

Game Design Document

Sophos Academy

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This Game Design Document will describe the interactive text adventure game Sophos Academy. It will provide details on the overall narrative the story is telling as well as inform of the potential branches the player may take; explicitly shown, with the use of a flow diagram and described with a walkthrough, in this document. The type of person to play this game is specified, as well as prior information they should be aware of before playing. Implementation into different platforms are presented, primarily focused on PC implementation; defining the player controls of the gameplay. Research into existing analogous games are explored and separated from Sophos Academy. Concept art of the game is provided to further establish the created world.

Analysis

Video Game Narrative

The story Sophos Academy follows the protagonist, the Caretaker, throughout Sophos Academy, the most prestigious school in the world. The story introduces to readers the variety of majors a student may study at Sophos Academy; it goes on to mention the Quinquennial Competition, a yearly showcasing of academic talent put on by students from every major of Sophos Academy. The Caretaker proceeds their day at Sophos Academy as usual, determining which of the day's undertakings to proceed with; including inventorying the ChemLab, tuning/repairing the musical instruments, and checking the school's power efficiency.

Following an undertaking, the Caretaker finds himself trapped in a Puzzle Cube, an project by student Amelia Ford. This is one of several major incidents; another, the poisoning of students who were unfortunate enough to ingest a deadly variety of mushroom with their meals, as well as the incidents involved with the previously chosen undertaking. Alluded by and following these incidents, the Caretaker sets out to find out who is responsible for the mishaps at Sophos Academy. Dependent on the undertaking chosen, the Caretaker finds potassium nitrate throughout the school, a rampaging humanoid robot, or a crumbling Amphitheater; leading to the debut of the antagonist, Teresa Evans.

When the Caretaker comes face to face with Teresa Evans, they exchange words; Teresa reveals her intentions and motives behind her master plan to destroy Sophos Academy. Either, the Caretaker captures Teresa, preventing her from razing Sophos Academy, using the Puzzle Cube he was trapped in earlier or, Teresa escapes and/or destroys part of the school. Following the former, the Caretaker undoes any damage Teresa had attempted returning Sophos Academy to its normal equilibrium, including yet another successful Quinquennial Competition with zero complications.

Target Audience

Our main target audience for this game are 'Teenagers' ages 13-19 both males and females, enrolled in middle school or high school, may or may not have a job yet; which is the same demographics of our characters in the game providing an instant connection between players and characters. Presently, we are targeting the United States but one of our goal is to translate into many popular languages which will expand our target audience all over the globe. We will remain with our same age group as our main target audience uniform for foreign countries. Teenagers are alike around the globe speaking different languages. Since our product is a text based game anyone that can read, write/type, and comprehend the story can play. Based on research we concluded that this age group is the majority when it comes to playing games;

since present trend is texting more than speaking on the phone we believe this will highly and positively affect our goals. This group are mostly enrolled in school and our game “Sophos Academy” is based on a school; this will connect them as they are students attending schools. All Schools compete in a way; i.e. Sports matches, club matches, grading, ranking, publicity, etc. The competition aspect of our game we engage our target audience to this game. Our target audience are also among the majority when It comes to texting; this can become a social backdrop of any meeting or conventions. Our game will offer the target audience the mystery, thrill and action they desire. Our heros’ will be connected to the players by practicing the natural urge to compete and since this is not ‘a hero’ game rather ‘heroes’; students will work as team to excel in the progression of the game making it more psychological and enhance the player experience.

Delivery Platform

Our ideal platform to release our game will be PC and mobile devices that support python, example: Apple, Android, Windows Mobile, etc. Our game will require the players to type in the commands and use touch or mouse to interact with objects, icon and/or direction; it is in our best interest to release the game on platforms that can provide such amenities.

Review of Competing Games

Depression Quest.

