

Carnegie Mellon

CARNEGIE CADETS

The MySecureCyberspace Game

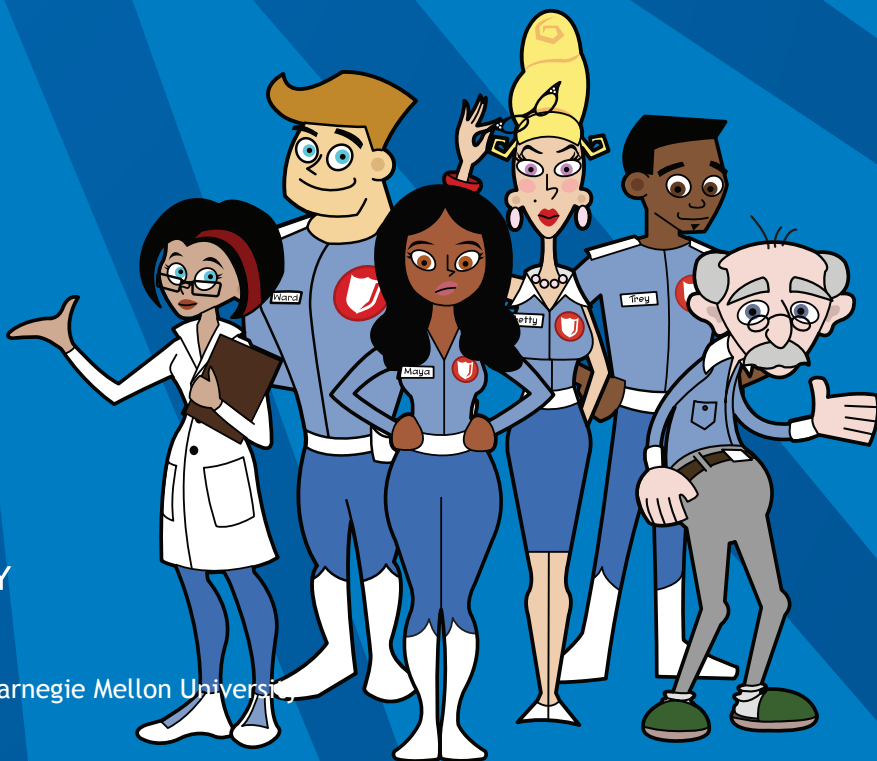
WALKTHROUGH

ini Information Networking Institute
Carnegie Mellon University

my
SECURE
cyberspace

created at CARNEGIE MELLON UNIVERSITY

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Walkthrough

Game Introduction

In the game introduction, the player is introduced to Commander Omni, who acts as their parent figure in the game. She explains that the player is at the Carnegie Cyber Academy to train to become a Cyber Defender. She then asks the player to register their Personal Access Link (PAL), which will store their game progress as well as useful information about the other characters in the game and about cybersecurity.

1. *Type in your name and click Enter.*

The player's game is automatically saved to the server as they progress through the world, as long as they are connected to the Internet. If a player loses Internet connectivity, their game progress may be lost after that point. It is recommended that you use the Save and Quit button on the PAL's Home screen to exit the game, however the game periodically saves itself automatically, and there is little need to save your game while playing.

The PAL will always be available to the player, minimized to the side of the screen. It contains all the information about the player's progress in the game, how many credits they have, badges they have earned, and ReQuest tasks they have been assigned and/or completed. It also contains maps of all the areas, the player's inventory, biographies of all the characters in the game, and an encyclopedia of cybersecurity terms for reference.

Commander Omni then explains that they have some time before orientation starts and suggests that they go upstairs and pick out their Dorm Room.

2. *Take Right elevator tube upstairs and enter My Room (far right door).*

Upon entering, the player is introduced to Captain Wits and the Dorm Room customization interface.

