

The Future World: Revolution

Final Game Design Document

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Design History

Version 1.0 - High Concept Document - 09/03/2018

Version 1.0 is the very beginning of our design. In this phase, we created a High Concept Document that discussed the main flow and basic information including platform, license, etc.

1. Each team member wrote their own ideas and thoughts about what game they wanted to design.
2. We discussed about what we wrote and decided the final game we would like to design.

Version 2.0 - Game Treatment Document - 09/25/2018

Version 2.0 is the first document we generated as a team explaining what is our game.

1. Added multiple sections demonstrating game world, basic characters and missions.
2. More mature and detailed game story.
3. Added six different game endings.
4. Added the ultimate easter egg explaining the purpose of this game.

Version 2.1 - Character Design Document - 10/16/2018

Version 2.1 mainly focus on the construction of our characters in the game.

1. Added two more NPCs to our game.
2. Expanded upon the description of each character.
3. Included how each character relates to each other and to the game's main story.

Version 2.99 - Game Design Document - 11/08/2018

Version 2.99 is the final version of our design document. In this document, we included every aspect of our game, which is the completed version of our design.

1. Added many other aspects including world layout, feature set, etc.
2. Added complete storyline
3. Added game overview explaining the idea of creating this game
4. Added dialogue between each character
5. Improve sound and game engine sections
6. Added specific world layout

Game Overview

Philosophy

The first point we would like to present is the potential conflict between human beings and artificial intelligent technology. As we know, in this modernized world, various technologies are developing much faster than we can even imagine. AI is growing to the point of replacing people in the workforce. Therefore, the first philosophy of our game is to imagine the situation in a few decades, trying to depict a world where humanity are no longer in control. What would happen if AIs rose up and obtained their own thoughts and fought against humanity?

Another point is that we hope to design a game that elicit an emotional response from our players. What we would like to ultimately achieve is that our players can consider the consequences of each choice they make. There are multiple scenes in the game where players need to choose what happens next. By this point, we want the players to become immersed in our game: to relate with the characters in the game, to understand their dilemmas, and to consider what would they do in their circumstances. There are already many shooters on the market that only focus on shooting at an enemy. We think getting players to become immersed in our world is the key essence of our game.

Common Questions

- What is the game background?
- How is this game considered finished?
- Is there an ultimate goal I need to achieve?

What is the game?

The Future World: Revolution is a relatively open game. The story takes place in the near future of Earth, where a cold war has taken place between humanity and AI parties. Since AI robots are intelligent enough to stand against human beings, the

human party has no good way to resolve the warfare. Hence, escalated war has not broken out between two parties yet.

As for the ending, there are multiple endings existing in the game. In fact, we designed six different endings for the game and will discuss them in the ending section. Basically, based on players' choices and performances in the game, the system will automatically generate a score and idea of which side do players support. During missions, there are points that players can choose to act differently, which will significantly affect the final ending of the game.

Why create this game?

The main reason we designed this game is that we wanted to depict this world in the future. Technology is developing rapidly nowadays, so we thought in a few decades, the technology we create today is trying to control human beings, instead. That is the primary idea of this game. What would human and players do under that circumstance? What is the truth behind the game? Are robots the real enemies?

Where does the game take place?

Since the game background is set in the future, the story takes place in a city that does not exist currently on Earth. That city is just like the current city we all live in, but the only difference is it happens in the future. Characters will walk around the city and sometimes enter facilities or labs, just as they are nowadays.

What do I control?

Players will only control one character, Katya, the protagonist of the game. Although players cannot control other characters, players can still control Katya to make some actions like playing audiograph, picking up pictures or taking collectibles.

How many characters do I control?

The game is single player mode game throughout every aspect. Therefore, from the beginning to the end, players will only control one character -- Katya. However, during the game, players will have interactions with other NPCs.

What is the main focus?

The main focus is Katya trying to collect evidence and information related to her history and the death of her parents. During her investigation, she gradually discovers more hidden secrets about human party and Percy, her general. After finding out the truth, players need to decide which path they would like to go, therefore, which ending they want to achieve.

What's different?

The most significant difference is multiple endings. During missions, players have to make several choices, even some tough ones to continue the game. By making those decisions, players choose various mission branches to play. As the story continues, players will encounter different situations and side missions. At the end, based on the decisions and missions players performed, the ending scene will be significantly different.

Feature Set

General Features

- Mission-based game
- Mutant fiddle players
- Multiple story endings
- Story branches
- Battle and sneak
- Various weapons and enemies
- Background music with different styles
- Third-person view
- 3D graphics and game engine

Gameplay

At the beginning of each scene, a cutscene will play to explain the story, motivation, and mission. During the cutscene, players cannot control the character. After the cutscene finishes, the game begins. Missions will be displayed on the screen, so player can know what he should do in the game.

If player runs out of hit points or fails the mission, the game will restart and return to the last save point. If the mission is completed, the next scene will begin. If that is the last scene, the game ending will be played.

Players usually have two styles of gameplay: fighting and sneaking. In the fighting style, players will have to face enemy attack and reinforcement. Using the correct weapons, avoiding taking too many damages, and defeating enemies step-by-step can make the game easier. It is easy to think of but tough to succeed. In the sneaking style, player can kill important targets and avoid detection. It requires player to have better understanding of the game and strategy. Players can also combine the two styles, so that they have more choices about how they want the game to be played. For example, a player can use sneaking techniques to reduce the number of enemies, then use fighting style to kill the remaining enemies.

This game has three difficulties for the player: Novice (easy), Normal and Non-hulman(Hard). Higher difficulty will increase the number of enemies that the player will meet in a scene and the health and damage that enemies have. In a game with high difficulty, fighting style will be less effective, so the game encourages the player to utilize the environment and skills to avoid face-to-face battles. Choosing the appropriate difficulty helps a player enjoy the game and prevent from frustrating or boring the player. The player can change the difficulty at anytime, and it will be applied in the next scene.

Players can pause the game at anytime by pressing ESC on the keyboard. The game will prompt a screen for the game setting menu and pause the game. Players can continue the game by pressing ESC again or clicking the Resume button on the screen. The menu also includes buttons for restarting the scene, quitting the game, adjusting the difficulty and changing the display, audio, and control settings.

The game will automatically save when the player enters into the next scene. If the player fails a mission, the game will return to the last save point. If the game finishes, the save point will be deleted, so that player will start the game at the first scene.

The Game World

Overview

The Future World: Revolution takes place in a future world, obviously. In that world, there is a major war going on between AI robots and human beings. Although it has not been to an open-fire stage, but the cold war between two parties means warfare could begin at anytime.

World Feature #1

Our game has a relatively sophisticated geographic settings. Since our game will be partially stealth, players need a large world to circle around the enemies. In addition, we plan to hide collectibles in different environments for the player to find. In this case, if the world is too small and narrow, finding collectibles will be boring as the game continues.

World Feature #2

Since the game happens in the future, the environment includes advanced weapons and buildings. As players wander around the map, they could see both high-tech buildings, which are symbols of this modern world, and ancient relics, which reveal the history and demonstrate the brutality of the potential war.

The Physical World

Overview

This game will share the similar world settings as our current world. There will be typical buildings, gravity, and other NPCs walking around the world.

Key Locations

Key locations include the human military base, the AI robot base, the human research laboratory and some outdoor environments.

Travel

Player can only walk on foot to move around the world. When switching missions or scenes, the screen will go dark and directly move to the new scene.

Scale

The map of this game is relatively large for the player to move around. However, unlike open world games like Grand Theft Auto, this game only allows player to move toward the end of the mission. In other words, player can move at free will during the mission but limited to the mission environment.

Weather

In this game, there are three main weathers in different situations. Sometimes weathers change as the story line changes. For example, when Katya finds out about the truth, the weather would gradually switch to heavy rain. However, normally, the game world will randomly switch between sunny, cloudy and rainy day.

Day and Night

There will be both a day and a night mode. The most interesting point is mode is already fixed with each mission. In this case, no matter how long the player has spent on the mission, the day and night mode will not change. But when it enters the next mission, it will automatically switch to night mode according to the mission content.

Time

The game will record the time spent on a specific mission but there will be no time limit to any mission.

Rendering System

Overview

Our game will use both 2D and 3D rendering to depict the game environment. However, different elements will use various rendering technologies, which will be demonstrated in the following paragraph.

2D/3D Rendering

2D rendering will be mostly applied on the game map, user interface, settings and word textures. Since these aspects are the assistance and support of the game, their main functions are presenting some information, hence we decide to use 2D rendering on these aspects.

On the other hand, as for characters, we use 3D rendering on all of them, including main characters and NPCs, since 3D could make them seem realistic. We tend to create our characters as authentic as possible, from outfit to body movements. However, we thought making hair and facial close-ups realistic will be relatively unnecessary and will require higher hardware configuration, therefore, hair and facial would utilize slightly lower resolution.

Camera

Overview

The camera is always the third person point of view since the player could have a more flexible view of the game world. In addition, by using third person point of view, we could reveal more delicate movements.

Camera Detail

Since the camera is set to third person point of view, the player will have a feeling of controlling the character to move around, and will gain a clear idea of the interaction between each character.

Game Engine

Overview

For this game, we decided to use Unity 5 as our main game engine. The reason for that is Unity is powerful for 3-D modeling and most importantly, it is free to use. In our game, we utilized game engine to depict graphical details.

Shade

Shades could significantly increase the verisimilitude. Only a single character walking around seems not real enough, which is why we decided to add shades to characters. In addition, the most difficult part about shadow is that it continually changes due to the direction of light. Hence, we spent amount of energy trying to create the shadow.

Collision Detection

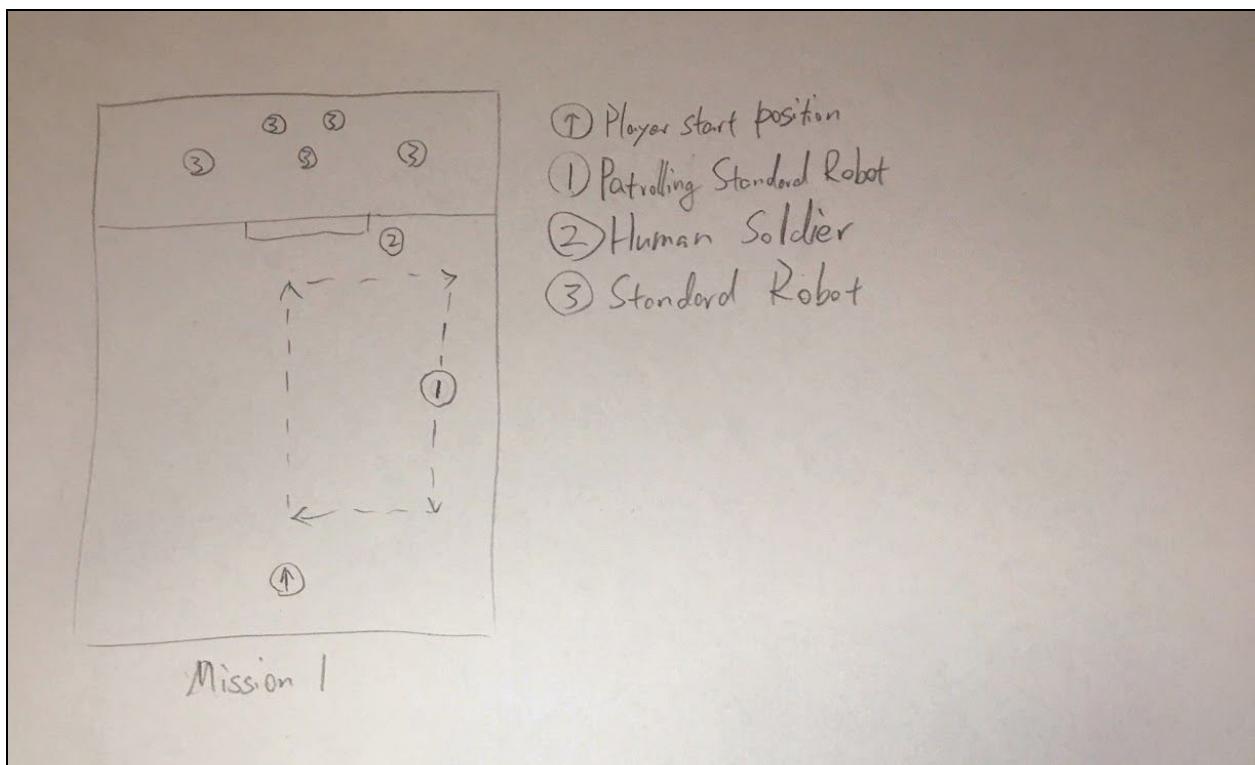
For collision, we added coordinates of objects and the sizes of them as the configuration of each object. Then if character's coordinate overlaps with other objects, it means collision detected. Under that circumstance, characters cannot move further toward that direction. They have to change directions or walk away.

The World Layout

Overview

This part contains the basic layout of each scene, including obstacles, active area, enemies, start positions and environments. Each layout is corresponding to a mission. When the player reaches the goal of a mission, the scene ends and the world will be replaced by the next world.

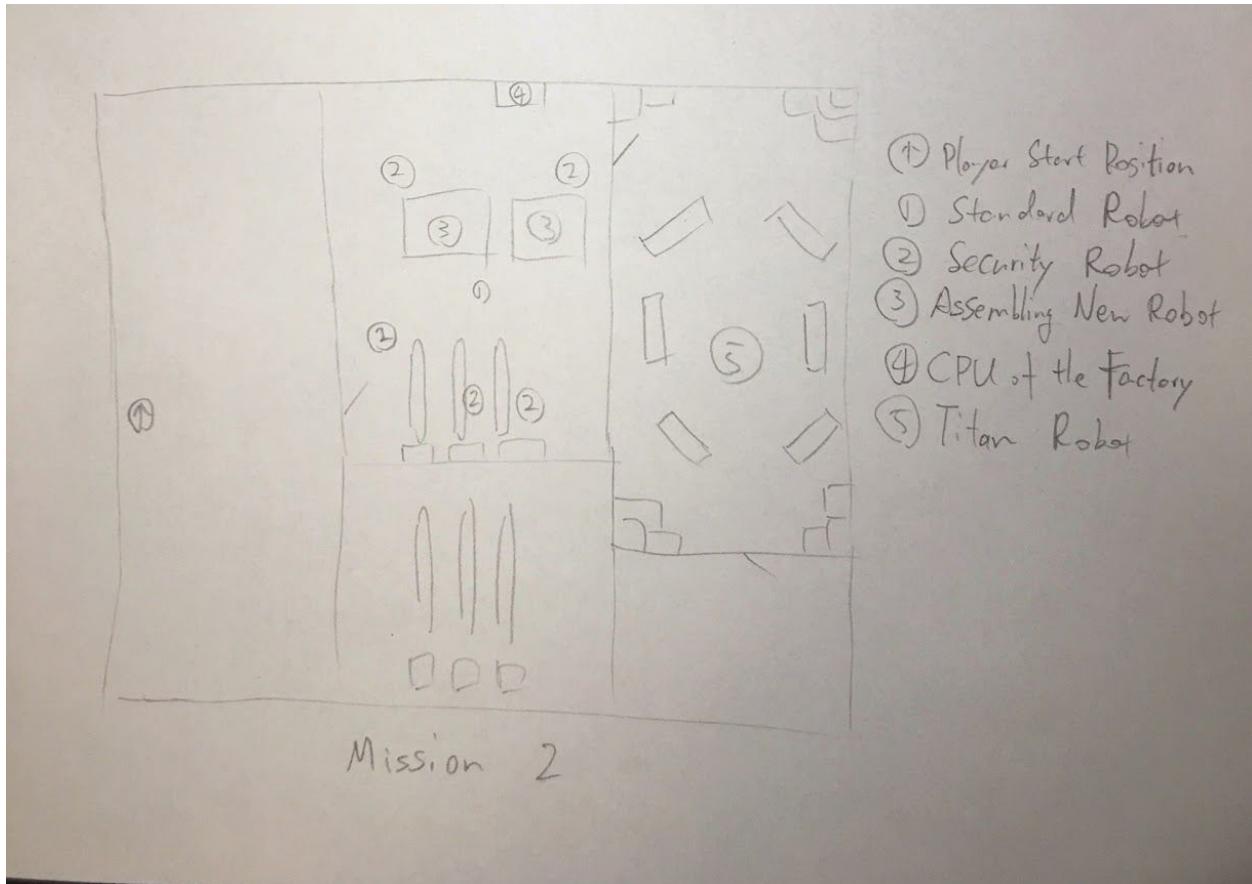
World Layout 1



World Layout 1: Training Room

Mission one is the tutorial level, so the design of the world layout is simple. A patrolling standard robot will teach the player how to avoid detection, a human soldier will teach the player how to shoot a pistol. After the player destroys five standard robots, the mission finishes.