Depression Quest is an interactive fiction game that is text based and runs on PC. The story of Depression Quest revolves around a person that is suffering from depression. Similar to Sophos Academy, the player can change the course of the game based on the actions that the player makes. The player can also find events or items that can treat the depression of the main character and check the main character’s mental status. However, unlike Sophos Academy, the game will sometimes prevent players from making certain decisions by highlighting them in red and crossing them out. Since the player is limited to the amount of choices that he or she can make, Depression Quest does not offer many chances to explore and interact with its world or characters. Since Sophos Academy doesn't limit choices to its player, Sophos Academy is more enjoyable and more immersive than Depression Quest.

Developed by The Quinnspracy. Published in 2013. Made with Twine Engine. Available on Internet for Windows, OS X, and Linux

Cypher.

Cypher is parser interactive fiction that can be played on a computer. The game’s story takes place in a post-catastrophic city in which a portion of the moon made impact

with the Earth's surface resulting in human casualties and the loss of the Internet. Humans of this society now carry information in the form of cybernetic implants that are part of their bodies. The main character, Dogeron "Dog" Kenan, delivers information in his implants for a living. However, a negative deal has turned him into a wanted man. Similar to Sophos Academy, players can change the course of the game through the actions that they make. They can also type in anything that relates to the current situation in order to discover the world and interact with certain characters. However, Cypher has the advantage since the game possesses visuals and background music that enhance the overall gaming experience. Since Sophos Academy is being constructed through Python, we will have to attempt to make the story as descriptive as possible in order to generate intricate and well-detailed mental images of the world, objects, and characters of the game. This disadvantage may actually turn into a bigger advantage since the lack of visuals and sounds will allow players to use their imagination and visualize the game according to their visions. This makes the game more enjoyable and increase replayability.

Developed by Cabrera Brothers. Published in 2012. Made with the Unity Engine. Available for Microsoft Windows and OS X

Violet.

Violet is a parser-based interactive fiction that can played with Internet access. The story of Violet follows a graduate student that is attempting a 1,000 word dissertation. The girlfriend of the protagonist, Violet, threatens that she will leave the protagonist if he doesn't complete this task. The player must help the protagonist avoid the wide variety of distractions that the game throws at the player, complete his dissertation, and keep his career and relationship intact. Violet is considered a one-room puzzle game since all of the events of the game happen in one room. For this reason, Sophos Academy is better than Violet since the multiple atmospheres that Sophos Academy creates a more interesting and more immersive world.

Developed by Jeremy Freese. Published in 2008. Made with the Z-machine engine. Available on the Internet

Design

Player Characteristics

One of things we expect players to know before playing our game is the genre of the game which is mystery and action. By providing the genre, the player is provided with a motivation that connects them to the story; finding the clues within the narrative which allude to the existence of the antagonist. Also, we expect the players to understand that our game is a not linear with a single ending that is found in conventional types of media such as books and games. By allowing the story not being linear and it contain branches, the outcome of the story is affected by the difference choices the player will make.

Game Mechanics

Due to this being a PC/Mobile game, players will focus on mainly on the usage of the keyboard/touch controls to make decisions that will tie in with the backstory of the Quinquennial Competition and its past winners and losers. There will also be other tools the player can receive and use to affect the progression of the story. The Caretaker's statistics (characteristics) will have an affect on the story; changing its path. Some of the "undesired" endings will prompt the player with a decision of "rewinding" the current scene; though the statistics and inventory remain the same.

The player is presented with choices to progress the story. Due to this being a PC game, the main controls are letter choices (A, B, C) associated with a proceeding scene. Once the player makes a selection, the player progresses in the game and will be greeted with more decisions to affect the ending of the story. Also, the player will be able to type 'inv' to gain access to the inventory. This menu provides The Caretaker's statistics (characteristics), which change depending on the player's choices. The Inventory will contain tools The Caretaker collects through the story, to potentially use later in the story.

The game can also be implemented on a smartphone platform where the player has access to rectangular buttons which display the choices; selecting the choice with the use of the touchscreen. The game on the smartphone can also display images which aid the immersion and have a help and inventory menu that is present on screen at all times in a corner.

