



Principles & Pokémon



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Getting Started!

 <p>Pikachu</p> <p>HP </p> <p>Lv.20 45/45</p>	 <p>Pidgeotto</p> <p>HP </p> <p>Lv.20 57/57</p>
 <p>Kadabra</p> <p>HP </p> <p>Lv.20 46/46</p>	 <p>Gyarados</p> <p>HP </p> <p>Lv.20 71/71</p>
 <p>Diglett</p> <p>HP </p> <p>Lv.20 36/36</p>	 <p>Chansey</p> <p>HP </p> <p>Lv.20 131/131</p>

Choose a Pokémon.

CANCEL





Principle no 1.

CIA Triad



Principle no. 2: Zero Trust



	 Identity	 Device/Workload	 Access	 Transaction
Zero Trust for Users	Validate users with strong authentication	Verify user device integrity	Enforce least-privilege access for workloads accessing other workloads	Scan all content for malicious activity and data theft
Zero Trust for Applications	Validate developers, devops, and admins with strong authentication	Verify workload integrity	Enforce least-privilege user access to data and applications	Scan all content within the infrastructure for malicious activity and data theft
Zero Trust for Infrastructure	Validate all users with access to the infrastructure	Identify all devices including IoT	Least-privilege access segmentation for native and third-party infrastructure	Scan all content for malicious activity and data theft

Principle no. 3

Know your Enemy and Self

BUG	2X DAMAGE TO PSYCHO GRASS DARK ½ DAMAGE TO FIGHT FLYING GHOST POISON SILENT PSYCHO	½ DAMAGE FROM FIGHT GRASS GROUND 2X DAMAGE FROM FIRE FLYING ROCK									
ELECTA	2X DAMAGE TO FLYING WATER ½ DAMAGE TO DRAGON ELECTA GRASS CAN'T DAMAGE DRAGON	½ DAMAGE FROM ELECTA FLYING STEEL 2X DAMAGE FROM GROUND									
FIRE	2X DAMAGE TO BUG GRASS ICE STEEL ½ DAMAGE TO DRAGON FIRE ROCK WATER	½ DAMAGE FROM BUG FLYING FIRE GRASS ICE STEEL 2X DAMAGE FROM GROUND ROCK WATER									
GRASS	2X DAMAGE TO GROUND ROCK WATER ½ DAMAGE TO BUG DRAGON FIRE FLYING GRASS POISON STEEL	½ DAMAGE FROM ELECTA GRASS GROUND WATER 2X DAMAGE FROM ICE POISON									
NORMAL	2X DAMAGE TO NONE ½ DAMAGE TO ROCK STEEL CAN'T DAMAGE GHOST	½ DAMAGE FROM NONE 2X DAMAGE FROM FIGHT IMMUNE TO GHOST									