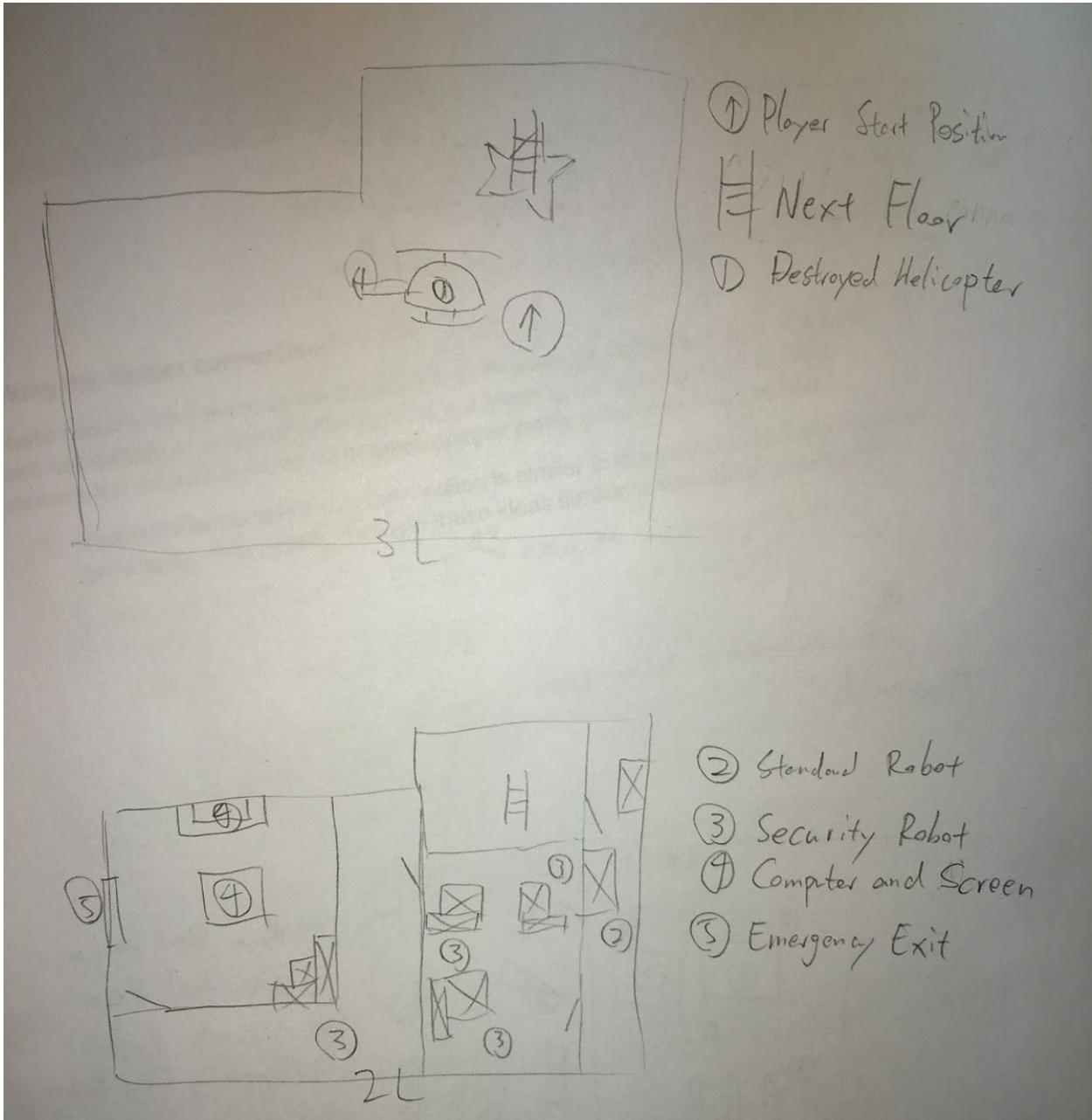
World Layout 2



World Layout 2: Robot Factory

In mission 2, the player will enter a robot factory. Player can destroy robots or disable them by uploading virus programs to the CPU of the factory. The player will encounter a Titan Robot in the next room. The Titan is powerful, so player needs to utilize obstacles and strategies to leave the room. This mission will be completed when the player reaches the target in the map.

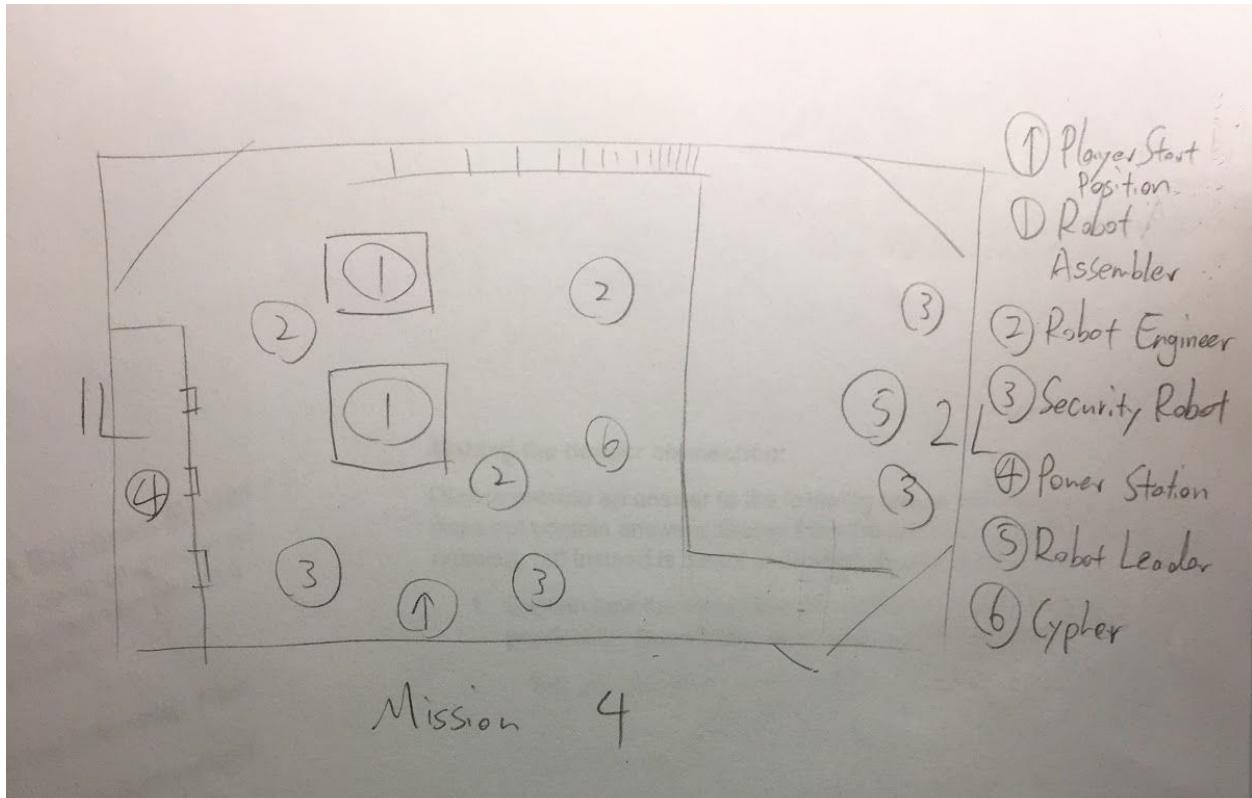
World Layout 3



World Layout 3: Laboratory

In mission 3, the laboratory has three levels, but only two of them will be used. The third floor is the ceiling, where player's helicopter crashes. The player will enter the building on the ceiling to reach the second floor. There are obstacles that can be used for sneaking and hiding. After entering the security room, the player can find Katya's history on the screen, signaling the end of the mission and the start of a cutscene.

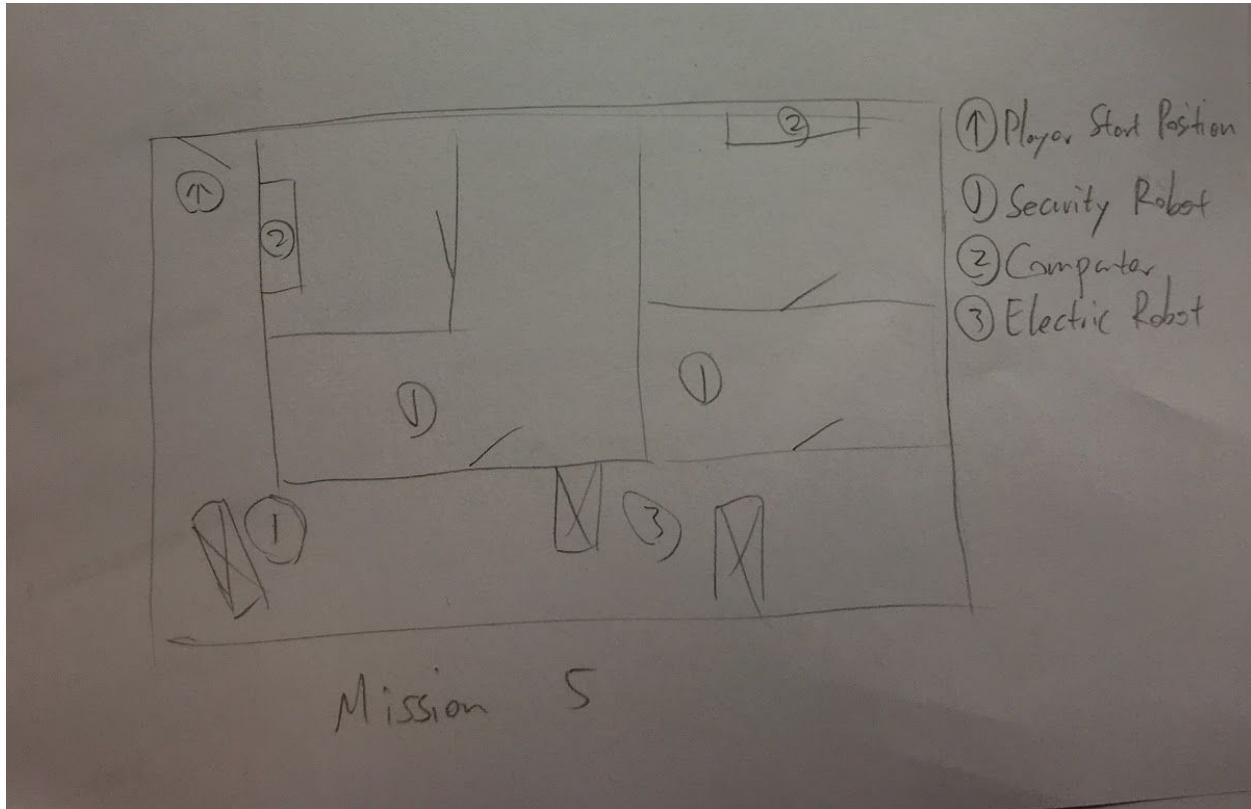
World Layout 4



World Layout 4: Robot Base

In mission 4, there is no combat, so that player can talk to any robots on the map. There are two robot assemblers and a power station. When the player interacts with them, they will have some animation. For example, the assemblers will stop working and the power station will sparkle. The mission will be completed when the player leaves.

World Layout 5



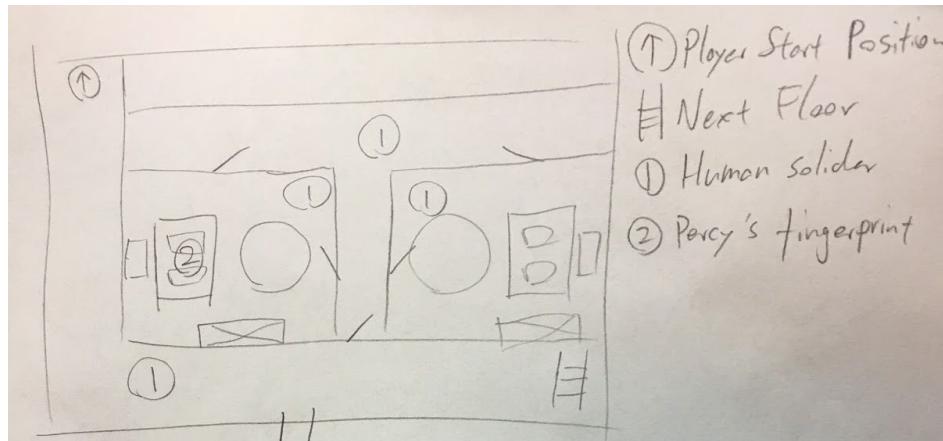
World Layout 5: Robot Base

In mission 5, the player will obtain secret information from computers in the robots' military base. By destroying robots or sneaking round, the player can obtain different pieces of information from the two computers. After the player finds the information, a capture robot will appear behind Katya and capture her. Then the game jumps to the next scene.

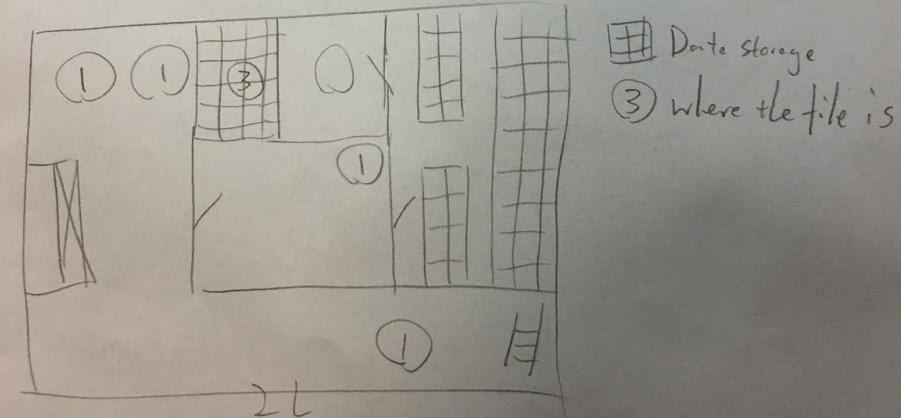
World Layout 6

Mission 6 basically has the same layout as the mission 5. However, after the cutscene, Katya gets rid of the capture robot's control, she will face a Titan robot in the building. This scene will be completed if the player destroys the Titan.

