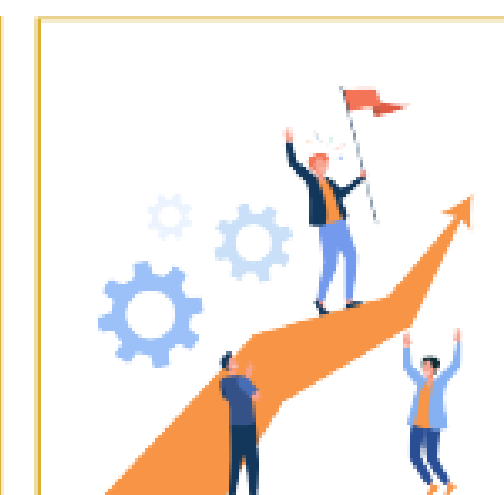
Start With
a Clear Vision



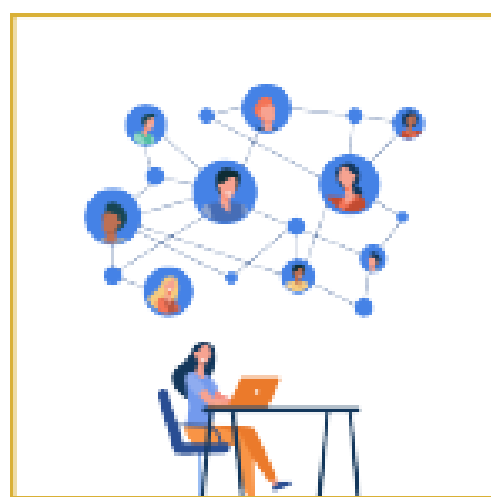
Secure Management
Support



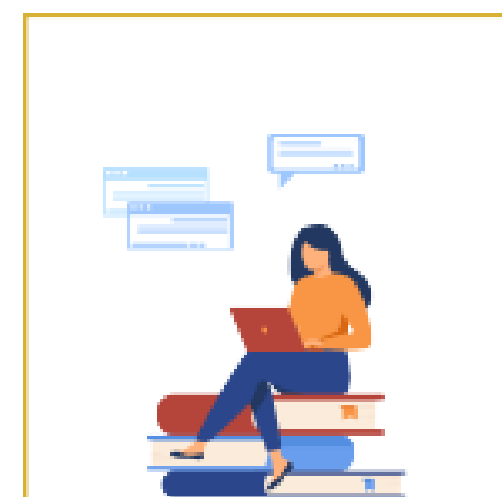
Nominate a
Dedicated Captain



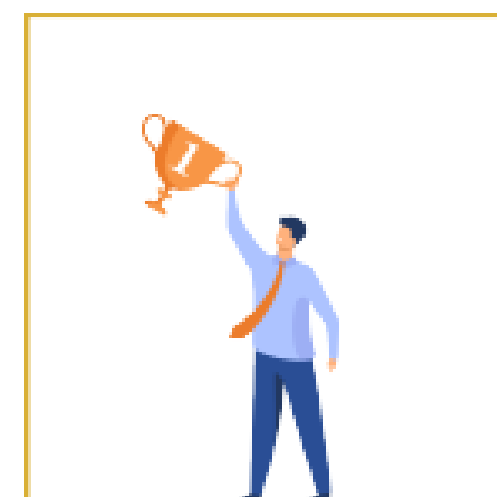
Trust
Your Champions



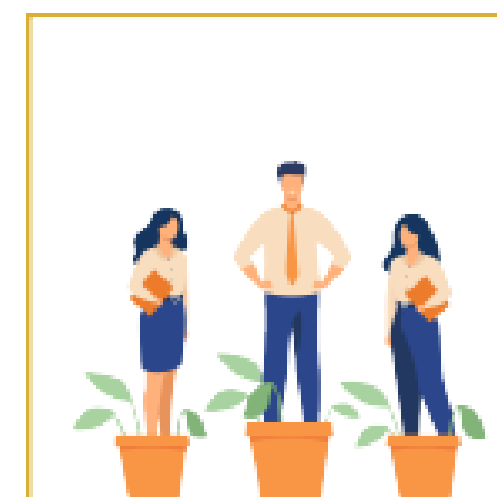
Create a
Community



Promote
Knowledge Sharing



Reward
Responsibility



Invest in
Your Champions



Anticipate
Personnel Changes



OWASP SECURITY CHAMPIONS GUIDE

Our Most Recent Case Study

Enabling Security Champions With Breakout Action Groups – A Longitudinal Study

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Marco Gutfleisch
Ruhr University
Bochum, Germany
marco.gutfleisch@ruhr-uni-bochum.de

