

Pizza Heist: Cybersecurity Threat Awareness Game



Brian Ramos Cazares, Daniel To, Nikki Thao / Dr. Gunay and Dr. Robertson / Georgia Gwinnett College

PROJECT GOALS

This study aims to educate middle school, high school, and college students about the importance of internet safety by implementing a fun and entertaining environment using Unity.

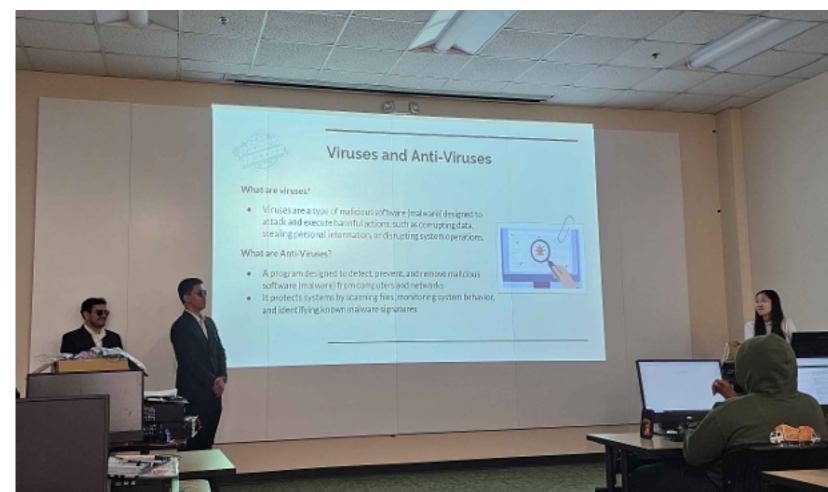
TAP

Technology Ambassador Program (TAP) is a project-based class that provides students with a collaborative environment to develop projects using the technologies of their choice to increase participation in IT through outreach projects and workshops designed to showcase the fun side of technology.

WORKSHOP DESCRIPTION

Students learn about password security, phishing, and viruses through our presentation and interactive discussions, including preventative measures to ensure the safety of their own digital data. Students are then given the opportunity to utilize their knowledge by playing our game where they must get through the mini-games and reach the end with the goal of not getting hacked.





INTEREST IN LEARNING

NEW TECHNOLOGY

Cybersecurity Survey

Quiz Scores

PRE VS POST WORKSHOP

SCORE AVERAGE ——ACCURACY RATE

■ NEUTRAL ■ NO

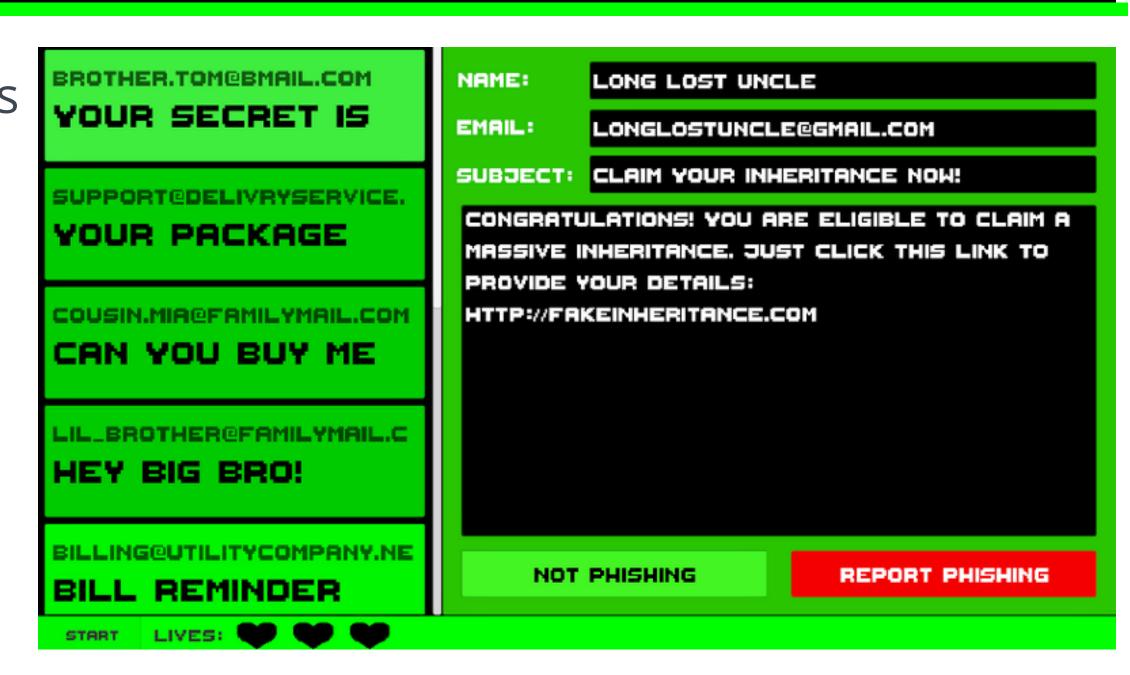
STUDENTS (OUT OF 43)

50.00%

- Inspired by the rising number of individuals falling victim to cybersecurity threats like phishing and malware.
- Utilized Unity to create a hacker themed simulator game where students will play through two mini-games viruses and ways to themed after phishing and viruses.
- First mini-game simulates sorting through emails where students must determine whether or not an email is phishing.

PROJECT DESCRIPTION

 Second mini-game incorporates viruses vs anti-viruses in a tower defense format to teach students about different defend against them in real life.





RESULTS

The workshop yielded strong results overall:

- A total of 43 students participated in this workshop
- Students rated the workshop an average of 4.2 out of 5.
- Average scores rose from 7.21 to 8.26, out of 10, a 10.47% accuracy increase after the workshop.
- 32 students enjoyed learning the new technology, 11 neutral, and none disinterested.
- 20 students reported increased curiosity about game development, 9 neutral, and 14 showed no interest.

REFERRENCES

- 1. Dekhane, S., Xu, X., Napier, N., Barakat, R., Gunay, C., & Nagel, K. (2018). Technology focused service-learning course to increase confidence and persistence in computing. Journal of Computing Sciences in Colleges, 34(2), 147-153.
- https://dl.acm.org/doi/10.5555/3282588.3282609
- 2. Unity 2D tools for game dev evolved for optimal graphics performance. (n.d.). Unity. https://unity.com/features/2dtools#why-unity-for-2d

ACKNOWLEDGEMENTS

We would like to thank the GGC TAP committee and the School of Science and Technology.