Challenge

In order to make it through the game, the player must make appropriate decisions. To engage the player by using intellectual language in choices; bringing them into the mind of the protagonist. As the player progresses through the story, evidence of an antagonist arise. The player "wins" the game by capturing the antagonist, Teresa Evans, with the help of Amelia

Ford's Puzzle Cube. However, there are several endings where Teresa Evans escapes and/or destroys part of the school.

Project Description

Walkthrough

At the title screen of the game, the player can choose if he or she would like to view a tutorial that instructs the player on the game's mechanics, the inventory, the Caretaker's stats, and the rewind feature. If the player does not want to view the tutorial, the player can type in "N" and begin the game.

I. Meeting with Marsh Banks

At the beginning of the game, the Caretaker will wake up from its slumber. Upon waking up from its slumber, the Caretaker will hear a strange noise and the player will have two choices to make. The player can choose one of the following choices:

- A. INVESTIGATE
- B. IGNORE

However, no matter what option the player makes, the game will proceed to the next scene where the Caretaker rushes to meet Marsh Banks. The Caretaker will be introduced to Marsh and it will guide Marsh through Sophos Academy, explain all of the majors that the school offers, and talk to him about the Quinquennial Competition.

II. Determining the First Task of the Day

After leaving Marsh Banks at the Advanced Aerospace Building, the Caretaker must make a decision on what task it should do first. The player can choose anyone of the following:

- A. INSPECT CHEMLAB
- B. CHECK THE SCHOOL'S POWER EFFICIENCY
- C. TUNE/REPAIR INSTRUMENTS

ChemLab Option

If the player chooses to inspect the lab, the Caretaker will go into the ChemLab and it will begin to inspect the chemical inventory of the ChemLab while an Intro to Chem class session is in progress. While inspecting the chemical inventory, the Caretaker will notice the some chemicals are missing from the shelves. Searching for the missing chemicals, the Caretaker will spot a group of students producing a lethal chemical known as Elephant Toothpaste. Due to the addition of Manganese Dioxide powder to the mixture, the Caretaker must stop the reaction immediately. However, the player will have to make a choice on what the Caretaker should do in this situation. The player can choose anyone of the following:

- A. MAKE EXOTHERMIC REACTION
- B. IGNORE
- C. MAKE ENDOTHERMIC REACTION

If the player chooses to make an exothermic reaction, the ChemLab will explode and the game will be over. The same occurrence will happen if the player chooses to ignore The player will lose the game if these choices is typed in. However, if the player chooses to make an

endothermic reaction, the Caretaker will stop the chemical reaction and the player will be able to continue with the story.

If the player chooses to check the power efficiency and the Caretaker's responsibility stat is too low, the Caretaker will be rejected and the game will end. If the Caretaker's responsibility stat is sufficient, the Caretaker will enter the Robotics Hangar and it will see that a few students are working on a robot that is named "The Savior." The robot will begin to go crazy. The player can then choose one of the following:

1. Get away from the place as fast as you can
2. Stand there and watch in awe.
3. Gather information on how to stop it

If the player runs away, the game will end. If the player watches in awe, the game will end. If the player tries to stop the robot, the robot's off switch will be revealed. The player can either choose if the Caretaker should reach for the switch or not. If the player says yes, the Caretaker will be hospitalized. If the player decides not to reach for the switch, the player will now have the option to begin the investigation process or immediately report the incident to the higher authority. If the player chooses to report the incident, the next scene will appear. If the player decides to go into the investigation process, the player will be given a set of three investigative options that the Caretaker can act upon:

1. Papers on the desk
2. Papers on the floor
3. The lockers

The player can choose one, two, or all three of these choices during the investigation process and gain clues about the possible culprit. At the completion of the investigation process, the Caretaker can either accuse or not accuse Christina, a friend of Arthur, for the occurrence of this incident. Regardless of the decision, no changes will occur and the player will have the option to go the ChemLab or forgo going to the ChemLab. The Caretaker goes to the ChemLab, the ChemLab branch will begin. If the Caretaker doesn't go the ChemLab, an explosion will occur in the ChemLab and the player will lose the game.