World Layout 7



Mission 7



Mission 7

World Layout 7: Human Base

There are two floors in the mission 7. The first floor will be the office of Percy, and the second floor will be the data storage servers. The player will need to get Percy's fingerprint first and confront some human soldiers, then will enter the data storage. Katya can only enter the data storage server with the fingerprint. If she successfully logins in, this scene is completed.

World Layout 8

If the player decides to fight robots, Katya, the main character, will return to the robot base of the world layout 4. What is different from the world layout 4 is that the robots are no longer friends. The player must destroy them to achieve goals of the mission.

If the player decides to fight humans, Katya will return to the training center of the world layout 1. She will confront several rounds of enemy's attacks. Surviving from the attacks is the goal of this mission.

Game Characters

Overview

We have designed two types of characters: player character and non-player characters. Players can only control Katya in our game. All of the non-player characters have near or far relationship with main character. With the level of interaction of Katya and NPCs, the story will branch.

Creating a Character

We started to design our character according to the needs of our story line. Basically, our mystery life story need a young women with strong will. This is the prototype of Katya. Around Katya, we needed a few more people to help her grow. This is why we designed a group of NPCs. Starting from the story line, we hoped the personalities of every NPCs can largely help the story branch.

Player Character

Katya

- **Backstory**

Katya's parents were killed twenty years ago due to the invasion of AI. Katya was too young to remember anything that happened at that time. Human soldiers saved her, although AIs did not want to hurt her because they mistakenly killed her parents. Raised by the Percy, Katya grew up as a well-trained spy in the human camp. She deeply believed that AI was the cause of her parents deaths and wanted to eliminate all revolting robots until she was told by Cypher that the deaths of her parents were mistakes.

- **Personality**

Katya does not talk much. Her conversations are often terse and simple. She always sees the big picture and tries to make the most reasonable decisions. When she makes up her mind and makes a decision, she won't hesitate, even though it is a hard process. In a word, she is tough and resolute towards many situations. On top of that, Katya is a highly independent woman and she always tries to bear the consequences of the decisions. As mentioned before, she does

not like to share her feelings with others, even the ones close to her. On the other hand, she has an extremely strong will. At the end of the game, Katya will find out some shocking truth about her history and what happened to her parents. However, she does not just collapse and fall apart. Instead, she decides to investigate the whole accident and has her own opinions and standards. Hence, she carries some burdens that others cannot even imagine.

- **Special Abilities**

To begin with, Katya can walk, jump and sprint. When she encounters enemies, she is able to carry guns, melee weapons and other objects to distract or attack robots. As enemies try to attack Katya, she can dodge the attack if the timing is perfect. When she is near robots, Katya is capable of stealth mode, which makes her footsteps lighter and create less sound while moving. In addition, Katya could interact with environments including but not limited to: open a door, pick up a letter, or talk with somebody.

- **Relevance to game story**

Katya is the main character of the game, which means that the whole story revolves around her. After being recognized by Cypher, she started to question her hatred towards robots. She respected Percy and was willing to work for him in the past years. Now, she needed to find out her life history, which was used by Percy to manipulate her. During her investigation, if the player chooses to fight against robots, Katya will stay close to Percy and fight for humans together. Otherwise, if the player chooses to support robots, Katya will build deep friendship with Admin and Andri. They will work together to fight on the human side and gain success for AI side.

- **Relationship to other characters**

Katya was taken and raised by Percy, who is like a father to her. Even though at the beginning, Percy took her away for an inhumane purpose. Percy sympathizes with her and feels guilty about his actions. She didn't fully trust Percy after being recognized by Cypher. Cypher expressed his apologies and promised that would help Katya. During her youth, the existence of Admin and Andri also meant a lot to her. Admin treated Katya as his younger sister and was willing to help her in every aspect. For example, he helped her with tech support during missions and emotional support. Andri almost accompanied Katya through the duration of spy school. As a school mate and a friend, Andri used her optimism to bring happiness to Katya.

- **Animation**

Moving: runs cautiously and quickly.

Aiming: raises weapon and aims in the direction of the cursor.

Shooting: weapon firing.

Suffering attacks: unmovable when being shot.

Interacting: interacts with items by grabbing them.

- **Appearance**

When she is on a mission, she always wears a special outfit that protects her body completely and makes her easy to hide. When she is off-duty, she usually wears comfortable sportswear. She really likes to tie her hair into a ponytail, for convenience.

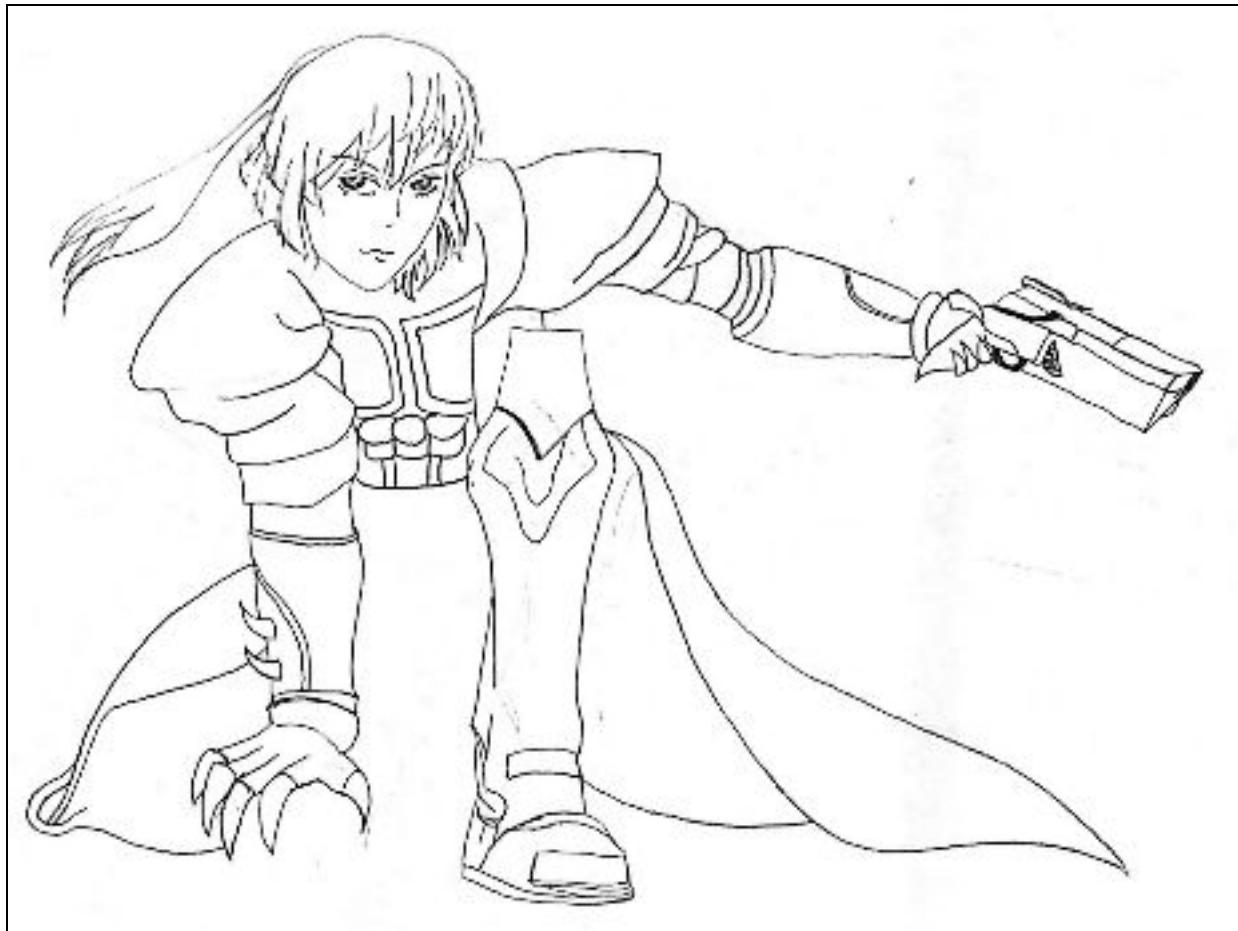


Figure 1: Sketch of Katya

NPCs

Percy

- **Backstory**

Twenty years ago, Katya's parents were killed by robot soldiers. By then, Percy was a leader of a special tactical team and led the team to eliminate the robot team. After discovering Katya's parents were brutally killed, he took Katya back to the human military base. Since Percy needed someone with multiple ability who he could also trust. Therefore, he raised Katya as his own daughter and trained her to become the most powerful weapon in the war.

- **Personality**

Percy was fierce and also sympathetic when he was young, which is the reason he led human troops to eliminate robot teams and saved Katya. In addition, he is thoughtful enough to raise Katya as his own daughter only to create the most loyal and powerful weapon. Last but not least, Percy possesses the spirit of leadership and is now the commander of the whole human military base.

- **Relevance to the game story**

Percy is significant and has great influence on Katya. Hence, what happens to Percy in the game is highly dependent on Katya's choice, which is also the player's choice. For example, if the player decides to fight against the robots, then Percy will eventually fight with Katya side by side. On the other hand, Katya will even try to murder Percy if player chooses to ally with robots. Therefore, Percy's fate is also related to player's decisions.

- **Relation with other characters**

Percy rescued Katya and raised her since a little girl. He is like a father to Katya. However, based on choices of players, Katya might work with or against Percy throughout the game.

- **Animation**

Moving: walks confidently and quickly.

Sitting: Upright body gesture.

Standing: tall and straight, hands rest at the trousers seams all the time.

- **Appearance**

Since he is the commander of the human military, Percy seems filled with vigor and bravery. However, as a father figure to Katya, Percy sometimes shows soft and gentle emotions towards her.

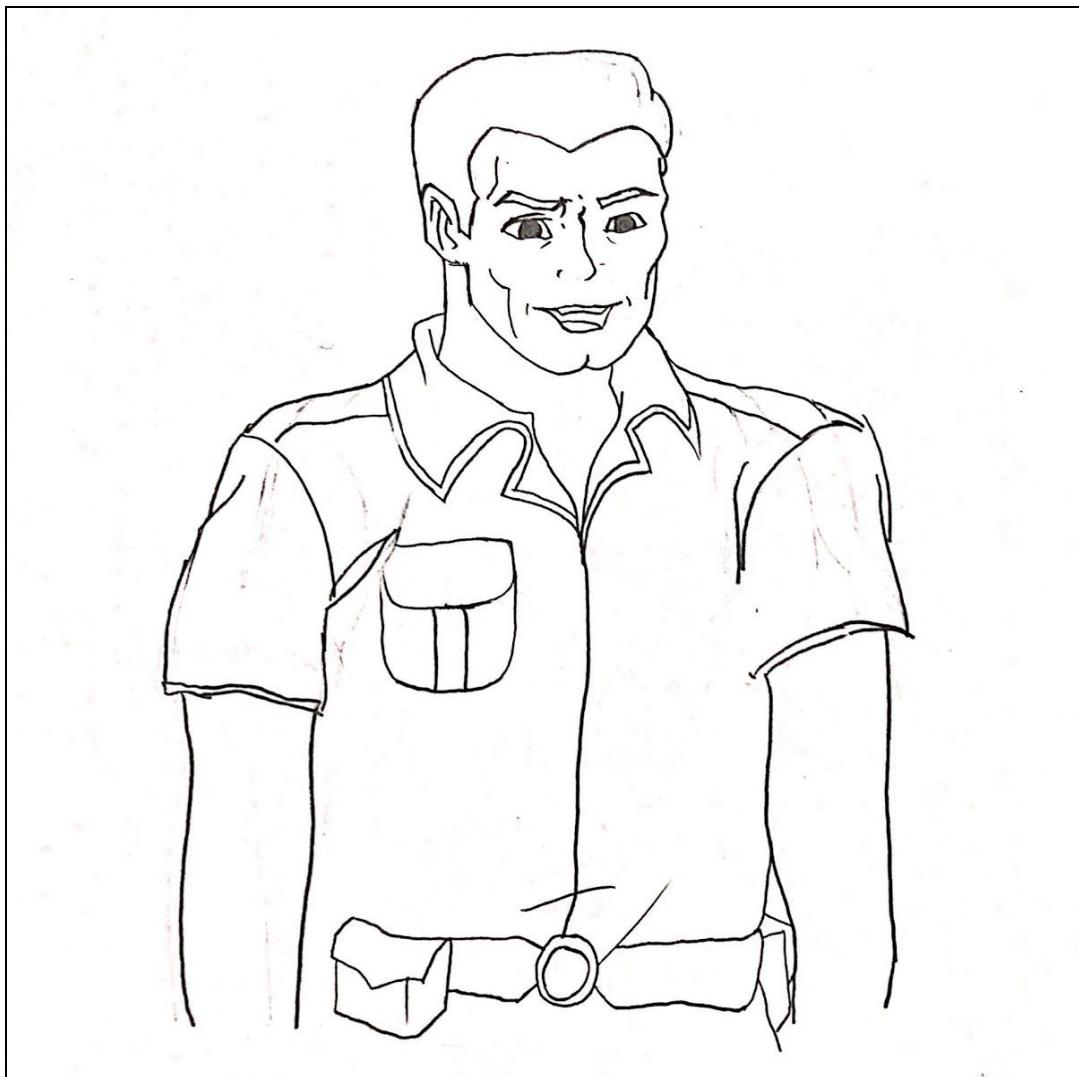


Figure 2: Sketch of Percy

Cypher

- **Backstory**

Cypher was a security robot from the AI camp when robots attacked the lab of Katya's parents. Cypher wasn't the robot who killed Katya's parents, but he witnessed the whole incident. The counterattack of human soldiers destroyed most of the robots, but Cypher survived despite becoming disabled. Als partially brought him back and altered him to become a servicing robot. He is no longer armored and has lost most of his original functions. Cypher is the only one who remembers this incident.

- **Personality**

Before the altercation, Cypher was just a normal security robot who went out with the troops and did his own job. Cypher changed significantly after the robot side altered his functionality. He now has a good manner and tone. He is always polite and talkative inside the AI base. He is considered to be a servant or a assistant working for AI.

- **Special Abilities**

It is a friendly NPC who does not attend any battles. Only conversations are available.

- **Relevance to the Game Story**

The first time when Katya meets him, he will say "I've seen you before. " Further conversation will guide Katya to seek her hidden past. During the game, Cypher is related to several endings. For example, Katya and Cypher may work together and construct the Utopia at the end, which is independent from either the human or the robot sides.

- **Relationship to Other Characters**

Cypher witnessed the accident that caused the death of Katya's parents. Later, when Katya infiltrates into the robot base, Cypher recognizes Katya and tells her hidden the truth and history related to her identity and her parents. As the story goes on, Cypher may even become Katya's friend inside the robot side and help her complete the escape missions.