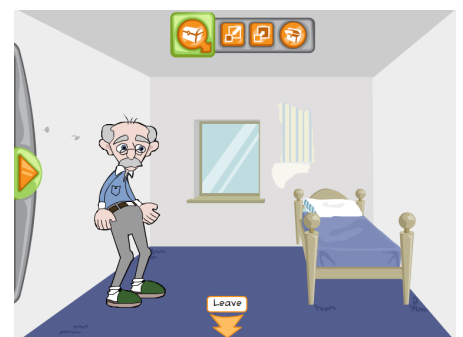
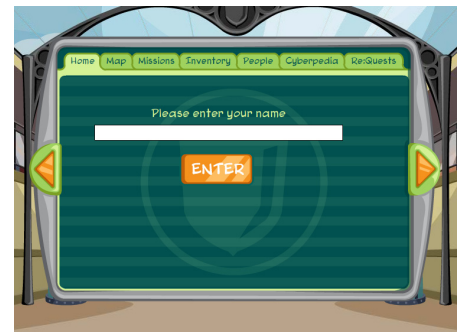
3. *When prompted, drag the Bed out of the room customization interface into the room.*

He explains how to use the interface and that if they want to decorate their room, all they have to do is collect items during the game, usually by purchasing them at the Academy Store with Academy Credits.

4. *Exit the room by clicking the Leave arrow on the bottom of the screen.*

The player is stopped in the hallway by Erika, another cadet, who takes them straight to orientation in Commander Omni's office. At orientation, Commander Omni explains about completing training missions in Cyberspace to earn Gold Badges. Commander Omni tells the cadets that if they have any questions, they can come to her for help.

At this point, the introduction is complete. The player is free to navigate and, after entering Cyberspace, can complete tasks and missions in any order.



Getting Started

1. Go to Omni's Office (right side of the Atrium).
2. Talk to Commander Omni.
3. Ask Omni How do I get started?

Commander Omni will explain that the player must enter into Cyberspace to complete missions in order to become a Cyber Defender. She gives the player their Cyberspace Pass and directs them to give it to Carlo in the CyberPort.

4. Tell Omni Goodbye.
5. Exit the room by clicking the Leave arrow on the bottom of the screen.



Getting to the Missions

1. Go to the CyberPort (left side of the Atrium).
2. Talk to Carlo.

The Cyberspace Pass the player received from Commander Omni is a sort of “permission slip” to enter Cyberspace.

3. Tell him you have a Cyberspace Pass and would like to enter Cyberspace.
4. Enter Cyberspace by clicking on the Cyberspace Portal in the center of the room.



This is the world of the Internet, and each Mission building has a specific purpose related to an Internet activity. (The Message Center is for Email, the Databank is for Web sites, and the Clubhouse is for Online Communications.)

Also in Cyberspace are the information resource centers, Diagnostics and the Detention Center, where the player can go to learn more about computer maintenance issues and cyber crimes. If something goes wrong in Cyberspace during the game (e.g. a virus is unleashed, or a cyber criminal escapes), these centers can also act as emergency response centers where the player can go to fix the problem.

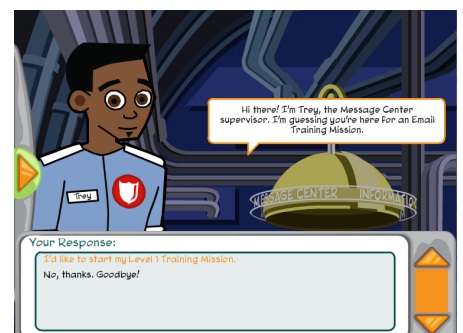


The Email Level 1 Training Mission

1. From the Data Stream Central, enter the Message Center by clicking on the front door.
2. Talk to Trey.

Every building in Cyberspace has a supervisor such as Trey, who will explain the function of the building (in this case email) and deliver missions to the player if appropriate. They act as “teachers” for each subject and the player will be able to solicit guidance from them if they are having difficulty with their mission.

3. Tell Trey you'd like to do the Level 1 training mission.



Trey then gives the player the email and spam tutorial, explaining the basics about email, spam, and spam filters.

4. Ask Trey how to recognize spam.

Trey will give the player a Hint Sheet for the training mission with 5 helpful tips for recognizing spam. These sheets are available via the Hint Sheet button inside a mission and also from the My Missions page in the PAL and offer some basic tips for the topic of the mission. These Hint Sheets are also printable. Note: you must set your printer to print Landscape to print the entire Hint Sheet on one page.

5. Inform Trey that you are ready to go.

The player can then enter the mission room, where they are presented with the gameplay instructions for that mission, overlaid on top of the actual game environment.

In this mission the player will be acting in place of the Message Center's spam filter, sending spam emails to the right conveyor belt where they are "deleted," and sending regular emails to the left conveyor belt to be sent to people's inboxes. The player is rewarded points for successfully sorting messages and must earn 70 points or higher, out of a possible 100, to earn a Gold badge.