POISON	2X DAMAGE TO GRASS FLYING ½ DAMAGE TO GHOST GROUND POISON ROCK CAN'T DAMAGE STEEL	½ DAMAGE FROM BUG FLYING FIGHT GRASS POISON 2X DAMAGE FROM GROUND PSYCHO									
ROCK	2X DAMAGE TO BUG FIRE FLYING ICE ½ DAMAGE TO FIGHT GROUND STEEL	½ DAMAGE FROM FIRE FLYING NORMAL POISON 2X DAMAGE FROM FIGHT GRASS GROUND STEEL WATER									
STEEL	2X DAMAGE TO FLYING ICE ROCK ½ DAMAGE TO ELECTA FIRE STEEL WATER	½ DAMAGE FROM BUG DRAGON FLYING FLYING GRASS ICE NORMAL PSYCHO ROCK STEEL IMMUNE TO POISON 2X DAMAGE FROM FIGHT FIRE GROUND									
DRAGON	2X DAMAGE TO DRAGON ½ DAMAGE TO STEEL CAN'T DAMAGE FLYING	½ DAMAGE FROM DARK GHOST IMMUNE TO PSYCHO 2X DAMAGE FROM BUG FIGHT FLYING									
FIGHT	2X DAMAGE TO DARK ICE NORMAL ROCK STEEL ½ DAMAGE TO BUG FLYING POISON PSYCHO CAN'T DAMAGE GHOST	½ DAMAGE FROM BUG DARK ROCK 2X DAMAGE FROM FLYING FLYING PSYCHO									
GHOST	2X DAMAGE TO GHOST PSYCHO ½ DAMAGE TO DARK CAN'T DAMAGE NORMAL	½ DAMAGE FROM <tr> <td>ICE</td><td> 2X DAMAGE TO DRAGON FLYING GRASS GROUND ½ DAMAGE TO FIRE ICE STEEL WATER </td><td> ½ DAMAGE FROM ICE 2X DAMAGE FROM FIGHT FIRE ROCK STEEL </td></tr> <tr> <td>PSYCHO</td><td> 2X DAMAGE TO FIGHT POISON ½ DAMAGE TO PSYCHO STEEL CAN'T DAMAGE DARK </td><td> ½ DAMAGE FROM FIGHT PSYCHO 2X DAMAGE FROM BUG DARK GHOST </td></tr> <tr> <td>WATER</td><td> 2X DAMAGE TO FIRE GROUND ROCK ½ DAMAGE TO DRAGON GRASS WATER </td><td> ½ DAMAGE FROM FIRE ICE STEEL WATER 2X DAMAGE FROM ELECTA GRASS </td></tr>	ICE	2X DAMAGE TO DRAGON FLYING GRASS GROUND ½ DAMAGE TO FIRE ICE STEEL WATER	½ DAMAGE FROM ICE 2X DAMAGE FROM FIGHT FIRE ROCK STEEL	PSYCHO	2X DAMAGE TO FIGHT POISON ½ DAMAGE TO PSYCHO STEEL CAN'T DAMAGE DARK	½ DAMAGE FROM FIGHT PSYCHO 2X DAMAGE FROM BUG DARK GHOST	WATER	2X DAMAGE TO FIRE GROUND ROCK ½ DAMAGE TO DRAGON GRASS WATER	½ DAMAGE FROM FIRE ICE STEEL WATER 2X DAMAGE FROM ELECTA GRASS
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WATER	2X DAMAGE TO FIRE GROUND ROCK ½ DAMAGE TO DRAGON GRASS WATER	½ DAMAGE FROM FIRE ICE STEEL WATER 2X DAMAGE FROM ELECTA GRASS									