Currently Under
Submission at
Top 4 Security
Conference

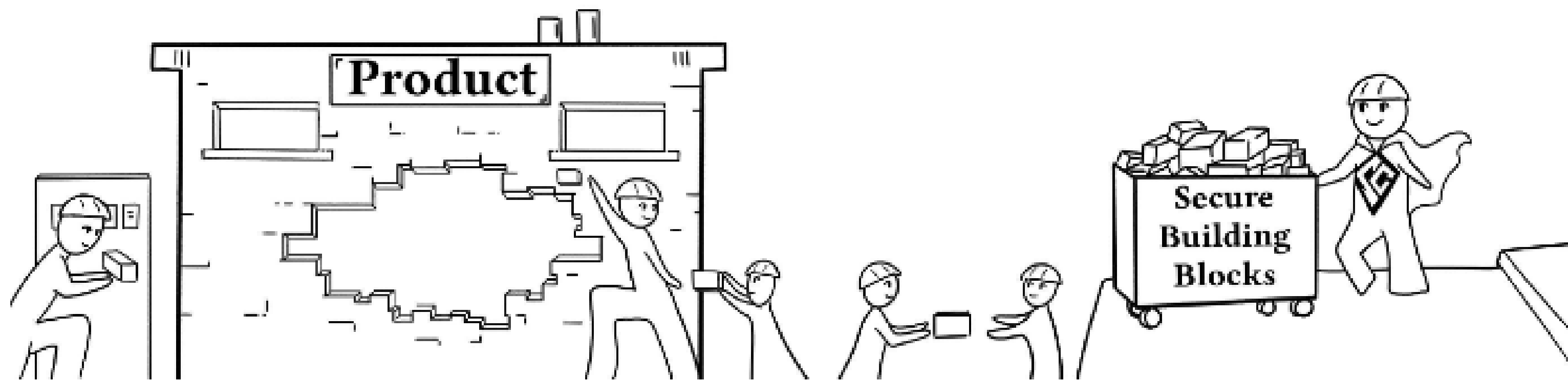


Figure 1: A Security Champion Bringing the Missing Secure Building Blocks for the Product Development Team's Product.

Our Most Recent Case Study

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes

Our Most Recent Case Study

- Familiarized Ourselves with the Company, Development Process, and Security Champion Program

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
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Our Most Recent Case Study

- Familiarized Ourselves with the Company, Development Process, and Security Champion Program

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes



Our Most Recent Case Study

- Familiarized Ourselves with the Company, Development Process, and Security Champion Program
- Attended Bi-Weekly Meetings of Security Champions
 - Very Speaker-Heavy
 - Only Few Questions Asked or Discussions