If the player chooses to tune and repair instruments, the Caretaker will visit the Amphitheatre in order to conduct this task. The player can then choose from one of the following options:

- A. Sit for a moment
- B. Go to work on the instruments

Regardless of decision, the Caretaker will begin its task of the tuning and repairing the instruments. The player can choose one of the three instruments to try:

- A. Violin
- B. Flute
- C. Trumpet

Regardless of what instrument the Caretaker tries, the walls will soon begin to vibrate. Upon discovering this vibration, the player can either choose to investigate the location of the vibration or turn off the speakers. If the player chooses to investigate, the walls will begin to vibrate violently, the Amphitheatre will be reduced to rubble and the game will end. If the player tries to turn off the speakers, the Caretaker will discover that it will need batteries to turn off the speakers and the player can either choose to temporarily stop the speakers or immediately hunt for batteries. If the player chooses to go for the batteries, the Amphitheatre will be reduced to rubble and the game will end. If the player stops the speakers temporarily, the Caretaker will reset the power in the Amphitheatre, the power will be turned off temporarily, and the Caretaker will be able to hunt for batteries. The player can either choose to look for batteries in the Robot Hangar or his room. If the player decides to look in the Robot Hangar, the robot rampage branch will begin. If the player decides to check the Caretaker's room, the player will be able to advance in the story, leading to the Puzzle Cube.

III. The Puzzle Cube Dilemma

After resolving the chemical reaction incident, the Caretaker will spot Marsh Banks in one of the Mathematics classes. The player can choose to ignore Marsh Banks by choosing "IGNORE MARSH." However, the player can pursue Marsh by choosing "FOLLOW MARSH." The Caretaker will follow Marsh until he picks up Amelia's Puzzle Cube. The Caretaker will become trapped inside the Puzzle Cube and the player will have to help the Caretaker escape the Puzzle Cube. The player can see different areas of the Puzzle Cube by choosing anyone of these actions:

- A. Wall with Door
- B. Wall with Table
- C. Wall with Books
- D. Wall with Plaque

A. If the player chooses the Door Wall, they can do the following:

- A. Examine the Door
- B. Try the Door
- C. Go to another Wall

-If the player chooses to Examine the Door, they are provided with a description of what the door looks like. They are presented with the previous choices again.

-If the player chooses to Try the Door, they attempt to open it. If it is unlocked, they escape the Puzzle Cube, otherwise they are still trapped. The player can only unlock the door by using the key found behind the plaque at the Plaque Wall and using it via their inventory.

-If the player chooses to go to another wall, they are presented with the original Wall Choices.

B. If the player chooses the Table Wall, they can do the following:

- A. Pick Up Radio
- B. Go to another Wall

-If the player chooses to pick up the radio, they are prompted with the following:

- A. Tune Radio
- B. Take the Radio's Batteries *(If the player doesn't have them in their inventory)*
- C. Put Down the Radio

-If the player chooses to Tune the radio and the radio has its batteries, they are asked to enter frequencies ranging from 530 to 1710. Most of the frequencies only play "white noise" except for the following: 1434, 1295, 1499, 1440, 865, 1589, 1421, 547. These frequencies repeatedly 'play' a word. The important frequencies are 1421, 1434, 1440, and 1499, which reference and allow the player to view the book *Twelfth Night* on the Book Wall. If the radio has no batteries, the player cannot tune the radio.

-If the player chooses to take the radio's batteries, they are added to the player's inventory. This option is only available if the player doesn't have them in their inventory.

-If the player chooses to put down the radio, they are presented with the previous options.

-If the player chooses to go to another wall, they are presented with the original Wall Choices.

C. If the player chooses the Book Wall, they are given a description of the wall. Followed by a list of some of the books that can be seen. The player can do the following:

- A. Look at more Books
- B. Examine a Specific Book
- C. Go to another Wall

-If the player selects to look at more books, they are provided with another list of books. An additional list will be displayed if at least three of the important frequencies from the Table Wall are tuned to on the radio. This additional list provides access to the book *Twelfth Night*. The player will be presented with the previous choices.