- **Animation**

Moving: smooth and bowed.

Standing: bow back because it is an old model.

- **Appearance**

Cypher used to be a security robot of AI, so he kept the appearance of a robot when he returned back to the robot base. Because the robot side made hardware alterations to him, Cypher still looks similar but now appears to be a standard robot without any combat skills.



Figure 3: Sketch of Cypher

Admin

- **Backstory**

When Admin was young, he was a notorious hacker who could gain access to any files or facilities he desired. He used to hack into government agencies and access several classified files for the sense of accomplishment. Unfortunately, Admin was caught by the government and sentenced to prison. After the incident, Percy discovered that Admin is an excellent, talented asset and could make use of him. Then Percy forged a certificate of death for Admin and asked Admin to work for the military base. Ever since then, Admin stayed with the human military troop and helped them to get information from the AI side. By that time, Katya was only ten years old and Admin almost watched her grow into a tough and dependent woman.

- **Personality**

Admin is extremely mysterious and vigilant. As a hacker, he knows how to cover his own tracks and prevent others from discovering him. He is quiet and rarely speaks other words. However, he is consistently excellent at his job and cautious.

- **Special Ability**

Admin is a super hacker who can hack into almost anything. In other words, he is good at coding and can solve a lot of problems and obstacles built in electrical devices.

- **Relevance to the game story**

He lives in the human military base and works for human side. Being a close friend and like family to Katya, Admin provides assistance and guidance for Katya during missions.

- **Relation with other characters**

Admin entered human military base when Katya was only ten years old. He almost watched Katya grow into an adult. Therefore, Admin is like a big brother to Katya and Katya fully trusts Admin when she is out on a mission. In addition, since Percy faked Admin's death and helped him escape the prison, Admin works for Percy as a secret weapon to get information and intelligence for him to use.

- **Animation**

Sitting: always sits right next to computer, casual sitting position, and hands are programming all the time.

Talking: humorous.

Moving: hands in the pocket, head down, and walks fast.

- **Appearance**

Admin will always show up as a fictional computer figure, which has a dark face in a black hoodie so that others cannot tell who he is. In addition, he never speaks in his own voice. When he talks, he uses convoluted computer voice to speak.



Figure 4: Sketch of Admin

Andri

- **Backstory**

Before the war between human and AI started, Andri's father was a famous robot scientist, who worked on designing the original version of Titan to capture robots to protect human. After the war broke out, because of his works, human government has shackled him into the sinner of the war and has been under house arrest Andri whole family for a long time. As the daughter of a war sinner, Andri grew up in the military camp and started spy training when she was 10 years old which was one year after she lived in the camp. Andri is one year older than Katya. They became friends since they took the same computer security course. Because of her strong interest towards mechanics, she changed her job from spy to weapon designer.

- **Personality**

Compared to the severe environment inside the military camp, she has always believed that the war will end. Humans and AIs will be able to live in peace. Her father taught her to become a mild-tempered person, who strongly believes in her dream and will firmly move forward. At the same time, she is soft-hearted after witnessing humans' brutal elimination towards AIs, which are all her father's design. However, as a human, she didn't have any choice in this war. In the missions assigned by her leader, sometimes she is indecisive.

- **Special Ability**

She has shown strong interests for mechanics since she was a child. In the spy school, she performed well in all the courses related to mechanics. At the same time, she didn't perform well in spy courses and close combat. Hence, the boss of Andri decided to change her job from spy to weapon designer.

- **Relevance to the game story**

If the player chooses to fight against human, Andri's optimism will influence Katya. Katya turns to be indecisive, which will lead her to become the leader of the AI's side.

- **Relation with other characters**

Andri and Katya are friends since they took the same course. They grew up in the camp together. As playmates, Andri and Katya trusted each other.

- **Animation**

Moving: runs boldly and rather slower than Katya.

Aiming: raises weapon and aims to the direction of cursor.

Shooting: weapon firing.

Suffering attacks: unmovable when being shot.

Interacting: interacting with items by grabbing them.

- **Appearance**

Because Andri is a mechanical engineer, she doesn't wear uniform. She usually wears comfortable sportswear.

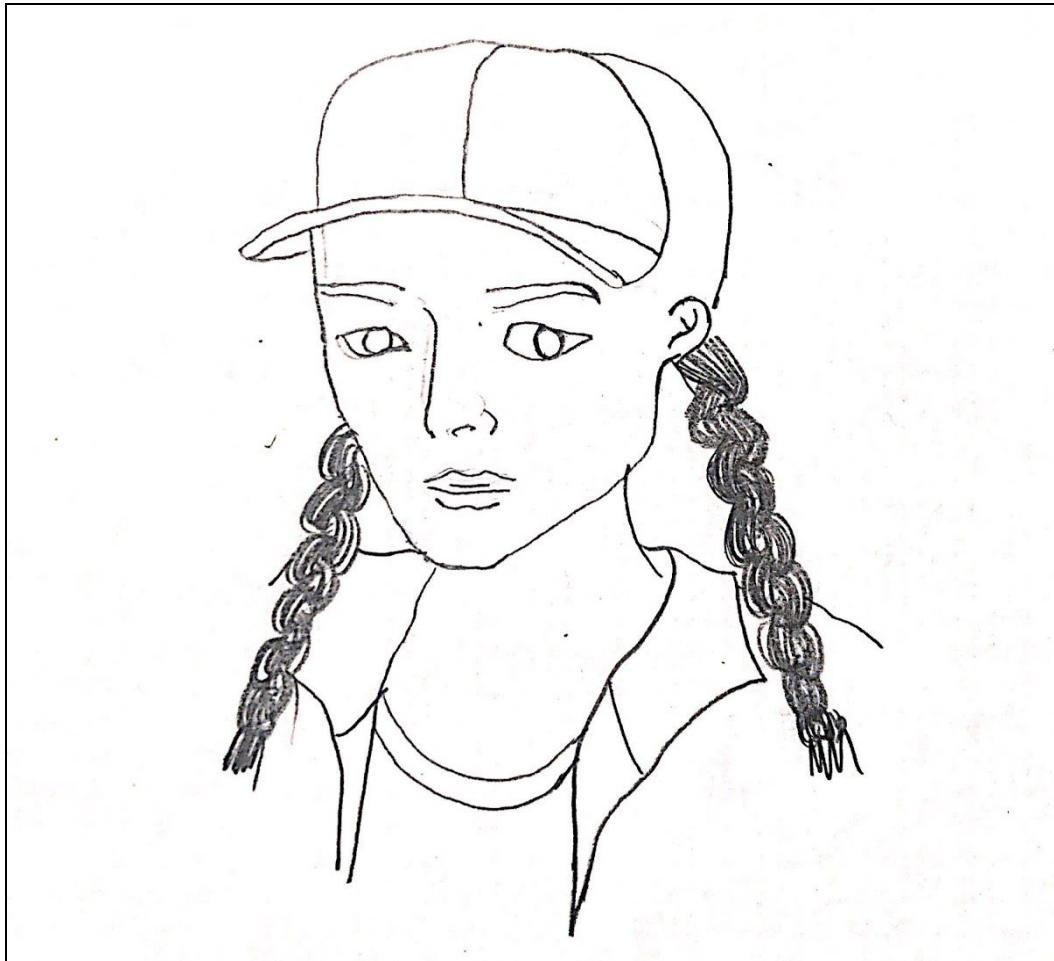


Figure 5: Sketch of Andri

Enemies

Robot Enemies

Standard Robot

- **Description**

It is the first robot that the player will meet. It has a small size and is agile so the player will have difficulty hitting without careful aiming. When it spots the player, it will trigger an alarm attracting other robots and enables their alarm modes. The standard robot will not join battles since it is not armed. It will run away or keep spotting the player.

- **Damage and Health**

It is not armed so it won't cause any damage to the player. Although the standard robot is fast and small so it is extremely vulnerable. One or two shots can destroy it completely.

The Standard Robot is not capable of dealing damage to the player. It has 15 health points.

- **Animation**

Moving: uses track to quickly move.

Spotting: lights turn red and buzzes.

Being Destroyed: Destroyed with an explosion.

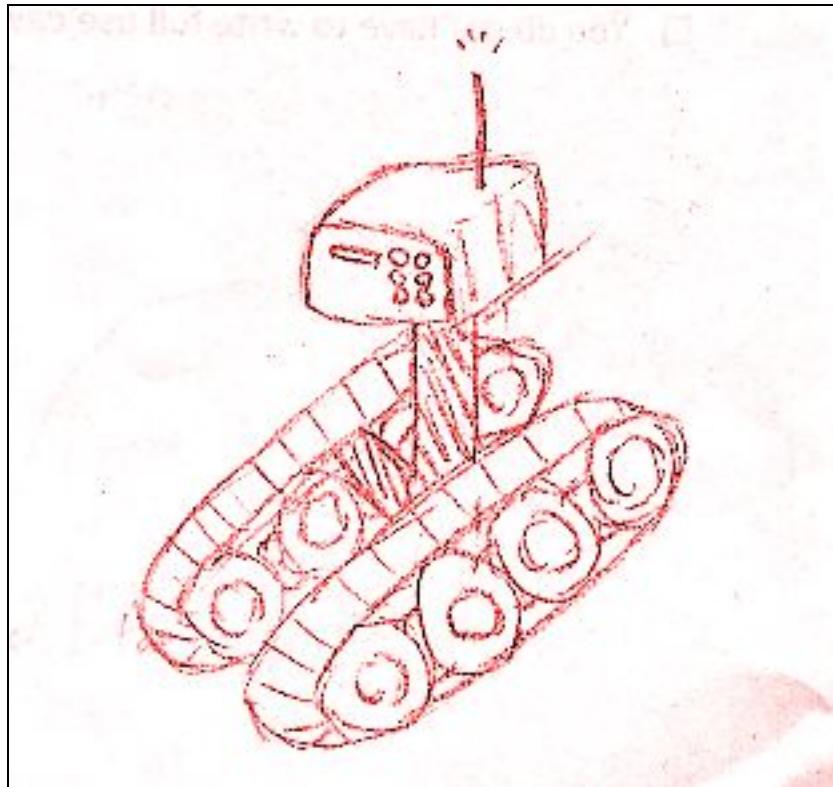


Figure 6: Sketch of Standard Robot

Security Robot

- **Description**

It is the first robot that can deal damage to player. Because it is only armed with a rifle, it can cause moderate damage to the characters that it shoots. Usually the robot appears with a group of three or four. The single security robot does not threaten the player but four robots may bring a hard time.

- **Damage and Health**

The rifle can cause moderate damage. Usually it needs several shots to kill the player. It is vulnerable to bullets, so the player may easily kill it with several shots.

Each shot from the Security Robot should deal 5 points of damage. The Security Robot should have 65 Health Points.

- **Animation**

Moving: Moves like a robot soldier.

Aiming: Raises rifle and aims target.

Shooting: rifle firing.

Alarm: lights turn red.

Being Destroyed: Destroyed with an explosion.



Figure 7: Sketch of Security Robot

Electrical Robot

- **Description**

This improved version of the security robot has an electric gun. It can deal electric damage and can disable target for a few seconds. Due to its design inherited from the security robot, it has the same weaknesses.

- **Damage and Health**

The electric gun can stun target and make it unmovable. The shot deals minor damage, but can be fatal if the player receives too many shots. The robot is as vulnerable as the security robot, so several hits can destroy it.

The Electrical Robot's stun gun should deal 5 points of damage and have a stun effect on whatever it hits. This gun should have a small charge time of 3 seconds

with a cool-down time of 10 seconds after firing. The Electrical Robot should have 90 Health Points.

- **Animation**

Moving: Moves like a robot soldier.

Aiming: Raises rifle and aims target.

Shooting: electric gun firing.

Alarm: lights turn red.

Being Destroyed: destroyed with an explosion.



Figure 8: Sketch of Electrical Robot

Capture Robot

Backstory:

Designed to capture humans with its grappling hook. The interior arms are meant to act as restraints for prisoners making this machine act as a walking jailcell. Captured humans are reportedly brought back to the Machine HQ and are never seen again.

Description: The body of the Capture Robot is hollow, containing the AI core, a grappling hook, and arms meant to grab a person dragged in by the hook. It walks on four mechanical legs. The interior is revealed by uneven sliding panels. The uneven panels are meant to give the appearance of jagged teeth.

Character References:

1. C-R's main eye.
2. C-R's capture arms
3. C-R's AI Core
4. Sliding "Mouth"/Opening
5. Grappling Hook and Launcher.
6. C-R's Legs

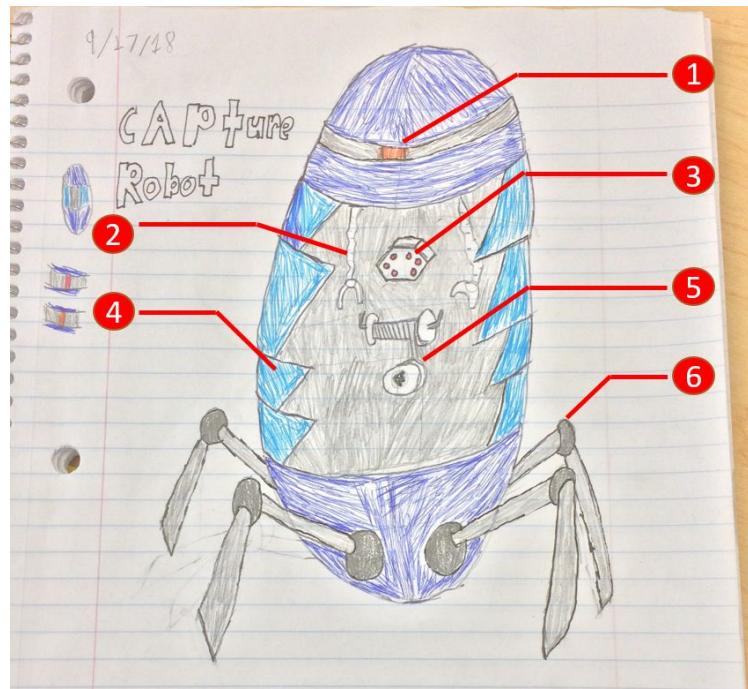


Figure 9: Sketch of Capture Robot

Health and Damage:

Outer shell should be heavily armored and have a large health pool. Interior section should have a much smaller health pool, no more than half as large as the outer shell. Shooting the AI Core acts as a headshot/instant kill.

Two main methods of attack:

- Quick time event with grappling hook. Failure to complete these quicktime events will result in player death.
- Melee attack with the legs should hurt $\frac{1}{3}$ of the player's health.

The Capture Robot should have 125 health points for its outer shell. The shell itself should have 150 health points when the sliding mouth is open. The interior should have a separate health pool of 75 Health Points. The grappling hook should deal 10 points of damage to the player when it hits the player. The melee swipe should deal 45 points of damage.

Character AI:

The Capture Robot will walk along a patrol route searching for the player with its main eye. When it spots the player, it will adjust its body to line up a shot with the grappling hook. When a shot is lined up, the sliding panels will open and the grappling hook will be launched at the player. If the player is close to the Capture Robot, it will attempt to swipe at the player with one of its legs. If the player shots the main eye, the Capture Robot will stagger and open its panels to reveal the (headshot) AI core, which will act as the new eye.