6. Read the instructions and then click the Start Mission button.

7. Play the mission.

After completing the mission, the player is shown their total score and their points are converted into Academy Credits.

8. Click on the Okay button.

Upon exiting the mission, Trey gives the player their de-briefing, awarding them a Gold Badge if they were successful. If they were not successful, they will have the option of trying the mission again whenever they want.

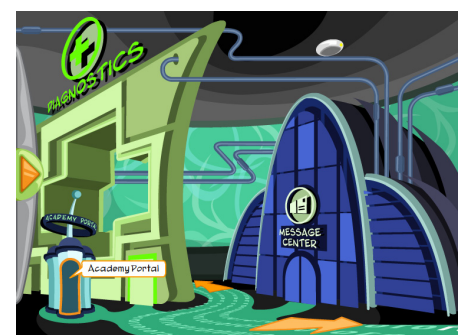
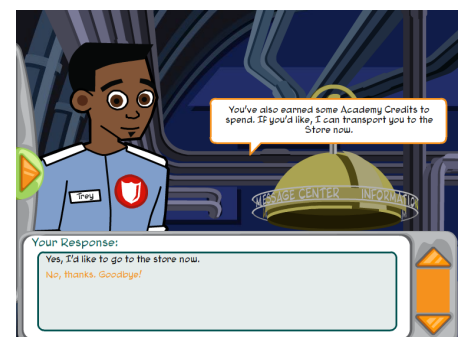
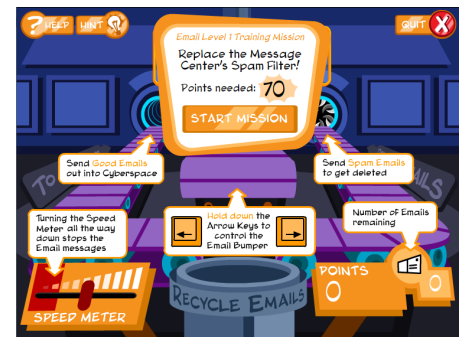
In addition to earning a Gold Badge after a successful mission, the player is now qualified to help others with the topic of the mission (in this case spam), and the supervisor will notify them of a character who is having a problem of that topic and needs their help and assigns them the ReQuest of helping that character with their problem.

The supervisor gives the player the option of jumping straight to the Academy Store to spend their new credits.

9. Tell Trey you will go to the store later.

10. Exit the building by clicking the Leave arrow on the bottom of the screen.

11. Return to the Academy by clicking on the Academy Portal door.



ReQuest: Alan and the Spam Attack

1. Click the Leave arrow to leave the CyberPort.
2. In the Atrium, talk to Alan.
3. Ask Alan if you can help with his Email trouble.

Alan tells a story about how his email inbox keeps filling up with spam and he doesn't know what to do about them. He keeps replying to them telling them to stop but it doesn't seem to be working. The player is then prompted to respond to the story with suggestions for how to fix the problem.

If the player chooses the wrong responses, Alan will give some feedback and then resign himself to asking Commander Omni for help, and the player doesn't earn a reward. If they choose the right responses, Alan will thank them with a reward Bonus Item (Lava Lamp) and 150 Academy Credits. The player may try the ReQuest as many times as they like until they get it correct.

Note: The correct responses to Alan and the Spam Attack! are:

1. Delete those emails without reading them...
2. Use a spam filter, and don't reply to any of them...
4. Enter the CyberPort.
5. Click on the Cyberspace portals to enter Cyberspace.
6. Click on the To Data Stream North arrow.

The Communications Level 1 Training Mission

1. From the Data Stream North, enter the Clubhouse by clicking on the front door.
2. Talk to Betty.
3. Tell Betty you'd like to do the Level 1 training mission.

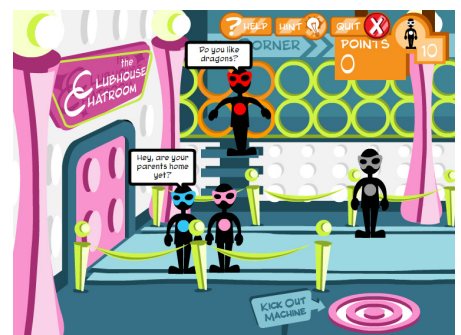
Betty then gives the player the Personal Information and chatting tutorial.