-If the player chooses to examine a specific book, they will be asked to enter the book number, as in the provided list, for the book they want to examine. Most books reveal nothing except, *Enigmatology - The Study of Puzzles* and *Twelfth Night*. The former provides the player with the list of frequencies mentioned earlier. The latter provides a task "PUSH P.U.L.L." alluding to what needs to be done at the Plaque wall. Note: The player can only examine *Twelfth Night* if they have previously tuned the radio to at least three of the important frequencies. The player is then presented with the previous choices.

-If the player chooses to go to another wall, they are presented with the original Wall Choices.

D. If the player chooses the Plaque Wall, they are provided with a brief description and given the following options:

- A. Observe Plaque
- B. Go to another Wall

-If the player chooses to Observe the Plaque, they are asked the following:

- A. Examine the Plaque
- B. Pull Down the Plaque
- C. Go to another Wall

-If the player examines the plaque, they find the it has the words “ I LIKE PUZZLES” on it and notice the letters are actually buttons. The Plaque acts as a combination lock; unlocking only when the following letters are pushed in sequence: P, U, L, L. The player will be asked to enter a letter to ‘push’, while entering ‘0’ will exit the code entry process.

-If the player tries to pull down the plaque, they will find it is secured to the wall unless they have unlocked it with the code P.U.L.L. If successfully opening the plaque, they player finds a key to the door which is added to their inventory.

-If the player chooses to go to another wall, they are presented with the original Wall Choices.

-If the player chooses to go to another wall, they are presented with the original Wall Choices.

-If the player manages escape from the Puzzle Cube, Amelia Ford will apologize for trapping the Caretaker in the Puzzle Cube and she will give the Caretaker a die that will be added to the player’s inventory. The player will then proceed to the Eatery. However, if the player is following the Amphitheater branch, the following will occur instead:

-If they have the radio’s batteries, they will be given the following choices:

- A. Get something to eat.
- B. Go back to the Amphitheater

-If they get something to eat, the player will go to the Eatery for a Cheeseburger but, the player wastes too much time and the Amphitheater collapses.

-If the player goes back to the Amphitheater, they find Teresa Evans there. Teresa provides her reasoning against Sophos Academy. The player must access their inventory and use Amelia’s Die in order to capture Teresa and ‘win’ the game. Otherwise, Teresa destroys the control board resulting in the collapse of the Amphitheater.

-If the player doesn’t have the radio’s batteries, they have no way of powering the control board, resulting in the inevitable collapse of the Amphitheater.

III. The Cafeteria Fiasco

At the beginning of this scene, the player will learn about the food that served at Sophos Academy and the people that make and serve the food. The Caretaker will order a Cheeseburger combo and the Caretaker will sit down and attempt to eat its lunch. However, the Caretaker will

discover that there is something suspicious about the contents of the cheeseburger. The player now has the opportunity to make the Caretaker's next move by typing in one of the following actions:

A. DIG IN

B. OBSERVE BURGER

-If the player chooses to eat the burger, the Caretaker will eat the Cheeseburger. After the Caretaker finishes its burger, they will become ill and hospitalized for several days. Things go awry during this time resulting in Sophos Academy's destruction.

-If the player chooses to observe the burger, the Caretaker will find white pinkish mushrooms in the burger. The Caretaker will then ask the cook about the location of the mushrooms. The Caretaker will find out that the kitchen is stocked with Destroying Angel mushrooms. The Caretaker will order the cook to stop serving the mushrooms and call an ambulance. The Caretaker will then go to the register and treat anyone that was affected by the mushroom's toxins. After attending to the afflicted, the Caretaker will go back to the cafeteria. Something sparkly will catch the Caretaker's eye and he will spot Jordan Bramley, a culinary student of Sophos Academy. Jordan tells the Caretaker that he saw someone with colored hair in the kitchen earlier checking the kitchen's supplies. The Caretaker is doesn't know if it should believe Jordan's story or not. The player must make the next move by typing one of the following actions

1. PRESS JORDAN

2. BELIEVE JORDAN

-If the player chooses to press Jordan, the Caretaker will threaten Jordan to give more information about the culprit. Jordan will then tell the Caretaker that the culprit was a female that was had a long, grey hair.