Principle no. 4: Defense in Depth



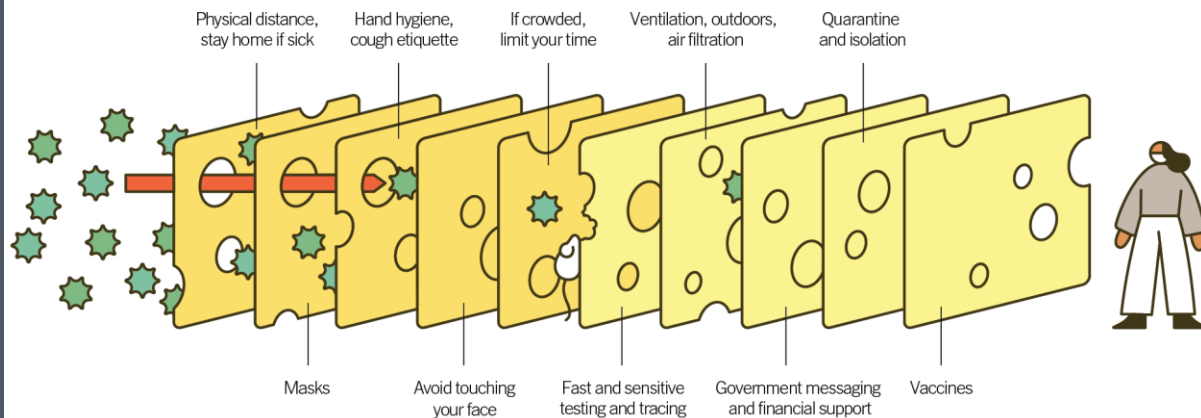


Multiple Layers Improve Success

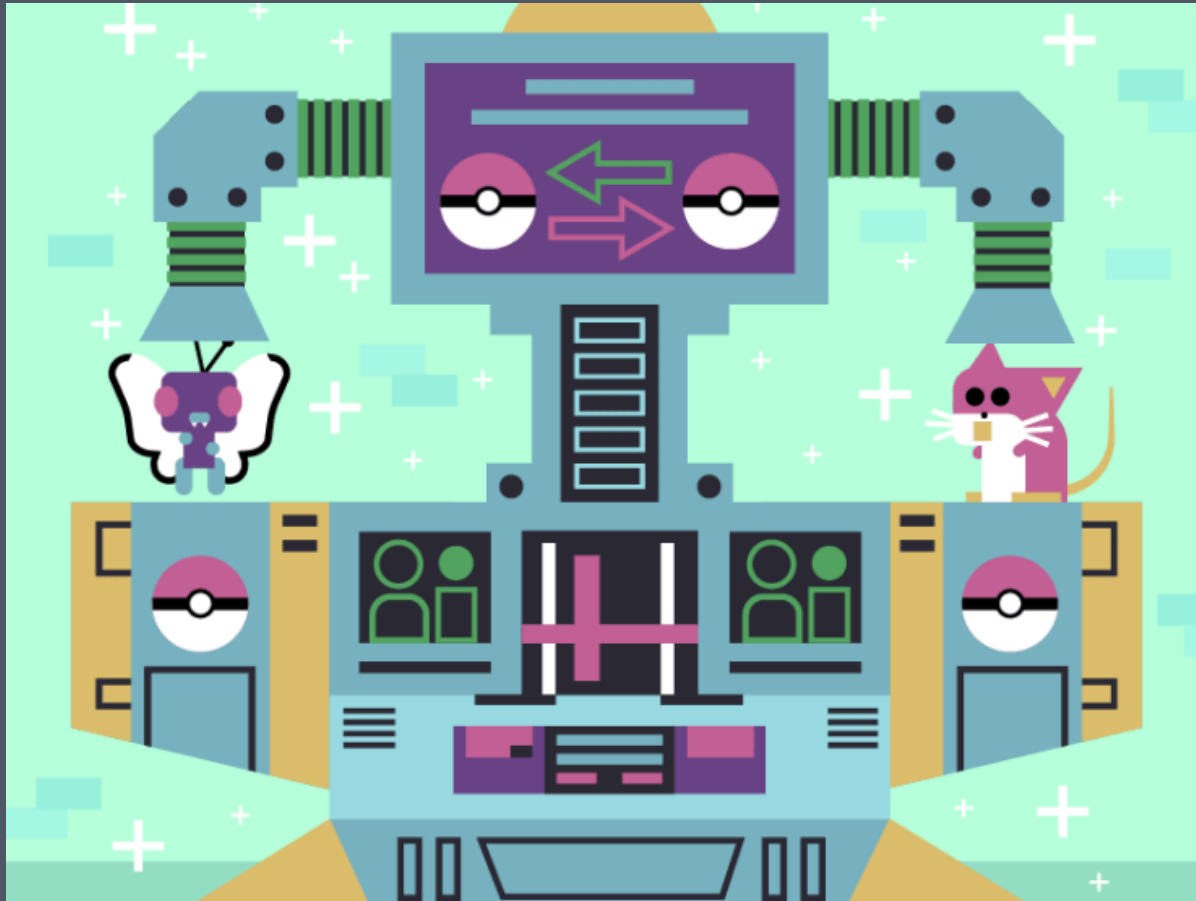
The Swiss Cheese Respiratory Pandemic Defense recognizes that no single intervention is perfect at preventing the spread of the coronavirus. Each intervention (layer) has holes.