4. Ask Betty for some examples of personal information.

Betty will give the player the Hint Sheet for the training mission. The Hint Sheet has a list of 23 different types of personal information that it is unsafe to share online.

5. Inform Betty that you are ready to go.

The player can then enter the mission room, where they are presented with the gameplay instructions for that mission, overlaid on top of the actual game environment. In this mission the player will be acting as the bouncer for the Clubhouse Chatroom, kicking out chatters who are asking for personal information, letting in safe chatters, and sending chatters who share personal information to the Corner to learn to be safer online.



The player is rewarded points for successfully sorting messages and must earn 70 points or higher, out of a possible 100, to earn a Gold badge.

6. Read the instructions and then click the Start Mission button.

7. Play the mission.

After completing the mission, the player is shown their total score, and their points are converted into Academy Credits.

8. Click on the Okay button.

Betty gives the player their de-briefing, awarding them a Gold Badge if they were successful. Betty also notifies the player of a character who is having a problem with personal information and needs their help (Dana in the Cafeteria), unlocking the ReQuest. If they were not successful, they will have the option of trying the mission again whenever they want.

9. Tell Betty you will go to the store later.



The Communications Level 2 Training Mission

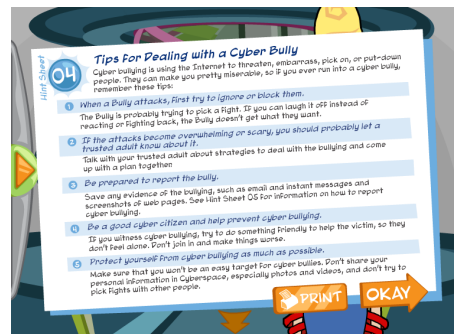
1. Talk to Betty.

2. Tell Betty you'd like to start the Level 2 training mission.

Betty then gives the player the Cyber Bullying tutorial.

3. Ask Betty what you can do to protect yourself from Cyber Bullies.

Betty will give the player the two Hint Sheets for the training mission. The first Hint Sheet is for the player and has tips for dealing with cyber bullies and protecting yourself from them. The second Hint Sheet is for the player's parents and has tips for reporting cyber bullying.



4. Ask Betty why cyber bullying is such a bad thing.

Betty will explain that cyber bullying makes people feel miserable and can lead to avoiding the Internet or even attacking the bully back.

5. Ask Betty what to do if you witness cyber bullying.

Betty will explain that you should be a good cyber citizen and do something friendly to help the victim, and to not join in and become a bully yourself.



6. Ask Betty if you can get in trouble for cyber bullying.

Betty will explain that schools and police have rules against cyber bullying and that punishments can include getting suspended from school, paying a fine, losing Internet access, or even going to jail.

7. Inform Betty that you are ready to go.

The player can then enter the mission room, where they are presented with the gameplay instructions for that mission, overlaid on top of the actual game environment. In this mission the player will be attacked by a robotic cyber bully. They must respond correctly to the bully by matching the arrows that show up on-screen before the timer runs out in order to earn bonus



attacks such as Tell an Adult and Save Evidence. Players must develop a strategy with the bonus attacks to take the bully's power level all the way down to zero to earn a Gold badge.

8. Read the instructions and then click the Start Mission button.

9. Play the mission.

After completing the mission, the player is shown their total score, and their points are converted into Academy Credits.

10. Click on the Okay button.

Betty gives the player their de-briefing, awarding them a Gold Badge if they were successful. Betty also notifies the player of a character who is having a problem with personal information and needs their help (Carlo in the CyberPort), unlocking the ReQuest. If they were not successful, they will have the option of trying the mission again whenever they want.

11. Tell Betty you will go to the store later.

12. Exit the building by clicking the Leave arrow on the bottom of the screen.

13. Click on the To Data Stream Central arrow.

14. Return to the Academy by clicking on the Academy Portal door.



ReQuest: Carlo's Bullying Bind

1. Talk to Carlo.

2. Ask Carlo if he needs any help with the Cyber Bully that is giving him trouble.

Carlo tells a story about how he encountered a forum troll on his favorite website who was violating the Terms of Use by flaming other people. Carlo tried to get him to stop, but instead the bully turned their aggressive attacks on Carlo. The player is then prompted to respond to the story with suggestions about what Carlo did wrong and what he can do to deal with the bully.