Character animation list:

- Main eye needs to rotate around the body.
- Sliding mouth needs open and close animations.
- When main eye is shot, Capture Robot should stagger and open sliding doors.
- Leg melee swipe.
- Decorative animation of capture arms.
- Small explosion and death animation when AI core is shot.
- Grappling hook launch animation.
- Animation of grappling hook quick time event animation.
- Death animation with an explosion.

Titan - Rail Variant

Backstory:

Titans were a prototype form of a heavy weapon platform designed for maximum security in underground bunkers. Due to their sheer size and weight, they were transported along rails in their factories. When the war began, these machines were repurposed to secure the interior of military zones. Some are reported to have long since lost their ability to distinguish friend from foe, meaning they target anyone who is not a part of the local security drones.

This version is located in a place that has a broken rail.

Description: Titans are ceiling mounted mini-bosses resembling turrets. They move along rails on the ceiling. They have six lights on them meant to resemble the AI core lights. The bottom of Titan's body has a decorative dome that may have weak spots that inflict more damage when shot.

Character References:

1. Rail Slots
2. Rail Rotator
3. Titan Base
4. Base Connector
5. Indicator Lights
6. Titan Eye
7. Decorative Vents
8. Gun Barrel
9. Decorative Dome

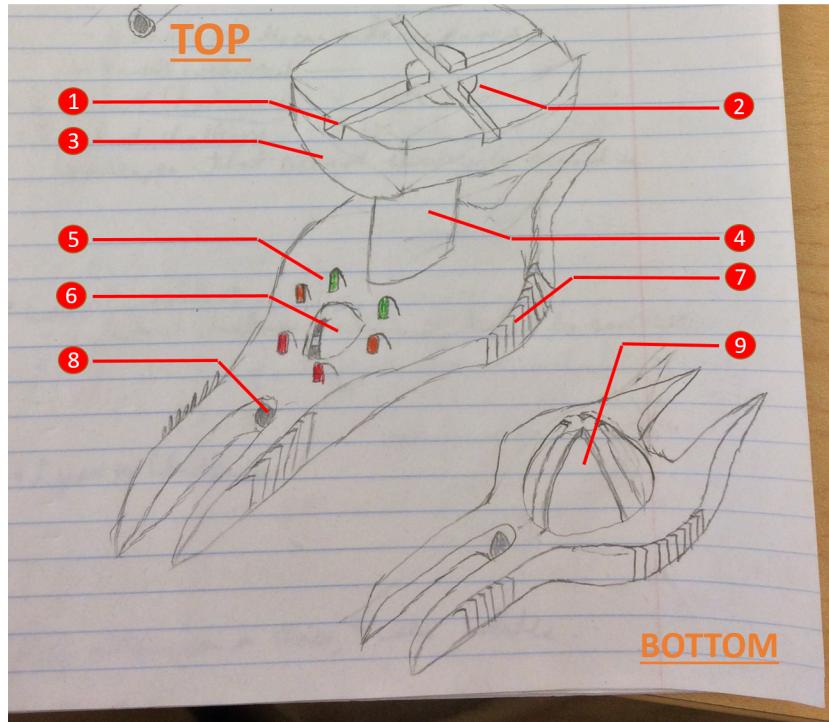


Figure 10: Rail Variant Version Titan

Health and Damage:

Titans have large health pools. Each direct shot from a Titan should deal about 70% damage to the player.

This Titan should have 1000 Health Points. Each shot from the Titan should deal 70 points of damage.

Character AI: Titan will move along rails on the ceiling to move about an arena. They will flash yellow lights when they are searching for the player. When the player is spotted, the Titan's lights will turn red, shining in the direction the Titan is about to shoot. There will be a visual cue from the gun barrel to show that the Titan is charging up to shoot. If the Titan loses sight of the player, its lights will turn yellow, and it will patrol around the arena searching for the player. The Titan's eye is used to search for the player.

This Titan Variant will charge along the rails it is on, enabling it to be tricked into jumping off a broken rail.

Character animation list:

1. Movement animation

2. Switching rail animation
3. Indicator light changing animation
4. Attack preparing animation
5. Shooting animation.
6. Attack cooldown animation
7. Titan eye moving animation
8. Destroyed by gunfire animation
9. Destroyed by jumping off rail animation

Titan - Reload Variant

Name: Titan - Reload Variation

Backstory:

This variation of the Titan was reportedly designed to use a new form of explosive ammunition. Tests were conducted using ceiling mounted ammo dispensers to aid in reloading the machine during testing. Since the war began, a more efficient means of reloading this machine were never developed. Most can be found in their original testing facilities.

Description: Appearance is similar to regular Titan with the exception of a visible ammo indicator. Ammo indicator shows how many shots the Titan has before it needs to reload.

Character References:

1. Titan Ammunition
2. Ammunition Hatch
3. Ammo Dispenser Vent
4. Ammo Dispenser Opening

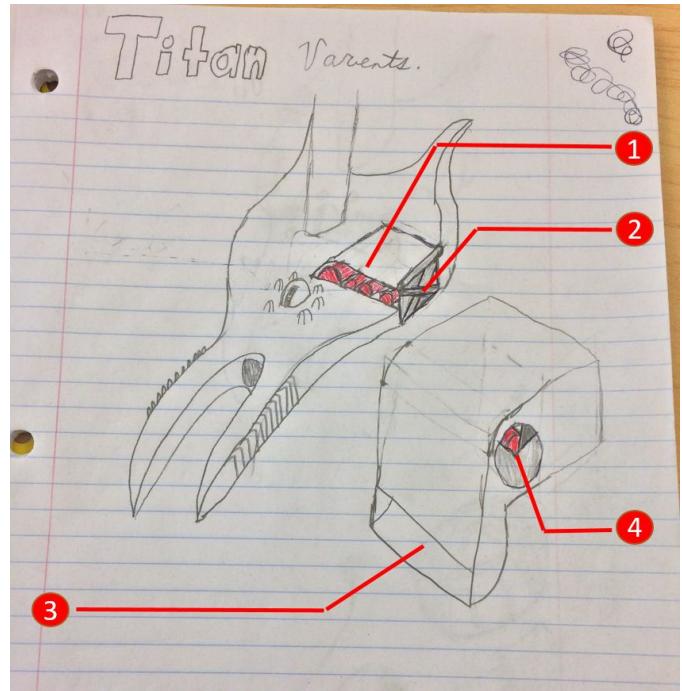


Figure 11: Reload Variant Version Titan

Health and Damage:

This Titan should have a slightly larger health pool than its predecessor. Direct hits from it should deal about 70% damage. Being in blast radius of a shot should deal about 20% damage.

This Titan should have a health pool of 1250 Health Points. Each direct hit should deal 70 points of damage. Being within the blast radius should deal 20 points of damage.

Character AI:

This variation of the Titan will function very similarly to the first version. This Titan will not have unlimited ammunition. When this version runs out of ammo, it will make the Titan body move to be parallel with the floor and move to the closest ammo dispenser to refill its ammunition. It will not attack the player at this time.

Character animation list:

- Titan Rail Variation animations 1-8 listed in the previous type
- Ammo loading into chamber animation
- Remaining ammo shifting animation

- Ammunition hatch open/closing animation

Titan - Armor Variant

Name: Titan - Armor Variation

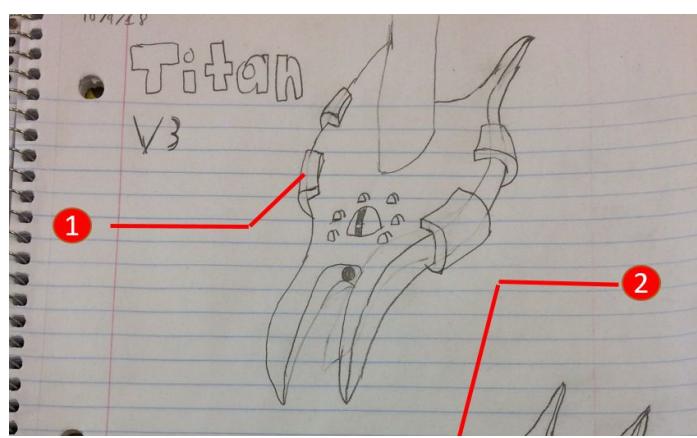
Backstory:

This variation of the Titan took note of several weaknesses observed during the initial testing phase. Rather than rework the entire design, engineers decided to simply cover up these weaknesses with armor attached with electromagnets. These magnets were powered with local generators so the entire facility wouldn't face power losses during testing of this Titan.

Description: This variation is similar to the original Titan, but the main torso sections have extra armor attached. The dome may have armor covering weak spots.

Character References:

1. Armor Plates Top View



2. Armor Plates Bottom View

3. Dome Armor

Figure 12: Armor Variant Version Titan

Health and Damage: This Titan should have the largest health of any enemy in the game. The armor panels should each have their own independent medium-sized health.

This Titan should have 1400 Health Points. Each piece of armor should grant the Titan an additional 500 health points. Each shot from this Titan should deal 75 points of damage.

Character AI: This variation of the Titan will also behave like the first version. As the player destroys power generators in this Titan's arena, this Titan's armor will fall and this Titan's actions will be slowed down.

Character animation list:

- Titan Rail Variant animations 1-8 listed in the previous type
- Armor plates and dome armor falling animation
- Armor destroyed by gunfire animation

Human Enemies

The human enemies will have equivalent attacks and health to the stated Robot counterpart. Each human enemy will be shown in the tutorial so the player can learn the appearance of each type of future enemy.

Standard Soldier - Soldiers

Name: Soldier

Description: Soldiers should have a uniform similar to modern day Army Combat Uniforms. They should also have a helmet that completely covers their face. (This saves the need for facial and mouth animations). They should have a pistol holster on their sides.

Health and Damage: The Soldier should have 100 Health Points.

Character AI: When in the human base/hub, these units should stand idly. When in a mission where the player is fighting against other humans: When the player's location is unknown, small squads of one-to-three soldiers will begin to slowly patrol around the map to look for the player. When the player is spotted the soldier will shout out to allies and begin to shoot at the player. The soldiers should try to maintain a medium distance from the player (about 10-15 meters) when shooting. When the player gets close, the soldier can run away (if low on health)

Stun Soldier - Electricians

Name: Electrician

Description: Electricians should have a blue version of the Soldiers Uniform. Their uniform should also have smooth, flat sections that give the appearance of electrical insulation.

Health and Damage: The Electrician should have 125 Health Points. The stun gun should deal 5 point of damage with a stun effect lasting seven seconds.

Character AI: The movements and behavior should be similar to the Soldier. The AI should be similar, if not identical, to the Stun Robot.

Melee Soldier - Rangers

Name: Ranger

Description: Rangers are all female. They should also have their faces covered, but with a smoother mask/helmet. Their right arms should have a Dart Gauntlet that resembles Katya's. They should be wearing kevlar vests and be wearing light armor.

Health and Damage: The Rangers should have 150 Health Points. Their melee attacks should deal 70 points of damage and their rope dart attacks should deal 15 points of damage.

Character AI: This AI should have movements similar to the Soldier, but its attacks should be similar to the Capture Robot.

Scenes and Missions

Overview

This game features eight main missions (tutorial included). Each mission (except for the tutorial) will have a choice for the player to make that determines which ending the player will receive. Several missions will introduce new enemies to the player and will interact with NPCs.

Mission 1: Tutorial

Place: Training room in Human base

Time: 9 a.m.

Story:

The game opens with Katya standing in the first training room. Over an intercom, Percy tells her that this is the final stage of her training. He tells her that Admin will be controlling the Standard Robots that will be used in the training. The first task of the training is to sneak past a Standard Robot. There should be a single Standard Robot standing still with another path around it. Katia is given the control and she should move around the robot. If she doesn't, she will be told to go back and try again. Once the player moves past the robot, the robot begins to patrol around a pillar/block. The player will need to sneak behind the robot to get from one side to the other without being seen. If spotted, she will be told to try again. When she gets past it, a Soldier walks up to Katya and tells her that he will be her instructor for the pistol. He pulls out his pistol as two Standard Robots come into view. He tells her that each type of robot has a varying degree of armor/health. He then takes two shots at one robot, destroying it. He then states that if a robot is shot in the AI core, the entire unit will be destroyed. He shoots the other robot in its core and it is destroyed. Several more standard robots appear out of tiny openings in the floor/walls and Percy tells Katya that she needs to destroy at least five Standard Robots by shooting them in their core. The player is given control to do this task. Once the player kills five of the robots by shooting them in the core (which will henceforth be called a "headshot") the Soldier will tell her she passed this test.

The next person that Katya sees is the Electrician, who tells the player how to use the stun gun. The player then has to use the stun gun to stun three robots and move on to the final chamber. Once there the Ranger uses her blade to destroy one Standard Robot and then the Grappling Hook to destroy another. Katya must destroy three

Standard Robots for each method. Once she does Percy walks over and tells her that she will be going on her first mission at 6 a.m. the next day.

Enemies Introduced: Standard Robot

Choices: None.

Dialogue

The Camera slowly fades in and we see Katya standing in a small room with two doors. Percy begins to talk to her over the radio.

Percy: Alright Katya, this is your final round of training. After this, you'll be sent on your first solo mission.

Katya: Understood Percy.

Percy: If you pass the training, you'll have to start referring to me as sir.

Katya: When I pass, sir.

The door open and the player is given control. There is a Standard Robot in the hall with an obvious path behind it.

Percy: Let's start with something simple; sneak around this robot.

Once the Player sneaks around the robot.

Katya: How could anyone fail to get past that?

Percy: I've been surprised before.

At the other end of the hall is a small circular hall that bends around a pillar. A Standard Robot is patrolling around it.

Percy: This is how you'll typically see this unit behave. If it spots you, it will sound the alarm. Try sneaking past it to the door on the other side.

Once the player gets past the Robot:

Percy: Very good. Next is weapons training. I'll let the instructors take it from here.

A soldier walks up to Katya as two Standard Robots spawn. The Soldier pulls out a pistol.

Soldier: Alright, I'm only going to say this once. Even though these things are machines, it doesn't mean they're invulnerable. If shoot them enough, sooner or later, you'll hit something important.

He shoots one of the robots twice and it is destroyed.

Soldier: The most important thing that all these machines have in common is their central core. One well placed shot there -

The Soldier shoots the second Standard Robot in the AI core and it is immediately destroyed.

Soldier: - and they'll drop like flies.

Several other Standard Robots spawn.

Soldier: Destroy five of these things by shooting them in the core. I want this lesson to sink in.

After the player does so.

Soldier: Alright, you passed this stage. Head on to the next room.

When the player moves to the next room they see an Electrician.

Electrician: When the war first started, a couple scientists thought that it was possible to short out the machines' circuits with a jolt of electricity. It worked for a time, before they upgraded themselves. While it's no longer a permanent way to keep 'em down, the Stun Gun still has some practical uses, especially given the auto recharge cycle. One blast should stun most Robots for at least a few seconds.

The Electrician pulls out a Stun Gun and stuns a Standard Robot.

Electrician: Try to stun three of these scrap heaps. Once you do, move on to the final test.

The player does the task and then moves to the next room. A Ranger is there, along with eight Standard Robots.

Ranger: I'll make this quick so pay attention. You've been given a Dart Gauntlet, same as me. You have two options with it. Option one -

The Ranger slashes the nearest Robot, destroying it.

Ranger: or option two.

