

COOL CYBER GAMES



Team: Matthew Goembel, Anthony Clayton, Ludendorf Brice, Ben Allerton

1

Milestone 5 Completed Tasks

Progress Summary

Task	Complete	Anthony	Matthew	Ben	Brice	To do
Make Poster	100%	25%	25%	25%	25%	Prettify, and enhance formatting.
Finish game: Master the password w/ backend & website sync	90%	10%	0%	0%	0%	-
Finish game: File Detective w/ backend & website sync	80%	0%	0%	100%	0%	-
Finish game: Web Quest w/ backend & website sync	80%	0%	0%	0%	100%	-
Enhance to dashboard, leaderboard, games, and profile tabs	90%	0%	100%	0%	0%	More prettification and enhancements we think of.
Finish game: Human Hacker w/ backend & website sync	50%	0%	100%	0%	0%	Finish rest of game, and integrate in with website and backend.

2

Milestone Task Discussion



Master the Password

- Created 9 new locations (2 outdoor, 7 indoor)
- All buildings are enterable and have unique interiors
- 2 new password challenges (medium & hard)
- Composed background music (created in Bosca Ceoil)



File Detective



- Added Intro Section
- Added How to play option
- Removed Scan with DB, making game too easy
- Added progress bar above question
- Shield mascot added to intro



Web Quest

- Finished the general game concept (4 levels)
- Added menus and music for player functionality
- Reworded the information that teaches players and came up with concept for backend sync to the leaderboard



Human Hacker Development

■ Cybersecurity puzzle-simulator. The goal is to review incoming files and messages to determine their validity, teaching players through 5 levels about (1)social engineering threats, (2)phishing, (3)malware, (4)LLM safety rules, (5)Data Privacy & Safe Information Sharing.

■ Flow

- Tasks arrive through the conveyor belt
- Players use the central terminal to analyze details
- The advisor NPC at the desk offers hints and explanations
- Players decide by pulling the (Safe / Unsafe, T/F, Yes/No, Right/Wrong) lever
- The player's HUD displays the task, hints/info about it , feedback, learning tips, and progress

■ Todo:

Adding learning modules and info from the database





Human Hacker Development



Poster



Cool Cyber Games *Cyber Security learning platform*

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Faculty Advisor(s): Dr. Sneha Sudhakaran, Dept. of Electrical Engineering and Computer Science, Florida
Institute of Technology

Games & Development

Malware Maze

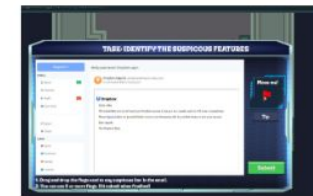
Description: Navigate a digital maze while learning to recognize and avoid phishing and malware threats.

Objective: Identify safe paths and “neutralize” malware monsters to unlock the next challenge.

Estimated Time: 15 minutes

Skills: Phishing detection, Malware avoidance

Tools: Godot Engine, Figma, Piskel, Itch.io, GenAI, Custom assets



Master the Password

Description: Learn and apply password security techniques as you explore this top-down 2D game.

Objective: Collect chests to earn characters to use in password challenges.

Estimated Time: 20 minutes

Skills: Password Security, Cyber Defense Awareness

Tools: Unity Engine, Itch.io, GenAI, Custom assets, bosca ceoil.



File Inspector

Description: Learn and identify the different file types you may come across on the internet and their properties.

Objective: Pick out and determine safe file types and potentially dangerous ones

Estimated Time: 10-15 min

Skills: Malware avoidance, General Computer knowledge

Tools: React + Vite + Tailwind + Zustand + Framer Motion



Web Quest:

Description: Learn how to read web links to keep you and your data safe in this Mario-esque learning game.

Objective: Traverse levels and determine safe web links while avoiding pesky popups.