If the player chooses the wrong responses, Carlo will give some feedback and go ask Commander Omni for help and the player doesn't earn a reward. If they choose the right responses, Carlo will thank them with a reward Bonus Item (Bagpipes) and 150 Academy Credits. The player may try the ReQuest as many times as they like until they get it correct.



Note: The correct responses to Carlo's Bullying Bind are:

1. You can try blocking his account so he can't send you anything else...
2. If he is disobeying the rules of the forum, you can report him...
3. Have a trusted adult help you, and show them evidence...

3. Click the Leave arrow to leave the CyberPort.

4. From the Atrium, enter the Cafeteria by clicking the back room.



ReQuest: Dana's friend is in trouble!

1. Talk to Dana.

2. Ask Dana if you can answer any questions about personal information.

Dana tells a story about how her friend has a suspicious friend from a social networking site who is calling her at home, and she's concerned about how he knows so much about her friend. The player is then prompted to respond to the story with suggestions about what her friend did wrong.

If the player chooses the wrong responses, Dana will give some feedback and go ask Commander Omni for help and the player doesn't earn a reward. If they choose the right responses, Dana will thank them with a reward Bonus Item (Bacon) and 150 Academy Credits. The player may try the ReQuest as many times as they like until they get it correct.

Note: The correct responses to Dana's friend is in trouble! are:

1. You're never supposed to share personal information online...
2. Weirdos are nice at first...

3. Click the Leave arrow to leave the Cafeteria.

4. Enter the CyberPort.

5. Click on the Cyberspace portals to enter Cyberspace.

6. Click on the To Data Stream North arrow.

The Web site Level 1 Training Mission

1. From the Data Stream North, enter the Databank by clicking on the front door.

2. Talk to Maya.

Maya is the Databank supervisor and specializes in Web sites and Web research.

3. Tell Maya you'd like to do the Level 1 training mission.

Maya then gives the player the Web sites and Web site Dangers tutorial.

4. Ask Maya what the 4 Dangers were.

Maya will repeat the 4 Dangers and give the player the Hint Sheet for the training mission. The Hint Sheet has descriptions of the 4 Web site Dangers (Links that download files, Forms that ask for personal information, Advertisements and Popups, and Threatening, hurtful, or Adults-only content) and tips for recognizing them.

5. Inform Maya that you are ready to start the mission.

The player can then enter the Databank vault, which contains the Website viewing console.

6. Click on the Web site viewing console.



This initiates the mission and the player is presented with the gameplay instructions. In this mission the player must evaluate 10 Web sites and collect samples of Web site Dangers from each site. The player loses 5 seconds off the 30 second site timer for collecting something that isn't a Danger, and the player must collect at least 70% of the total available Dangers to earn a Gold badge.

7. *Read through the instructions and then click the Start Mission button.*

8. *Play the mission.*

After completing the mission, the player is shown their total score and their points are converted into Academy Credits.

9. *Click on the Okay button.*

Upon exiting the mission, Maya gives the player their de-briefing, awarding them a Gold Badge if they were successful. Maya also notifies the player of a character who is having a problem on with Web site Dangers and needs their help (Erika in the West Upstairs Hallway), unlocking the ReQuest. If they were not successful, they will have the option of trying the mission again whenever they want.

10. *Tell Maya you will go to the store later.*

11. *Exit the building by clicking the Leave arrow on the bottom of the screen.*

12. *Click on the To Data Stream Central arrow.*

13. *Return to the Academy by clicking on the Academy Portal door.*

ReQuest: Erika's Popup Problem

1. *Click the Leave arrow to leave the CyberPort.*

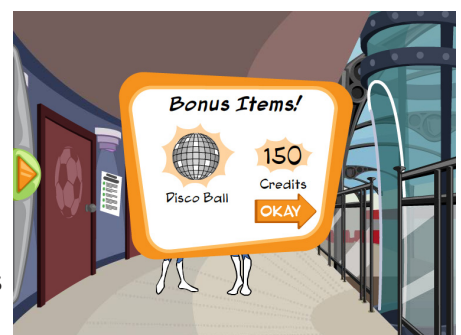
2. *Take Left elevator tube upstairs to the West Upstairs Hallway (West Dorm Rooms)*

3. *Talk to Erika.*

4. *Ask Erika if you can help with the trouble she's having with Web site Dangers.*

Erika tells a story about how she was searching for a gift for her mother when a popup appeared offering her a free mp3 player. She followed the link and did everything the site said to for the mp3 player. However, she hasn't received it in the mail yet and is now receiving mysterious emails and calls regarding a credit card offer. The player is then prompted to respond to the story with suggestions for how to fix the problem.