Personal responsibilities

Shared responsibilities

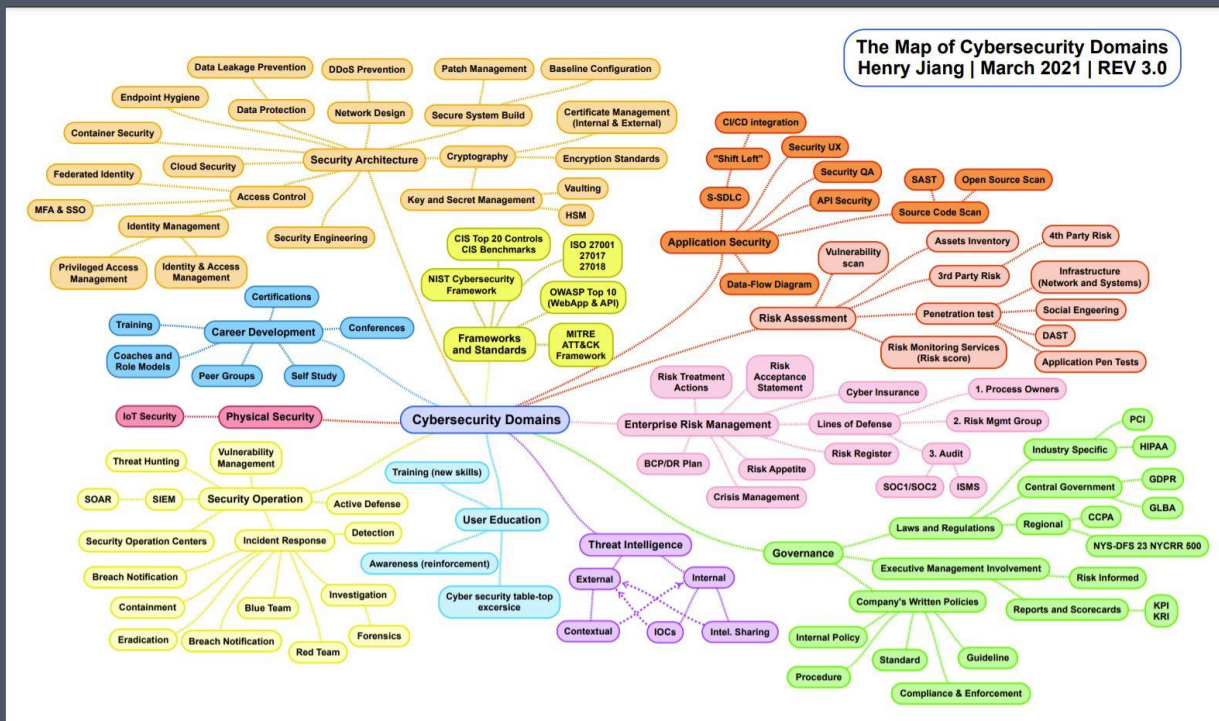


Principle no. 5: Learn in Public



<https://www.swyx.io/learn-in-public/>

Principle no. 6: "Try a little harder to be a little better"





What?
Pikachu is evolving!



What?
EEVEE is evolving!

questions?

References

- <https://www.idx.us/knowledge-center/can-we-stop-the-pokemon-go-cyber-risks>
- <https://www.ejohnson.com/blog/it/find-cyber-security-experts-say-go-away-pokemon-go>
- <https://money.cnn.com/2016/08/04/technology/kill-pokemon-lookingglass-niantic/index.html>
- <http://www.wigleylaw.com/assets/Uploads/Addressing-human-cybersecurity-risk-lessons-from-Pokmon-Go.pdf>
- <https://www.csoonline.com/article/3105488/pokmon-gos-strategy-could-thwart-cybersecurity-threats.html>
- <https://www.crowdstrike.com/cybersecurity-101/zero-trust-security/>
- https://cwe.mitre.org/top25/archive/2021/2021_cwe_top25.html
- <https://www.ncsc.gov.uk/collection/cyber-security-design-principles/cyber-security-design-principles>
- <https://www.educba.com/cyber-security-principles/>
- <https://www.mitre.org/publications/project-stories/know-your-weakest-link-exposing-weaknesses-to-eliminate-cyber-flaws>
- <https://www.broadcom.com/support/security-center/ses-protects-you>