-Following: The Caretaker will then go into his office and browse through the student records in order to find a picture of the culprit. While the Caretaker is searching for the culprit's records, it will find an outdated version of Jordan Bramley's records. After discovering that this is not the best course of action, the Caretaker will quit looking through the student records and punish Jordan for the incident. If the player chooses to believe Jordan, the Caretaker will continue to search the kitchen. The Caretaker will eventually find PotNi in the kitchen and it will ask the Cook if he has seen anything from the earlier incident. The Cook will notify the the Caretaker that he saw a flash of light coming from the kitchen earlier in the morning. While the Caretaker ponders on this, it will run into Professor Norm and Professor Norm will tell the Caretaker that a wormhole was used during the incident and a former competitor of the Quinquennial Competition used a wormhole during the competition. The Caretaker will then look through the competition records and it will discover that the wormhole project is missing. This discovery will lead the Caretaker back to the ChemLab. In the ChemLab, PotNi is found underneath a laboratory bench instead of in the Wall Case. Also, the Caretaker will remember that a student

received the wormhole experiment idea from a note that was left on that student's locker. Realising the significance of the PotNi, the Caretaker proceeds to the Schutzhund Training Centre in search of a way to 'sniff out' the Potassium Nitrate.

- The Schutzhund Training Centre houses the school's dog trainers. The Caretaker approaches the first student they see with a dog; asking for assistance, the Caretaker provides a sample of the PotNi for the Bloodhound to track. The Bloodhound identifies PotNi throughout the main building. Providing a dog whistle for future assistance, the student leaves. The Caretaker heads to the main building's basement to temporarily prevent the PotNi from combusting. They do so by adjusting the building's temperature extremely low. This causes everyone in the building to leave because it gets so cold.

-Just as the Caretaker is about to leave, a strange noise occurs. A portal like opening appears and a girl comes out of it. She readjusts the temperature. The girl is the antagonist, Teresa Evans. She and the Caretaker speak; Teresa revealing her reasons against Sophos Academy. The following options are available when the player is asked to use an item from their inventory.

USE Amelia's Die

If the player uses Amelia's Die, Amelia appears in a cubic form. This results in Teresa's Capture.