If the player chooses the wrong responses, Erika will give some feedback and go ask Commander Omni for help and the player doesn't earn a reward. If they choose the right responses, Erika will thank them with a reward Bonus Item (Disco Ball) and 150 Academy Credits. The player may try the ReQuest as many times as they like until they get it correct.



Note: The correct responses to Erika's Popup Problem are:

1. You probably shouldn't have clicked on the pop-up window...
2. Not all pop-up windows are safe...
3. You must have shared personal information...

5. Take the elevator tube downstairs to the Atrium.
6. Enter the CyberPort.
7. Click on the Cyberspace portals to enter Cyberspace.

Other Things To Do:

Visiting Diagnostics

1. Enter Diagnostics by clicking on the door.

Diagnostics is Cyberspace's center for computer maintenance and emergency repairs. Dr. Keen is the lab technician who runs Diagnostics.

2. Talk to Dr. Keen.
3. Tell Dr. Keen you would love a tour of Diagnostics.

The tour starts in the Hall of Quarantine. Dr. Keen explains that the best way to combat Cyber Villains is to keep them from causing problems in the first place by protecting your computer and data from known threats like viruses. In the Hall of Quarantine, the player can view several tanks that contain known risks and threats, such as Adware, Trojan Horses, and Spyware, and read more information about where they are located and how to combat them. Dr. Keen encourages the player to look at them.

4. Click on the Tanks for a closer look.
5. When finished looking at the threats, talk to Dr. Keen again.
6. Tell her you'd like to move on to the next room.
7. Click on the door to the Repair & Recovery Room.
8. Talk to Dr. Keen again.

The next room on the tour is the Repair & Recovery room, where damaged machines are fixed. Dr. Keen explains that Scout scans the machines for malware and isolates and removes any that he finds. He cleans up any damage the malware may have caused, and if there is physical damage then he replaces those parts.

9. Tell Dr. Keen you'd like to move on to the last room.
10. Click on the door to Dr. Keen's Office.
11. Talk to Dr. Keen again.

The last room on the tour is Dr. Keen's Office and also her Experiment Lab, where she develops new and improved antidotes and tools for securing Cyberspace. As a reward for completing the tour, she gives the player a Gold Badge.



12. *Leave Dr. Keen's Office.*

Upgrade Scout's Eyes ReQuest

1. *Talk to Scout.*

2. *Ask Scout how he is.*

Scout will explain that he is not 100% because he is overdue for an upgrade to his eyes.

3. *Ask Scout why he is overdue.*

Scout explains that Dr. Keen has ordered the parts but has been too busy to install them.

3. *Offer to help Scout locate his new eyes*

Offering to help will unlock the Upgrade Scout's Eyes ReQuest .

4. *Enter Dr. Keen's Office*

5. *Click on Scout's eyes on the countertop*

6. *Leave Dr. Keen's Office.*

7. *Talk to Scout.*

8. *Tell Scout you have his new eyes*

Scout will install the new eyes and reward you with a special rare item and bonus creds.

9. *Click the Leave arrow to leave the Repair & Recovery Room*

10. *Click the Leave arrow to leave Diagnostics*

Visiting the Detention Center

1. *Click the To Data Stream South arrow.*

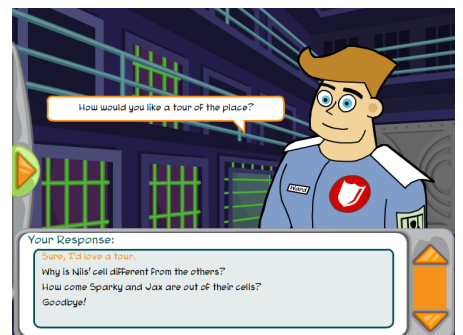
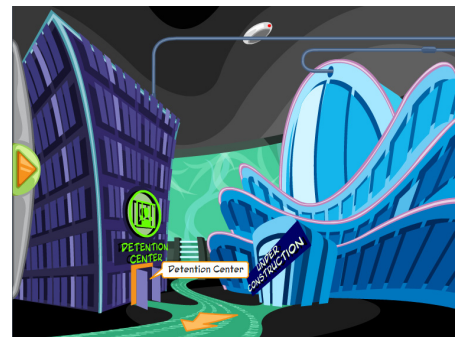
2. *Enter the Detention Center by clicking on the door.*