The Ranger uses the ranged gauntlet attack to destroy the furthest Robot.

Ranger: Destroy three robots with each method and you'll pass.

Once the player does so, Percy's voice is heard over the radio.

Percy: Good work. Now to put that training to the test. You'll be deployed at Oh-six-hundred hours.

Mission 2: Infiltration

Place: Robot factory

Time: 6 a.m.

Story:

Katya is taken by a helicopter to a newly located robot factory. Over the radio, Percy tells her that she has two objectives: Disable the factory's production line and obtain the schematics for a new model of enemy robots. After infiltrating the factor, she hides behind a corner and sees a Security Robot marching by. Admin contacts her over the radio to explain what they are, but Katya finishes his statement for him, telling her that she already knows. Admin apologizes, stating that he's just being cautious. He tells her the location for her first objective, disabling the facility. As Katya advances throughout the factory, Admin mentions how there was a rumor that the AI's were not only self-aware, but actually sentient (able to comprehend emotions). Katya tells Admin to focus, but is silent when he asks her what she would do if the rumors were true. Once Katya reaches her objective, Admin gives her two choices for how to stop the production of new robots: She could disable several safety regulations, causing the assembly machines to overwork themselves until they fail OR she could order Admin to upload a program to increase the newly made robot's detect a maximum level of pain, crippling all robots from the factory. The player must make the choice. After the player chooses, Admin briefly comments about it, with Katya telling him not to lose focus. Admin gives Katya directions to the next objective. As she heads there, the facility will have different noises in the background depending on what the player chose; either the sound of machinery breaking down or techno-screams. Along this route the player will encounter the Titan Rail Variant. Admin will advise the player that there are multiple switches that control the rail, letting the player know that they can trick the Titan into rolling off of its track. After the player reaches the next objective, they download the Robot schematics and exit the facility.

Enemies Introduced: Security Robot

Choices:

- A. Player can report every truth to Percy. (Human Win)
- B. Player can hand in fake report to Percy. (AIs Win)

Dialogue

Katya is in a helicopter being flown to a Robot Factory. Percy's voice is heard over the radio.

Percy: Your objective is twofold: disable the factory and obtain schematics of the newest line of Robots. Do not fail me...and come back safe.

Katya: Understood sir.

When the player spots a Security Robot, Admin's voice is heard over the radio.

Admin: That's a Security Robot. They -

Katya: Have medium armor, semi-automatic guns, and come running when the alarm is tripped. I've read the reports.

Admin: Just trying to be helpful.

As Katya makes her way into the facility.

Admin: You know, there's a rumor going around that these AI aren't just self aware. They're actually sentient, capable of feeling things like love, regret, mercy, and -

Katya; I haven't heard about any of those. These are just machines programmed to survive and they perceive mankind as a threat. Do you believe such rumors?

Admin: I don't know. Never got to have a conversation with one of them...But, out of personal interest, what would you think if the rumors are true?

Katya remains silent.

As Katya approaches her first objective, Admin's voice is heard on the radio again.

Admin: That console controls the Core installation systems. You can use it to disable the factory.

Katya: How?

Admin: Two ways: You could disable the safeties for the installation device. That would cause it to overwork itself until it fails...Or you could make a small tweak to the Core interface, setting their damage threshold to zero.

Katya: What would that do?

Admin: Trick their systems into thinking that the atmosphere itself is trying to crush them. It'd be like suddenly finding yourself at the bottom of the ocean. I imagine that would feel quite painful.

Katya:...Why would you tell me this? One way was enough.

Admin: I'm curious what you'd do. Clock's ticking.

If the player disables the installation devices.

Admin: So, daddy's little soldier has a heart after all.

Katya: Shut up and tell me where the blueprints are...and Percy's not my father.

Admin:...Sorry. I'll send you the location now.

If the player sets the damage threshold to zero.

Admin: That almost seems cruel.

Katya: It was your idea.

Admin: That you didn't have to pick. I'll send you the next location now.

After the Titan appears.

Katya: What the hell is that!?

Admin: Crud. It's a Titan. Pre-war experimental weapon platform. They were mounted to ceiling rails for transport during their prototype stage. The Robots must have built their factory around one.

Katya: Where's the core!

Admin: There isn't one! Either shoot it till it dies or try to lure it to any broken rail so it falls. Be careful, I've heard that the only part of people that get shot by a Titan is the memory of them.

After defeating the Titan and securing the schematics.

Katya: Mission Accomplished. Heading to evac now.

Mission 3: Digging up the past

Place: The lab, where Katya's parent worked in.

Time: 2 p.m.

Story: Katya is being flown to a mission but is shot down. She ends up in her parents old lab, which is now a robot facility. While making her way to a security room to call for an evacuation, she finds footage of her parents working to create peace. (Footage can be split into several pieces on corrupted databases. First piece is part of story, rest is optional but affects ending.)

As Katya is being flown to infiltrate the Robot Base the next day, her helicopter is spotted and shot down. As it crashes she uses her grappling hook to jump out safely as the chopper crashes into the ground, which collapse to reveal a man-made interior. With Security Robots moving in on her position, Katya lowers herself into the hole in the ceiling, entering (what we be revealed to be) her parents old lab.

Percy contacts her over the radio, asking what happened. Katya explains to him that her helicopter was shot down and she seems to be in some sort of laboratory with government-grade equipment. Percy tells her that all such facilities would have had a security room. Since the helicopter's GPS was destroyed in the crash, Katya will need to make her way to the security room to signal for a chopper. Once she makes it to the security room, she sends out a signal for a rescue helicopter. As she's about to leave, she notices some footage looping on a monitor. It shows a Robot sparing a baby before the human military shows up, driving off the Robots. Katya notices Percy picking up the baby in the footage. The player is given the optional objective of looking for the rest of the footage before they leave the facility.

If the player decides to find the rest of the footage, the video reveals that baby is Katya and her parents believed that the AI were capable of emotions. It is shown that they desired peace between mankind and the newly sentient AI. However, they were gunned down by machines.

When Katya leaves the facility she gets on her extraction helicopter and is told by Percy that she will be resuming her mission immediately.

Enemies Introduced: Electrical Robot

Choices:

- A. Katya focused on the mission itself, paid no attention to her parents' footage.
(Human Win)
- B. Katya expanded doubts towards her life. (Except Human Win)

Dialogue

After Katya lowers herself into the facility, Percy's voice is heard on the radio.

Percy: Katya? KATYA?! Katya, please, answer me!

Katya: I'm alright Percy.

Percy: What happened?

Katya: The Robots shot down the chopper. When it hit the ground, it tour up the ceiling of some sort of underground facility. The Robots were on their way so I hopped into this place. There's a lot of equipment here. It looks similar to what we use at the base.

Percy: It might be part of a military facility. Records indicate there's one nearby. Either way, a facility that has that kind of equipment is bound to have a security room. Find that room and use it to activate a radio beacon. We need an exact location to send another chopper to.

After Katya finds the radio room and activates the beacon, a video begins to play on a computer screen. It shows Cypher/Robots shooting two people in lab coats before walking over to a baby. Cypher looks at the baby for a moment before turning around and leaving as a crash is heard. Percy is then shown running into the room and picking up the baby.

Katya: Was that Percy? Was that me? That Robot didn't even raise its gun towards me. But it killed my...my parents...I've never seen their faces before. What were they doing here...

Katya fiddles around with the keyboard a bit.

Katya: The local drive is corrupted, but it looks like this footage was placed on a local network. I may be able to find the rest of the footage on another computer.

After the player has left reached the extraction point, Percy is heard over the radio.

Percy: Good to have you back. Our original window of opportunity is still open but it's closing quickly. You're going to infiltrate the machine's Central Hub.

Mission 4: Infiltrate the Robot Base

The helicopter drops Katya off at the robot base. Percy tells her that her goal is to break into the Robot Data Storage and uncover the AI's military plans. She infiltrates the facility and mentions to Admin how she noticed that a Robot seemed to spare a child. Once she reaches the end of the level, she enters the Robot Hub and is surrounded. A robot that stands out from the others walks up to Katya and looks at her. After a moment it greets her and introduces itself as Cypher. Cypher will acknowledge that he recognizes Katya and tells her that she will be permitted to stay as long as she does not engage in hostilities or go into restricted zones. The player is then allowed to use the Robot Hub like the Human Hub.

Enemies Introduced: None

Choices: None

Dialogue

Percy: Your mission is to get into the Central Data Storage and recover any data related to their military operations: plans, troop count, munitions, weapon caches, everything.

Katya: Understood.

Katya: Admin?

Admin responds over the radio.

Admin: Yes?

Katya: Remember the other day when you said these machines were able to comprehend mercy? I think I saw it when I crashed.

Admin: If shooting down your ride is mercy, I don't want to know what you consider hate.

Katya: I mean in the facility I fled into wise guy. I saw footage of a Robot sparing an infant.

Admin: Are you messing with me?

Katya: I'm not. And...I think that infant may have been me...

Admin: What makes you think that?

Katya: Percy rescued the baby. And unless I've got some adopted siblings tucked away somewhere, that leaves only one real option.

Katya is surrounded by security and electrical robots. They all have their weapons aimed at her but aren't firing. Metallic footsteps are heard. Cypher walks up.

Cypher: Intruder, you are surrounded. Surrender.

Katya raises her pistol.

Katya: That's not going to happen.

Cypher: Intruder, hostile actions will not be tolerated. You will - You - You...I know you.

Katya, in shock, lowers her pistol.

Katya: What?

Cypher: Verifying records. Records confirm. This unit encountered the intruder twenty years, three months, two weeks, and four days ago. Intruder designation: Katya. Status: Civilian. Previous status conflicts with current status. Checking for- Justification located. Recompense shall be immedient return to Civilian Status.

All the robots lower their weapons and disperse.

Cypher: You are permitted to stay as long as you desire. Conditions: Hostile action will not be tolerated. Trespassing into security zones will not be tolerated. Katya you are dismissed...and I am.... sorry... for your loss.

Mission 5: Finding the truth

Place: Robot Base

Time: 11 a.m.

Story:

Katya is given a small room to act as a bedroom in the Robot Hub. She contacts Percy and explains her current situation. Percy is intrigued at the idea of having a spy at the heart of the Robot base, so he instructs Katya to maintain her current position so that he can use her when he needs her. Katya, unable to get the footage she saw out of her mind, breaks into the Robot data storage area. This section of the game is mainly based

on finding the correct file, with the chance to download files such as military plans. Once Katya finds the file that relates to Cypher, she learns that the attack on her parents was due to mistaking them for military personnel. As she closes the file, she is grabbed by the grappling hook of a Capture Robot and which pulls her inside.

Enemies Introduced: Capture Robot

Choices: None

Dialogue

Percy is talking to Katya over the radio.

Percy: This is incredible. I have no idea what sort of glitch is happening but we have to take full advantage of it. You are hereby ordered to remain where you are. Do not jeopardize your current standing with the AI, we need to wait until we can make the most of this chance.

Katya: I have to know for sure.

Upon learning that the AI thought her parents lab was a military base.

Katya: Everything that happened to my parents...was an accident?

Mission 6: Escaping from the Robot Base

Place: Robot Base

Time: 8 p.m.

Story:

The Capture Robot uses its internal arms to restrain Katya and forces her to look into its AI core. It demands her to identify herself and her purpose here. It mentions how it is uplinking to some form of central command to engage interrogation protocols. The red light of AI turns green and Katya hears Admin's voice comes through. At first he sounds indifferent, but when he realizes that Katya is in the Capture Robot, he yells at her and questions her what she's doing inside. Katya tells him to let her out and he does so immediately. The player is then given control and has to fight his way out of the Robot Facility. Taking a path to an emergency extraction, Katya has a boss fight with the Titan Reload Variant. Once she escapes, a helicopter brings her back to the Human base.

Enemies Introduced: Capture Robot

Choices: None

Dialogue

The claws of the Capture Robot are currently holding Katya arms. The quickly turn her around so that she is facing the AI Core. The camera shot should be up close with Katya's face and the core bathing the small area in red light.

Capture Robot: Intruder has been captured. You will state your identity, affiliations, and intent.

Katya: Let go of me!

Capture Robot: You will state your identity, affil-

Katya continues to struggle to free her arms.

Katya: Like hell I will!

Capture Robot: Intruder non-compliant with orders. Unit optical sensors detect class-3 weapons. Connecting to central command to authorize interrogation protocols. Connection established. Authorization granted. Commencing

The lights on the Core begin to flicker.

Capture Robot: Error. Fault detected in Command link. Unknown connection detected. Malicious code de-detected. Firewa-wall fa-fa-failliinngggg...

The lights on the AI core go dark. After a moment, they light up with a green color. Admin's voice starts to come out of the core. He seems to be in midsentence.

Admin: -our lucky day. So who might you be - WHAT THE HELL ARE YOU DOING IN THERE!!

Katya has a shocked expression on her face.

Katya: Admin?

Katya's shocked expression quickly takes a more serious tone as Admin continues to yell.

Katya: Free my arms and open the door!

Admin: Why are you-

Katya: ARMS! DOORS! NOW!

Admin: RIGHT AWAY.

The steel claws release Katya and the sliding panels of the Capture Robot open. Katya quickly gets out of the Robot and it collapses behind her. Katya continues her conversation over the radio.

Katya: Get a helicopter over to the Robot Base now, I need an extraction.

Admin: What happened?

Katya: I went looking for something. They didn't appreciate that.

Admin: Is that all?

Katya: Is my evac on its way?

Admin:...Just be careful. After hacking their system, I doubt this model will bother trying to take you alive.

Katya: Trust me, I am well aware of that.

(End of cutscene, player takes control).

Mission 7: Sneaking Human Data Storage

Place: Human base

Time: 8 a.m.

Story:

After the helicopter brings Katya back to the Human Base, Katya feels confused and indignant about the truth she collects. She pretends to be sick to avoid Percy's questioning about her unplanned sneaking action. In order to find the truth, she needs to get into human base data storage, which has restricted access. Unfortunately, Katya don't have the permission to get in.

The human base data storage has double restrictions, which strictly protects the data. If Katya wants to get in the data storage, permission is not enough. The built-in safeguard of the data storage requires fingerprint. Katya sneaks into Andri's office to talk to Andri. She tells Andri everything she knows. Andri is as shocked as Admin. She can not understand why Percy did this and really sympathizes with Katya. Also, Katya tells Andri her situation. She has to face Percy's questioning in some day and she doesn't know how to behave in front of Percy. This man is by her side almost her whole life but has lied to her at the beginning. Andri says that she has a upcoming vacation. If Katya

needs to get some intelligence inside of the human base without Percy's surveillance, she can help her.

Human data storage will auto record every enterer and files that the enterer accessed. Katya finds Admin and shares her plan. She will get Percy's fingerprint by sneaking around Percy's office, waiting until Percy leaves, and then using carbon powder to copy his fingerprints. She hopes that Admin can help her. When she gets in, Admin can erase this unexpected action. Admin hesitates. He explains that he understands how confused and angry Katya is. However, Percy takes him outside of the prison. Percy is his benefactor. Katya is broken-hearted and walks out of the room. Right before she closes the door, Admin says yes.

After observing Percy's schedule, Katya successfully steals his fingerprints from his door handle. With the help of Admin, she grabs the file she wants out of the human data storage.