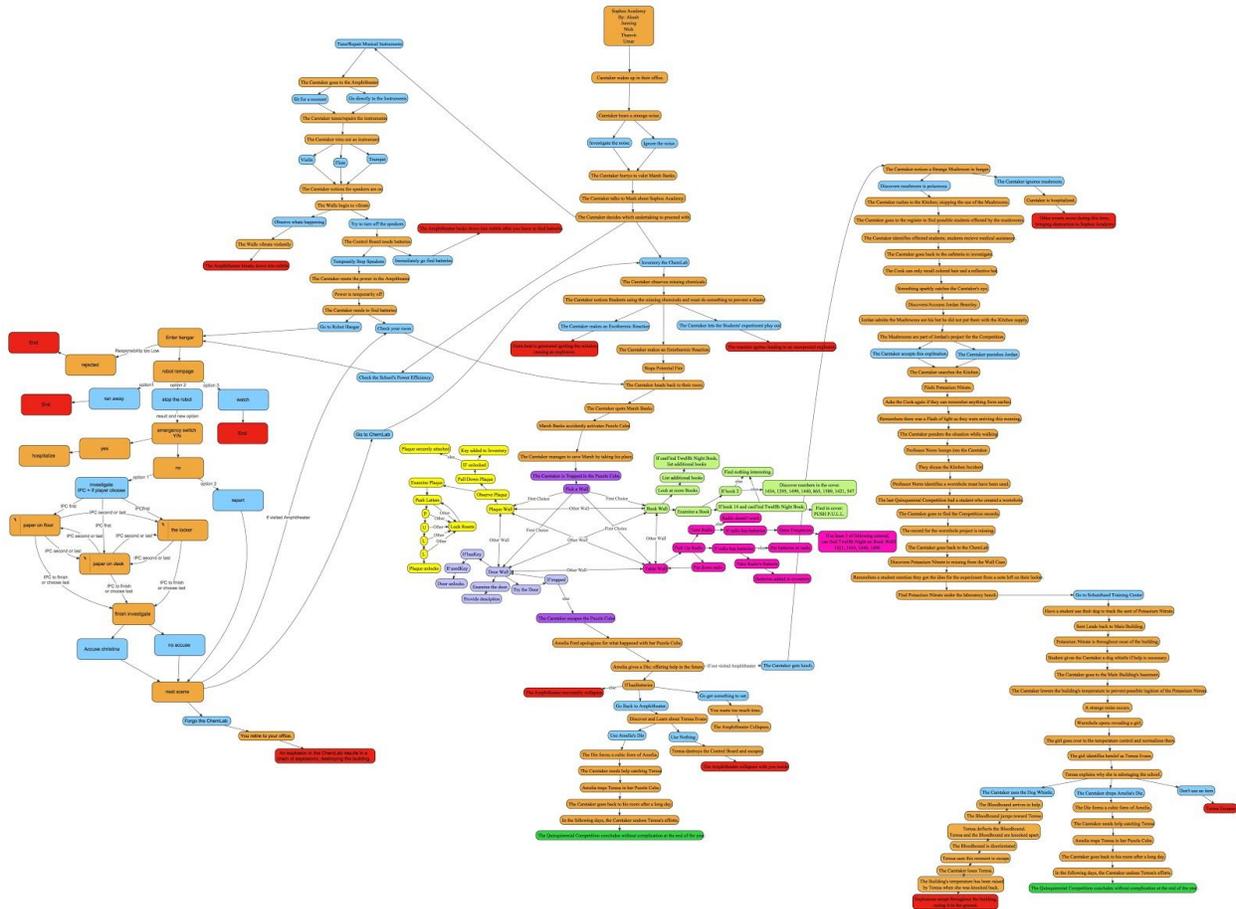
USE Dog Whistle

If the player uses the Dog Whistle, The bloodhound arrives shortly. However, Teresa manages to escape and simultaneously raise the temperature very high. This results in the explosion of the main building.

DON'T USE ITEM

If the player chooses not to use an item, Teresa escapes.

Visual Map of the Game



Conceptual Art

Sophos Academy Buildings.



Main Campus (Source: Umar Alam)

Advanced Aerospace Building (Source: Umar Alam)



Amphitheater (Source: http://www.wikiwand.com/en/Universal_Amphitheatre)

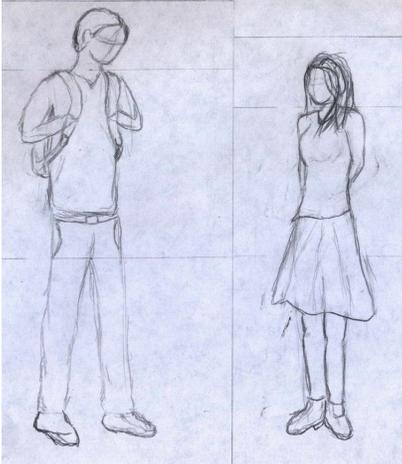
Character Designs.



The Caretaker^(Male) (Source: Junxing)



The Caretaker^(Female) (Source: Junxing)



Students (Source: Junxing)

Student(s) Projects.



“The Savior” (Source: <http://www.ign.com/articles/2017/10/06/pacific-rim-uprisings-director-explains-new-jaegers-and-setting>)



Amelia Ford's Puzzle Cube (Source: <http://installationmag.com/puzzling-plateau/>)