The Detention Center is Cyberspace's center for Cyber Crimes and Criminals. In addition to a Jail for captured criminals, it is also a crime investigation center.

3. *Talk to Officer Ward.*

4. *Tell Officer Ward you would love a tour of the Detention Center.*

The tour starts in the Cell Block, where convicted cyber criminals are kept. Officer Ward explains that it's a very boring and miserable life as a captured cyber criminal, and to emphasize his point, he locks the player in a cell for a bit to experience it for themselves. Once he lets them out, he explains that there are all kinds of cyber crimes and encourages the player to talk to some



of the captured Cyber Criminals in the cell block to find out what crimes they committed.

5. Talk to Jax, former detainee and cyber bully, and ask her what she did to end up in the Detention Center.

Jax explains that she used to send nasty messages to other people, trying to make them angry. When she started bullying people she didn't know, the Cyber Defenders traced the attacks to her computer and she was caught. Because of good behavior, she is allowed out of her cell to help out around the Detention Center.

6. Click on the Cell Doors, talk to the Cyber Criminals to find out why they are there, click the Leave arrow to leave the cell.

One of the Cyber Criminals, Ex-Commander Nils, won't tell the player why he is in the Detention Center. He tells the player to ask one of the Cyber Defenders.

7. When finished talking to the Criminals, talk to Officer Ward again.

8. Ask Officer Ward what is the story with Nils and why his cell is different than the others.

Officer Ward explains that Nils used to be Commander Omni's partner but he became a Cyber Villain, the Master Hacker, and used his knowledge of cybersecurity to commit cyber crimes. He is the most dangerous and notorious Cyber Villain and even managed to escape from the Detention Center once so he is kept in a high-security cell.

9. Tell Officer Ward you'd like to move on to the next room.

10. Click on the door to the Cyber Forensics Lab

11. Talk to Officer Ward again.

The next room on the tour is the Cyber Forensics Lab, where the Cyber Defenders investigate cyber crimes and track down cyber criminals. Officer Ward explains that most cyber crimes can be tracked to the computer which they came from, and that the Cyber Defenders also monitor Cyberspace for any suspicious behavior.

12. Talk to Sparky, former detainee and script kiddie, and ask him what he did to end up in the Detention Center.

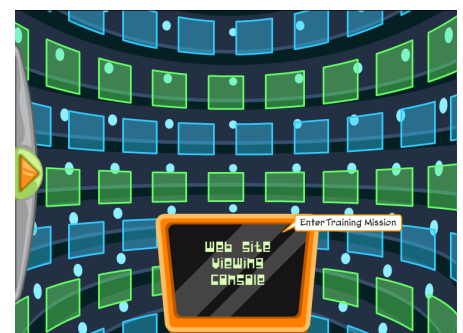
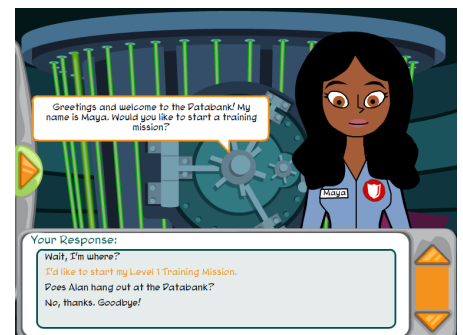
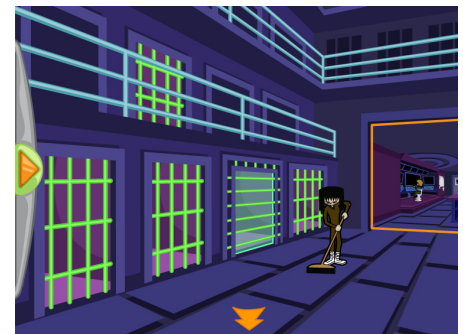
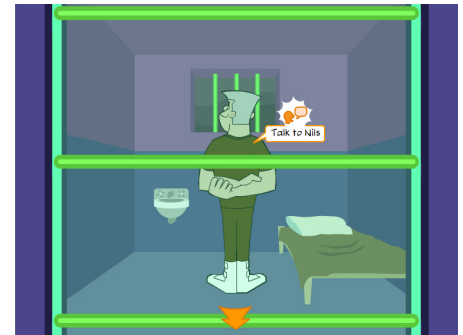
Sparky explains that he was a script kiddie, a wannabe hacker who uses someone else's code to break into computers. He was caught after hacking into the library database and changing it. Because of good behavior, he is allowed out of his cell to help out around the Detention Center.