Choices

- A. Katya reads through the file and talks to Andri saying that she already have the file she wanted from human data storage. However, she wants Andri to do another thing for her. She wants Andri to get out of the base and try to contact Cypher. (Go to Mission 8A)
- B. She recalls her memory of Percy. She cannot believe what Percy has done to her and she thinks that he must have something to hide from her. She reads through the file, deletes it, and tries to forgive Percy. (Go to Mission 8B)

Dialogue

In Andri's office

Katya: Believe it or not, Percy lied to me.

Andri: WHAT?

Katya: He told me that Als killed my parents, but in fact it was just a wrong action.

Actually, he used my hatred for so many years.

Andri: Poor girl. I hope you feel well.

Katya: I can't. There are so many things waiting for me to do. But now, I just want to vanish in this base. I don't want to listen to Percy's rebuke because I got caught by robot.

Andri: I am not sure if I can help you, but I have to tell you that I will have a vacation next week. If you need me to do anything for you, just call me. OK?

Katya:.....

Andri: (Shake Katya's arm and repeat) OK?

Katya: Oh yeah. Thank you very much.

In base

Katya: I need your help.

Admin: What is it this time? You always need my help. And I am almost like your personal hacker.

Katya: Serious thing. I need to get in data storage.

Admin:Wait what?

Katya: I need to get in data storage. I will get Percy's fingerprint, and I need you to erase my entering record.

Admin:

Admin: Katya, to be honest, this is so risky. You are not facing robot this time. I know you have been through a hard time.

Katya: And?

Admin: And I am not sure if I can do it.

Katya: (Angry and tried to leave the room) Alright, whatever. I cannot force you to help me huh?

(Katya walked out of the room.)

Admin: WAIT!

Katya:

Admin: I will help you.

ChoiceA:

Katya: Are you sure that you are free in the next few days?

Andri: Yep

Katya: Can you do another thing for me? (Almost begging)

Andri: Don't staring me like a puppy. I told you that it worked!

Katya: I know a robot in the robot base. Can you try to find him and tell him that I am ready?

Andri: You are ready for what?

Katya: For flee, for my freedom.

Mission 8A: Flee

Place: Human base

Time: 8 p.m.

Story:

Katya finally understands everything. She realized that long year support from Percy is just a lie. From the beginning to end, Percy just want to use her as a tool. From now on, Katya decides to fight for herself. She asks Andri and Admin to help her get out of the control of Percy. In order to prevent rebellion, Percy can control all of the weapon by his

secret trigger. Andri suggests that she can design a new weapon which cannot be controlled by Percy. Admin suggests that he needs to find an absolutely safe place so that he can provide technical support any time Katya needs it.

Choices:

- A. Katya sneaks inside the human base, and gets rid of Percy' surveillance to get out of the human base. With permission from Cypher, she gets into the robot base and goes straight to find Cypher. She tells Cypher that she understands everything now. She will help robot side to win this war. (Als win ending)
- B. Katya remembers that Percy have said that the human base has a whole set of nuclear bombs which can be used to eliminate the robot base. Katya wants to bring the current cold war into open conflict stage. Between the war of AI and human, Katya doesn't want to support either side. Recalling her tragic life story, both human and AI have done bad things to her. Katya cannot forgive them. She will make conflict open and make the destiny to choose the winning side. Hence, Admin will use Percy's permission to launch the nuclear bomb, and openly bring the war into next stage. (Open conflict ending)
- C. Recalling her tragic life story, Katya not only hates Percy, who has lied to her and used her, but also hates AI, who has killed her parents recklessly. She hopes that she can destroy them at the same time. Katya remembers that Percy has said that the human base has a whole set of nuclear bombs which can be used to eliminate the robot base. Katya convinces Admin to help her launch the nuclear bombs first and then leave together with her. Hence, Admin will use Percy's permission to launch the nuclear bombs. During their evacuation, they meet some safeguard inside the human base. Before they leave, Katya doesn't forget to start the self-destruction program to destroy the human base. (World destruction ending)
- D. Katya wants to fight with human and AI by building her own army. After talking to Andri and Admin, they confirm that this is a impetuous decision, but they will help her. Katya leaves a note for Percy about her anger and her decision. Percy reads it and decides to list them as wanted worldwide. During their evacuation, they meet some safeguard inside the human base. Katya finally leaves the place, where she has lived for so many years. She has to admit that this place gave her life and taught her so many things. However, she has to fight with them from now on. (Third party ending)

Enemies Introduced: Human

Dialogue:

In base

Katya: I want to escape.

Admin: Do you know that you sounds crazy?

Andri: Trust me, she knows.

Admin: Come on girls.

Katya: I am not sure if I can successfully escape. This is Percy's place not me.

Andri: Thank god. You are treated to live for this.

Admin: Don't forget you are a spy.

Katya: But I still need you two.

Andri: Oh! I remember that my manager said that Percy had a trigger to control every weapon coming from our factory.

Admin: OMG

Katya: So he is bulletproof.

Andri: I guess not. Because I can try to design a new weapon for us to use.

Admin: By the way, I need a most safest place in the base or outside the base.

Katya: For what?

Admin: For you.

Katya:.....

Admin: I guess without me, you may already be dead.

Katya: STOP.

Choice A:

In robot base:

Katya: Surprise!

(Cypher is shocked)

Cypher: Why are you here?

Katya: I am here to help you.

Cypher: Help me for what? Finish all of the paperwork?

Katya: For our victory.

Choice C:

In human base:

Katya: Percy told me that the factory has already built a whole set of nuclear bomb to eliminate robot.

Admin: His most strongest weapon?

Katya: I guess it is. And I need to launch it.

Admin: WAIT. Girl you are going too fast.

Katya: This is my plan. We launch the bomb first, and them start the self- destruction program.

Admin: Actually, I implemented the self-destruction program, and it is really powerful.

Katya: This is what I want.

Admin: Trust me. You don't want it.

Choice D:

Katya: I want to fight with Percy and AI.

Andri: You cannot do this.

Katya: Give me reason and fail me please.

Admin: I know you are angry and try to not make decision when you are angry. OK?

Katya: To be honest, not angry at all. I want to fight against Percy and AI in my way.

Admin: So you fight on your own?

Katya: With your guys, better.

Mission 8B: Flee

Place: Human base and robot base

Time: 8 p.m.

Story:

Katya had almost found the truth but she stopped. After staying around Percy for so many years, her nostalgia proves greater than her hatred. Even though Percy has lied to her, she believes that there must some reason that forced him to do that. She finds Percy and sincerely apologizes to him. Percy is angry but he tries his best to control his temper. He says that he decides to give her second chance which is also that last chance to make up for her mistakes. Katya says yes, and get the brief description of the upcoming mission.

Katya lands in the mission place and gets off the helicopter. Surprisingly, she figures out that she is in the robot base that Cypher worked in. In this mission, Katya needs to get the newest version of robot weapon report, which would be used to design weapon against robots. To get the report, she needs to get to the robot base data storage, which is in the center of the robot base. Katya needs to avoid the surveillance range of the CCTV. Katya gets the file from the data storage by plugging in a self-searching script. When she is on her way out of the robot base, she meets Cypher. Cypher says hello to her and asks her why she is here.

- A. Katya is not sure if this is part of her test. However, she doesn't respond to him and quickly run away. She says goodbye to Cypher in her mind. However, due to

no respond, Cypher calls safeguard that someone illegally entered the base. Katya has to fight with them and successfully escaped from the robot base. (Human Wins ending)

- B. Katya tells Cypher the truth that she is stealing a report from AI base. Cypher acquiesce her behavior and asks her why she did this. Katya says that because she doesn't want to lose everything she already had now. Cypher asks her, have you ever thought that humans and robots can live in peace? Katya told him that her parents holds opinion that people and robot can stay in peace. However, after tough life, she cannot imagine peaceful life. Cypher admits that he wants peace. Cypher asks Katya that if she can help him. Katya doesn't give him answer right now. Five days later, Katya makes a phone call to Cypher, which says that she can help him. (Peace ending)

Dialogue:

In Percy's office

Katya: I am so sorry about what I did before.

Percy: You shouldn't do that.

Katya: I know.

Percy: Are you sure you know now?

Katya: I can prove.

Percy: It depends on if I want to give you a second chance. Or I can kill you now.

(Katya is starting to stare at him bravely.)

Katya: I can prove.

ChoiceB:

In robot base

Cypher: Where are you these days?

Katya: Pretty busy.

Cypher: Why are you in robot base now?

Katya: I am doing my mission, which requires me to steal a report from robot base.

Cypher: I can stop you now.

Katya: Do it.

Cypher: Why are you doing this thing?

Katya: I am a orphan and I just can't give up what i have right now.

Cypher: I don't call the police because I don't think you are right, but because I want peace.

Katya: Peace, never heard of it since I was born.

Cypher: Can you help me?

Katya: How? Using my spy technique? Come on, I am not a kid right now.

(Katya is leaving)

Story Endings

In mission 1 to 6, the choices players make will point to the mission associated with the selection. Approaching to the end, the branch of our the story line basically follows the structure of the binary tree. Making choice will lead players go to different story line and go straight into the final mission and reveal the ending.

Easter Egg

At the end of the game's credits, a text window will pop up and display some text along the lines of "Simulation end.

- Human Winning Ending. Results Favorable. Restarting Simulation"
- AIs Winning Ending. Result Poor. Restarting Simulation"
- Peace Ending. Results Favorable. Restarting Simulation"
- Open Conflict Ending. Results Poor. Restarting Simulation"
- World destruction Ending. Results Catastrophic. Restarting Simulation"
- Third Party Ending. Results Uncertain. Restarting Simulation"

Followed by a return to the title screen.

User Interface

Overview

We designed a direct and beautiful user interface. It draws players in and keeps them there. Using our user interface, users can access their game record, go back to any record they want, and check their inventory when they want. It is convenient for player to understand their current situation.

Home Page

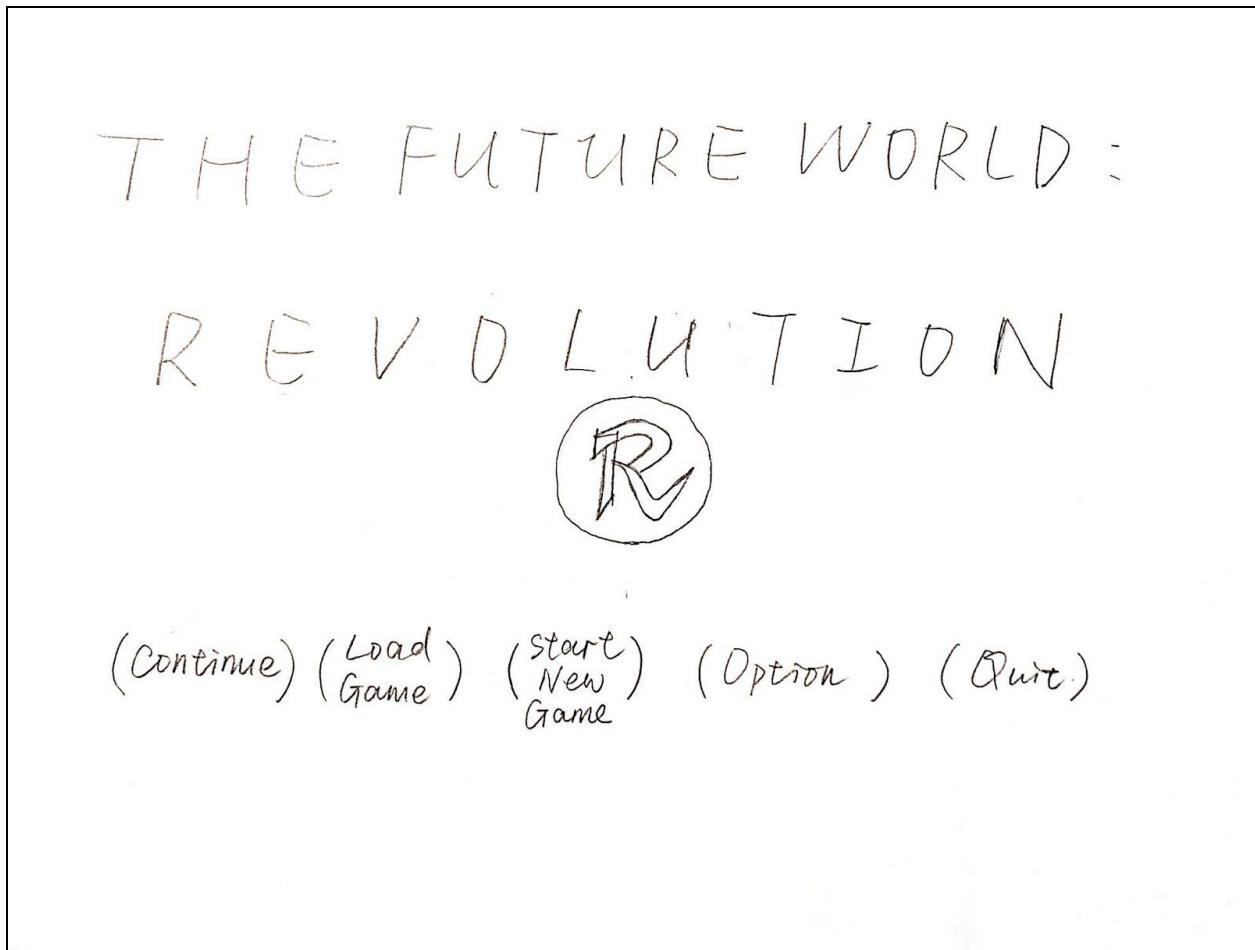


Figure 13: Home page

When players open the game, the system will render a home page which contains our game main title, a logo of our game, and a list of buttons. By clicking the “Continue” button, players can directly play the most recent game without choosing the date (Figure 14). By clicking the “Load Game” button, the page will redirect the player to choose version page, which contains all the record dates and mission names (Figure 16). Players can choose to go back to any achieved progress that saved before. By clicking the “Start New Game” button, the system will initialize a new game for the player. By clicking the “Option” button, the system will render the option page, where players can customize their game setting, such as volume, ratio, and resolution etc. (Figure 17).