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes

Our Most Recent Case Study

- Retrospective to Gather Feedback

OWASP Key Principles

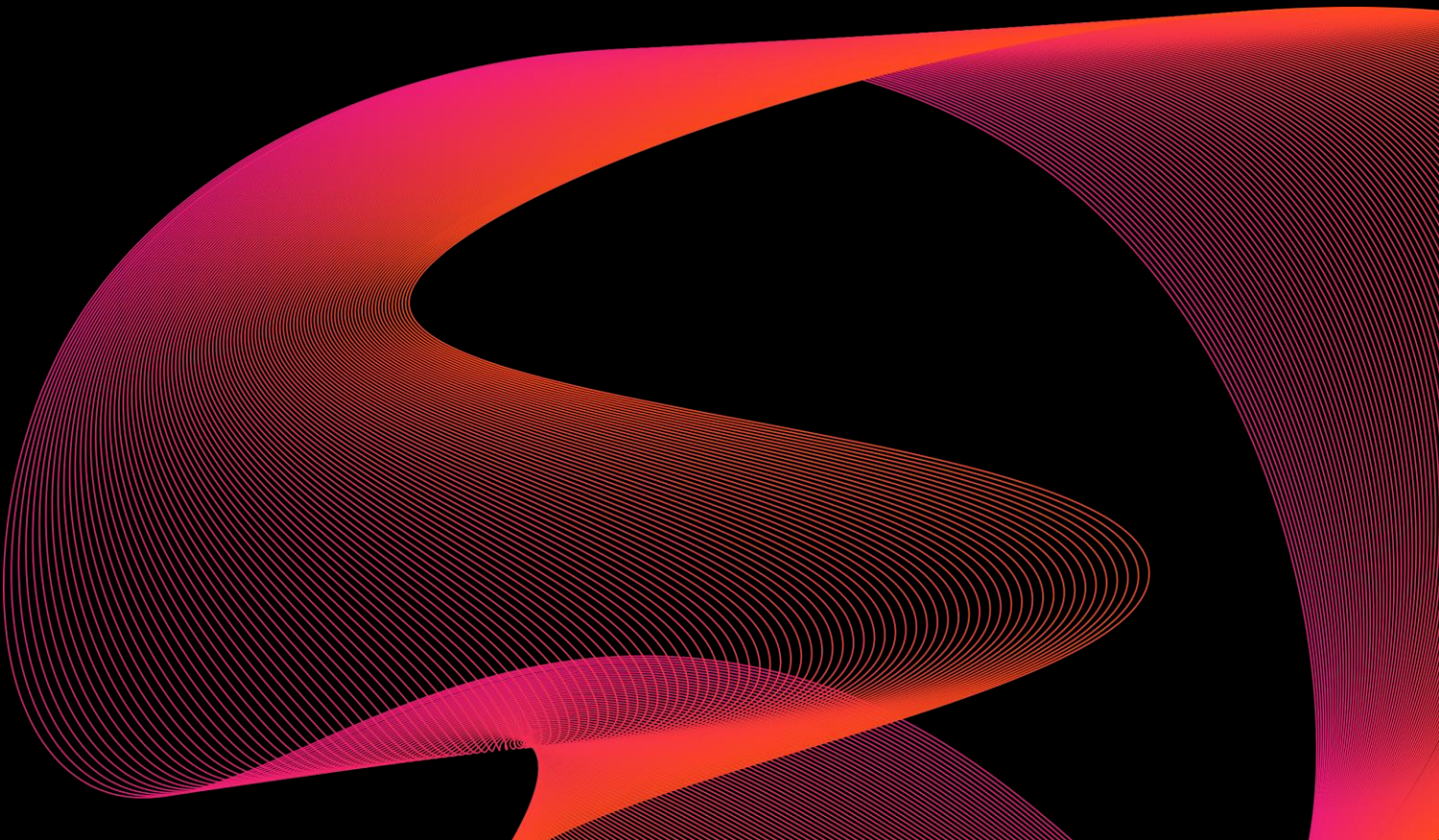
Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes

Our Most Recent Case Study

- Retrospective to Gather Feedback
- Vision Workshop
 - Mission Statement and Goal