13. When finished exploring the Cyber Forensics Lab, talk to Officer Ward again.

14. Tell him you'd like to move on to the last room.

15. Click on the door to Officer Ward's Office.

The last room on the tour is Officer Ward's Office and has the Wall of Shame, a board with pictures of some of the most notorious cyber villains and



criminals. As a reward for completing the tour, he gives the player a Gold Badge.

16. Click on the posters on the Wall of Shame for a closer look.
17. Leave Officer Ward's office.
18. Click on the Leave arrow to leave the Cyber Forensics Lab.
19. Click on the Leave arrow to leave the Detention Center.
20. Click on the To Data Stream Central arrow.
21. Return to the Academy by clicking on the Academy Portals.



Darn That DigiBoard ReQuest

1. Click the Leave arrow to leave the CyberPort.
2. Talk to Alan
3. Ask Alan what he is working on.

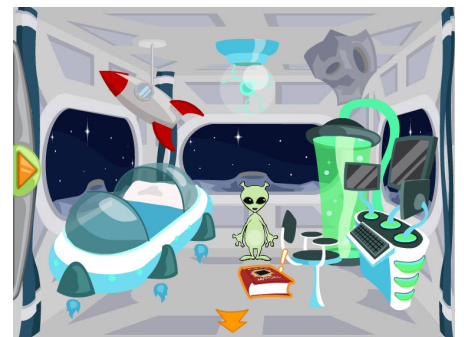
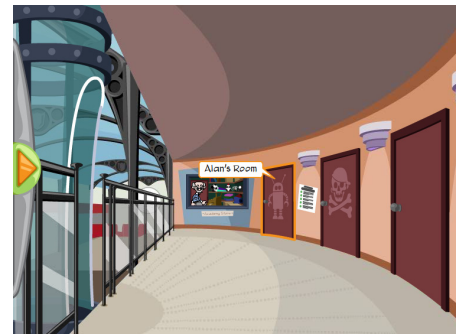


Alan will explain that he is trying to fix the DigiBoard.

4. Offer to help Alan with fixing the DigiBoard

Alan will ask you to find the DigiBoard manual so that he can fix it.

5. Tell Alan you will find it.
6. Take Right elevator tube upstairs to the East Upstairs Hallway (East Dorm Rooms)
7. Enter Alan's Dorm Room
8. Click on the DigiBoard Manual on the floor
9. Click the Leave arrow to leave Alan's Dorm Room
10. Take the elevator tube downstairs to the Atrium.
11. Talk to Alan.
12. Tell Alan you have the DigiBoard manual.



Alan will fix the DigiBoard and reward the player with a special rare item and bonus credits.

Alexi's Forgotten Password ReQuest

1. Take Left elevator tube upstairs to the West Upstairs Hallway (West Dorm Rooms)
2. Talk to Alexi
3. Ask her how things are going.



Alexi will explain that she has forgotten her Academy password and needs help remembering it. She explains that it has something to do with what she did during the summer of 2008, and that she mentioned what that was on her Academy blog.

4. *Open a web browser and navigate to the Carnegie Cyber Academy website at www.carnegiecyberacademy.com*
5. *Click on Cadet Life*
6. *Scroll down to the Blog Archives and click on Alexi's blog, Make Your Own Sunshine*
7. *Select June 2008 from the Archives drop-down menu and read the blog post for June 10th*
8. *Return to the game*
9. *Talk to Alexi again*
10. *Tell Alexi what she did for summer vacation in 2008*

Note: She went camping in the woods.

Alexi will thank you for helping her remember her password and reward you with a special rare item and bonus credits.

