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👋 Welcome to the CyBOK Mapping Workshop!

This work is/was supported by the Cyber Security Body of Knowledge (CyBOK) call for funded Outreach, Adoption, and Awareness projects around CyBOK v1.1.

Where opportunity creates success

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Is cyber security a part of your job role and responsibilities?

Intended learning outcomes

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- Recognize the different areas of the Cyber Security Body of Knowledge (CyBOK).
- Relate your job role to different knowledge areas in the CyBOK.

What is the CyBOK?

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What is the CyBOK?

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- The Cyber Security Body of Knowledge.
- An effort to systematise knowledge that is related to cyber security.
- Relevant knowledge was decided via a series on consultation workshops and surveys, and divided into **knowledge groups** and **knowledge areas**.

What is the point of the CyBOK?

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- The main use (currently) is certifying / mapping HE degree programmes.

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- The main use (currently) is certifying / mapping HE degree programmes.
- **But is has potential to be used for so much more!**

CyBOK knowledge areas

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- 5 top-level knowledge groups.
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  - 
- 21 knowledge areas divided across these groups.
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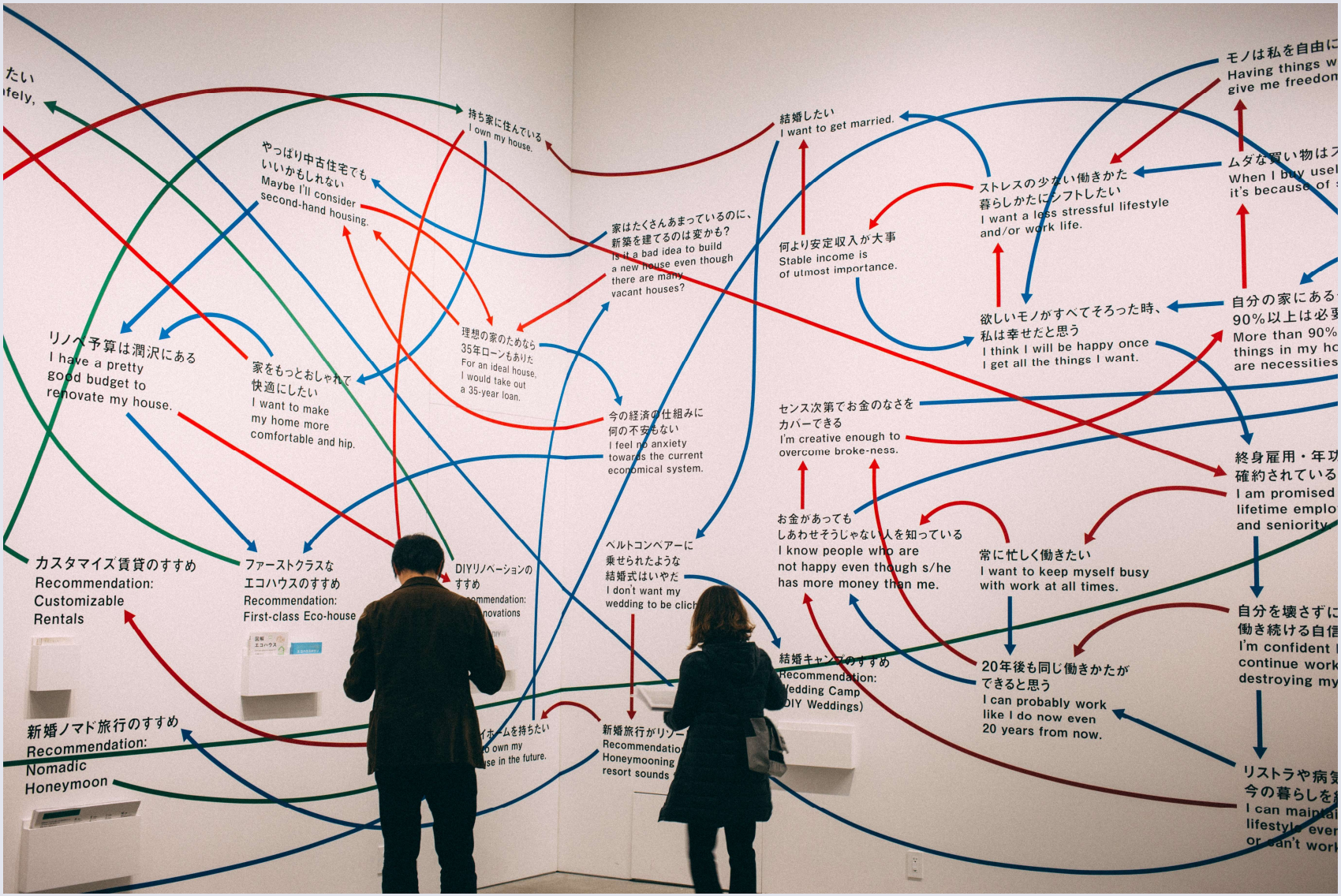
  - …

Photo by Annie Spratt on Unsplash



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CyBOK knowledge areas

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- 5 top-level knowledge groups.
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CyBOK knowledge areas

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- 5 top-level knowledge groups.
  - Attacks & defences.
  - Human, organisational, and regulatory aspects.
  - Software and platform security.
  - Systems security.
  - Infrastructure security.
- 21 knowledge areas divided across these groups.
  - Software Security
  - Applied Cryptography.
  - Network Security.
  - …

Human, organisational, regulatory aspects

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- Risk management and governance.
  - Security management systems and organisational security controls...
- Law and regulation.
  - Regulatory requirements, compliance obligations, and security ethics...
- Human factors.
  - Usable security, social & behavioural factors impacting security…
- Privacy and online rights.
  - Techniques for protecting personal information…

Attacks and defences

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- Malware and attack technologies.
  - Technical details of exploits + approaches to analysis…
- Adversarial behaviours.
  - Motivations and methods of attackers…
- Security operations and incident management.
  - Detection and response to incidents…
- Forensics.
  - Gathering of digital evidence after incidents and criminal events…

Systems security

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- Cryptography.
  - Theory of cryptography, public vs. private key…
- Operating systems and virtualisation security.
- Distributed systems security.
  - Security relating to large scale coordinated systems, cloud, DLT…
- Formal methods for security.
  - Formal methods for reasoning about security…
- Authentication, authorisation, and accountability.
  - All aspects of identity management and authentication technologies…

Software and platform security

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- Software security.
  - Known categories of error that can occur…
- Web and mobile security.
- Secure software lifecycle.
  - Processes and practices that result in secure software…

Infrastructure security

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- Applied cryptography
  - Practical aspects of cryptography…
- Network security
  - Security aspects of networking, routing, etc…
- Hardware security
- Cyber-physical systems
  - Security in control systems, e.g., electronic hotel door, IoT factory…
- Physical layer and telecommunications security

Mapping toolkit

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- Each of the word clouds corresponds to a knowledge area.
- Tabular reference (contains descriptions of knowledge areas).
- Mapping worksheet.