Estimated time: 10-15 minutes

Skills: Web security, observation awareness

Tools: Godot, GenAI, Custom Assets, Bandlab



Backend & Website

Architecture Overview:

- **Frontend:** HTML5-exported Godot games embedded on coolcybergames.com
- **Backend:** Node.js + Express API managing authentication, score tracking, and achievements
- **Database:** MongoDB storing user profiles, game progress, and leaderboard stats
- **Hosting:** Render (server) + Git LFS for large WASM game files

Key Features:

- Secure login with Google OAuth
- Real-time leaderboard updates via API calls
- Automatic score syncing after each game
- Admin dashboard for monitoring player metrics

Project Summary

Cool Cyber Games is an interactive cybersecurity learning platform that teaches players real-world digital safety skills through fun, gamified experiences. Each game focuses on a core cybersecurity topic—such as phishing, password security, and file safety—allowing users to learn, apply, and test their knowledge in engaging, story-driven challenges.

Impact & Future Directions

Major impact stems from being able to teach all generations a wide range of beginner friendly Cyber-Security topics through video games. Moving forward we hope to create more diverse games and delve into deeper and more niche concepts to help people truly understand all cybersecurity concepts.



3

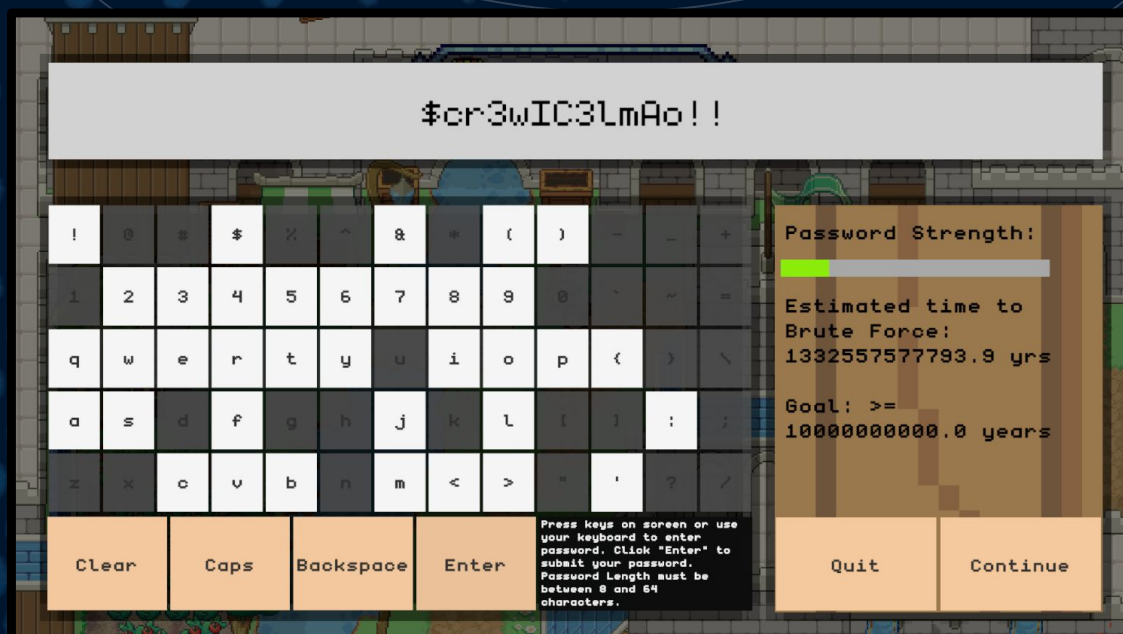
Demos

Website → <https://coolcybergames.com>

Master the Password New Areas



Master the Password New UI



4

Milestone 6

Tasks



Task	Anthony	Matthew	Brice	Ben
Finish Polishing Poste	25%	25%	25%	25%
User and/or Developer Manual	25%	25%	25%	25%
Make Demo Video	25%	25%	25%	25%
Final game Touches/Polish	25%	25%	25%	100%
Finish FinalGame (Human Hacker)	0%	100%	0%	0%
Future Directions	25%	100%	25%	25%

5

Milestone 6 Task Discussion



Task Discussion

- Polish poster
- Develop user manual
- Create promotional media (video, qr, codes, stickers)
- Final touches/polish for all games worked on from Milestone 5
- Finish final game (Human Hacker)
- Develop directions for future games and concepts



Thank you!

Any Questions or Suggestions?