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes

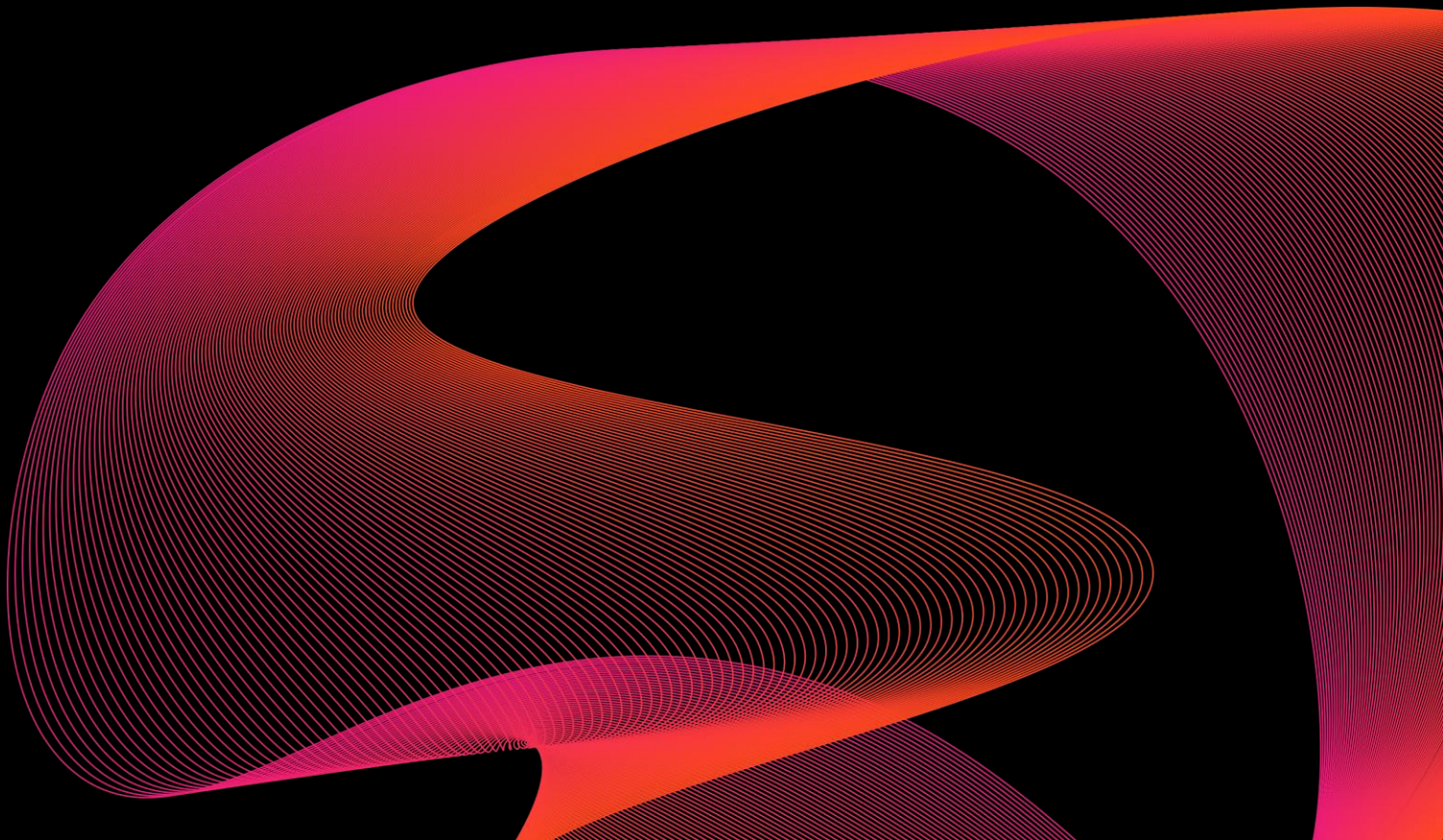


Our Most Recent Case Study

- Retrospective to Gather Feedback
- Vision Workshop
 - Mission Statement and Goal
- Secure Coding Workshop (5 Days)
 - On-Premise (3 Days)

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes



Our Most Recent Case Study

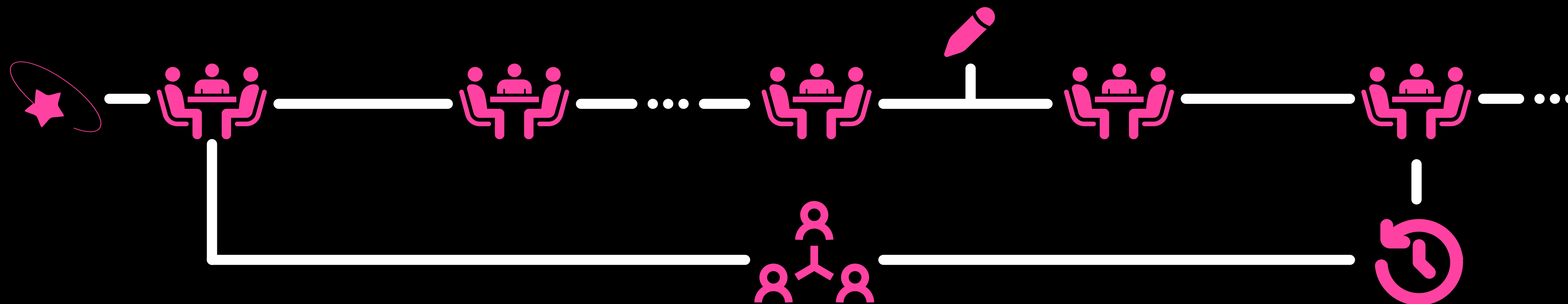
- Biggest Change: Format
 - Smaller Project Groups Working Independently on Lighthouse-Projects
 - From Bi-Weekly
 - To Every 4 Weeks to Check-In on Progress and Update the Other Groups

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes



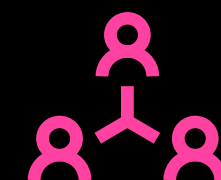
Concrete Recommendation



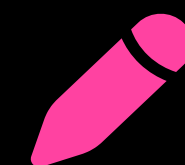
Start with a Vision



Meet (Less) Regularly With All Security Champions



Small Independent Project Teams – Breakout Action Groups



Workshops



Retros

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Questions

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TAKE A MINUTE AND GIVE US FEEDBACK

