Competitive Analysis: Cyber security awareness games.

It’s very hard to find a good training; everything is paid and made for large companies

On itch.io there are various games related to cyber security. 2 years ago, there was even a game jam about it.

<https://www.socialspel.nl/cybersecurity-awareness-training/?gclid=EAIaIQobChMIs_20qbKYgQMVb0NBAh0ldgpzEAMYAiAAEgJSyvD_BwE>

<https://itch.io/search?q=cyber+security>

<https://cybersecured.itch.io/cyber-secured-2020>

<https://evangfatoks.itch.io/cybersecgame>

<https://itch.io/jam/cybersecurity-game-jam/rate/1112238>

<https://lio-lim.itch.io/cryptic-clash>

<https://adamfowler.itch.io/phish-bait>

Research Question:

**What kind of cyber security awareness trainings exist already, and what can be used from them?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Game | Summary | Focus | Educational value | Other notes |
| Cyber Secured | You work for a company as a security specialist. You must make certain choices on how to secure the company. When you choose to secure the company in a certain way, you receive a minigame about that topic, which also improves the points you get. | Topics include phishing, encryption, good passwords, and backups | The information is thrown rather directly into your face, but everything is optional. This information is required for the gameplay | Personal rating 7/10. The game is alright, but its looks could use some improvement. It gives you a lot of information you may not always need.  [link](https://cybersecured.itch.io/cyber-secured-2020) |
| “Comprehensive Cybersecurity Game” | A game which consists of 3 minigames you can choose from. These minigames all encompass a different part of cyber security and cyber security awareness. The minigames seem to be very standard games, adapted to have a cyber security “skin”. | Social engineering, network security and passwords | The information mostly consists of definitions of words, distractingly placed on the screen during gameplay. | Personal rating 3/10. Music is very loud. Information is thrown at you and even obscures your view. Memorable, but not in a good way.  [link](https://evangfatoks.itch.io/cybersecgame) |
| Phishing Trip | A game where you work at a company to either forward or block e-mails based on if they are safe or not. | Focus solely on phishing emails | There’s not a lot of information, and you’re expected to just know what phishing is. This can be confusing. | 5/10. The game has a cool artstyle and concept, but some things are broken and you’re not sure what to do. [link](https://redbluebird.itch.io/phishing-trip) |
| Cryptic Clash | A game about password strength, where you send a password to fight other passwords. Over the course of the game you can improve your password, making it stronger. After each battle won, you can pick one method to make your password stronger, which has a description of why it will become stronger. | Strong passwords. | The way to make your password stronger is in the way you usually do so; making it longer, preventing common words etc. It incorporates the information in a creative and fun way. | 8.5/10. Love the concept and gameplay, nice artstyle, teaches about strong passwords well. [link](https://lio-lim.itch.io/cryptic-clash) |
| Phish Bait | Another game where you work at a company to either forward or block e-mails based on if they are safe or not. | Phishing Emails | There is a tutorial at the start and each time you get a new type of suspicious email for the first time. | 6/10. The concept is fun and the game looks good. There are quite a few bugs, though.  [link](https://adamfowler.itch.io/phish-bait) |

# Conclusion

This research has told me quite a bit about the different games out there, and has given me new insights and ideas to put in the game. It would be good to incorporate the information in a fun way, like the passwords game, instead of showing it on the screen as distracting messages such as in the “comprehensive cyber security game”. The idea of Phishing Trip and Phish Bait could work, however I do want to make it more special than those. The game should ideally focus on one or two topics; otherwise the player may get overloaded with information. This would also allow me to spend more time in coming up with interesting game mechanics for those topics.