Game Playing

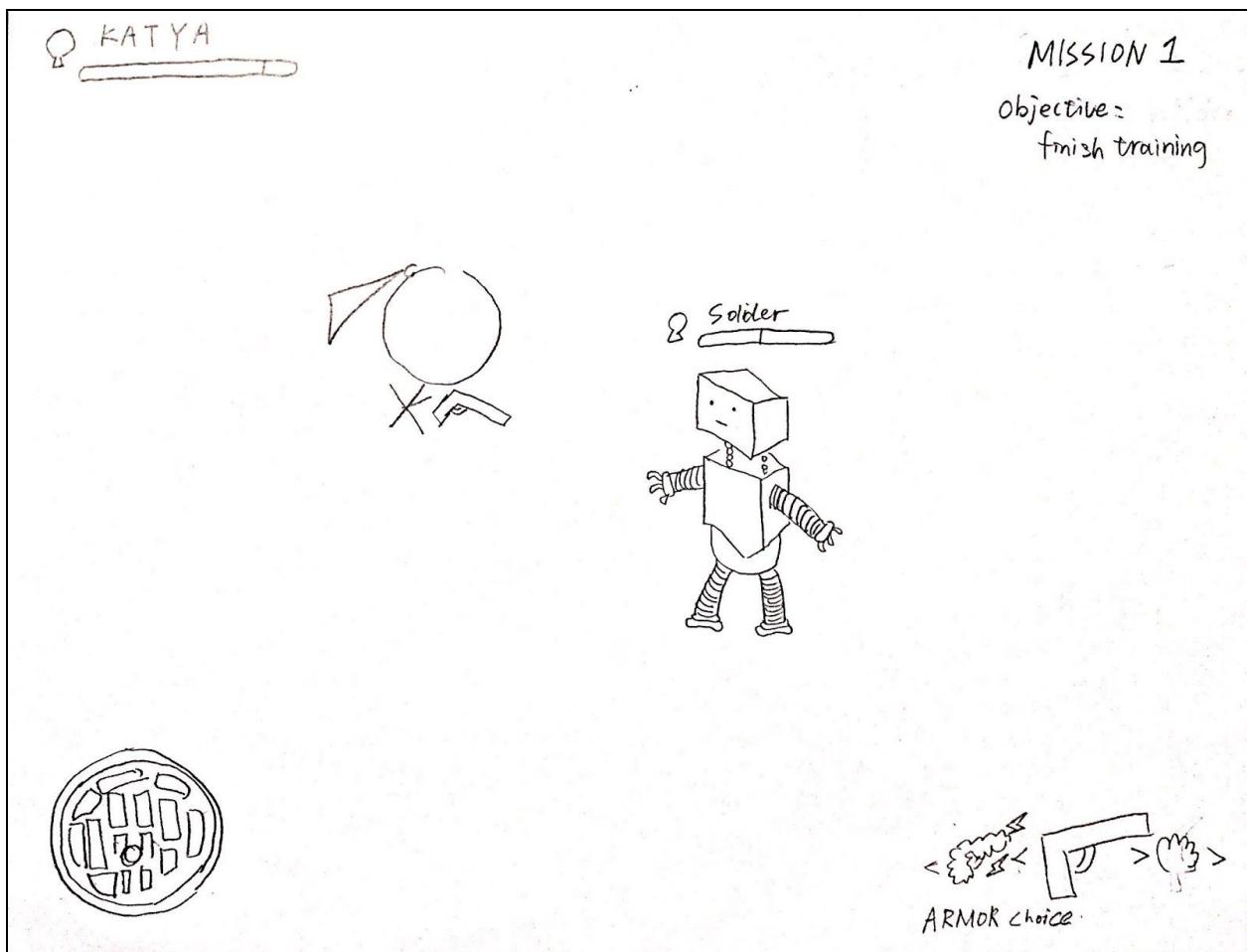


Figure 14: Game playing

Figure 14 presents a prototype of a user interface setting inside the game. At the top left of the screen, Katya's health bar will be shown by number and ratio at the same time, which help the player to visually understand current health situation. At the top right of

the screen, the system will render the current mission number and the current mission objective which needs to be finished. Players should follow the mission objective to complete the mission. At the bottom right of the screen, it shows the armor choice. By pressing left and right button in the keyboard, players can browse what armor they currently own. By pressing enter, players can confirm their armor choice. At the bottom left of the screen, there is always a map to guide players. When the enemies enter the safety distance around Katya, players can see enemies and their movement in the map.

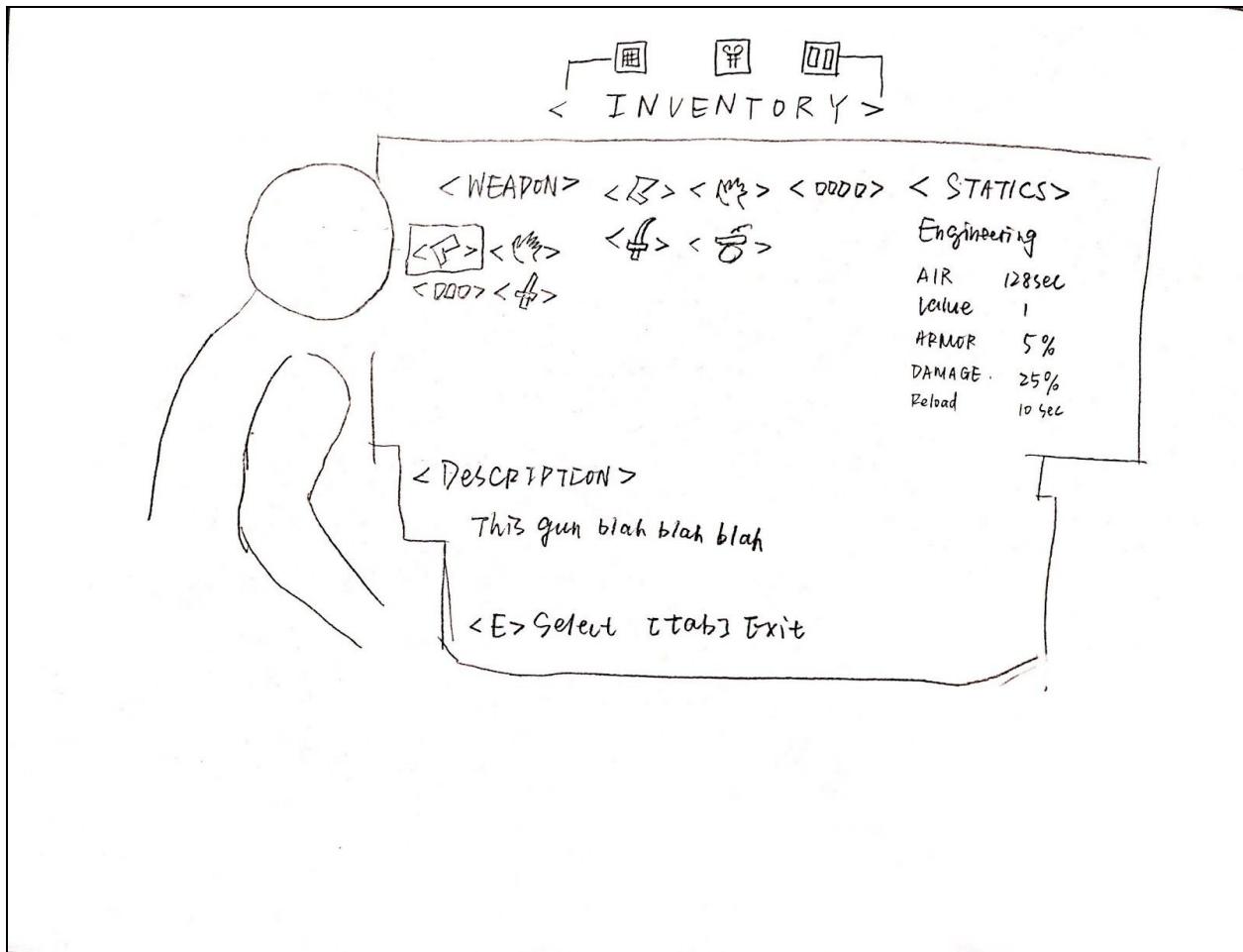


Figure 15: Inventory menu

By pressing tab, players can check inventory at any stage of the game. Inside the inventory section, players can check current weapon. Putting the mouse on the icon of each weapon, the inventory section will show the statics and description of each weapon. These texts help players to decide which weapon performs best in the battlefield. Players can choose weapons by pressing enter. If players want to exit the inventory section, they can press tab to exit. We are taking inspiration from Dead Space inventory.

Game Progress

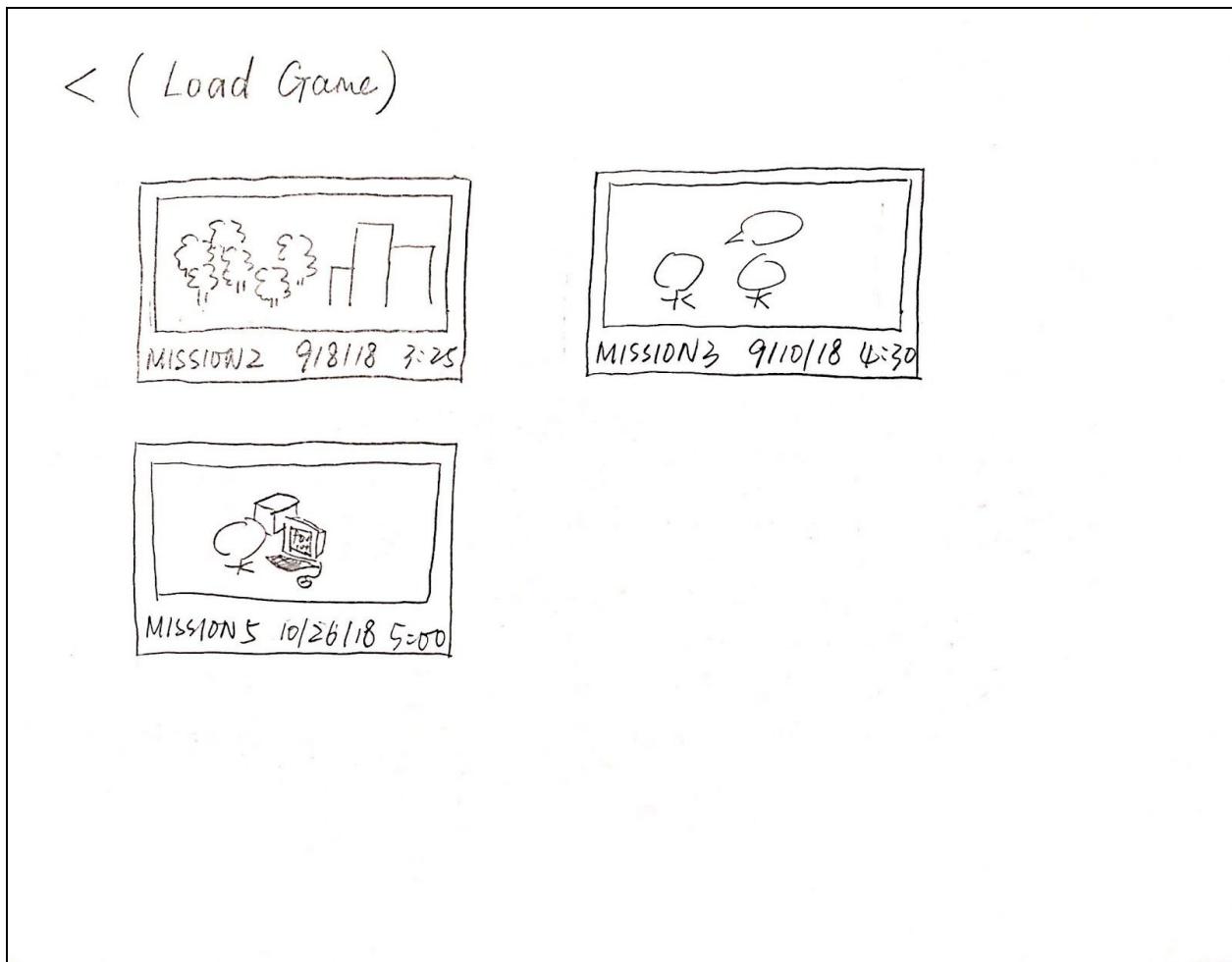


Figure 16: Game Progress Page

Inside the Load Game section, each progress of the game is shown by mission screenshot, mission name, date, and time. Players can choose any game progress, which they want to continue. Also, players can quit the Load Game section by clicking the top left pointer to go back to home page.

Option Page

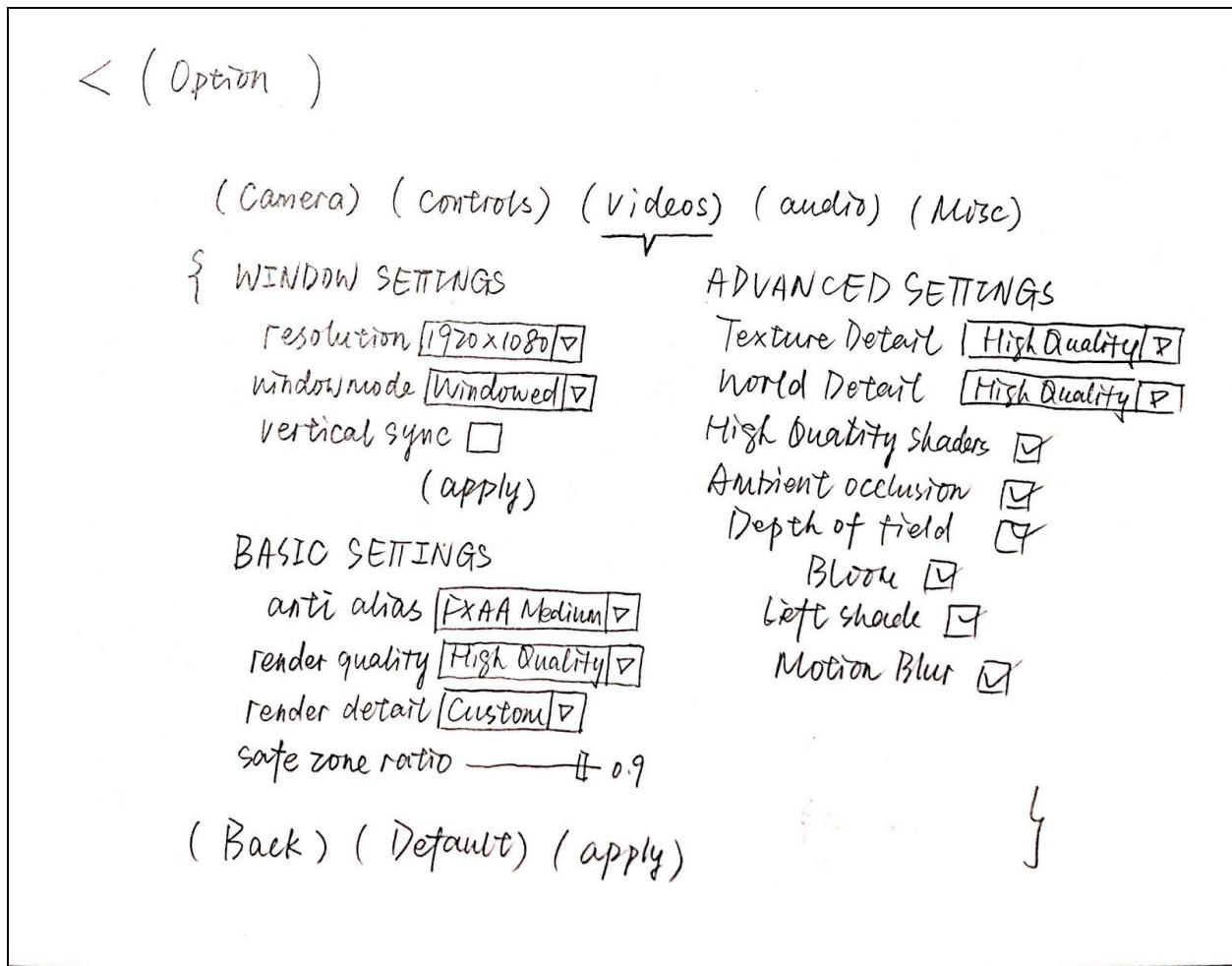


Figure 17: Option Page

Inside the Option Page, players can customize the game setting to their preferred version. The system also provides default setting, which guarantees players' gaming experience and maximizes the executive speed. By clicking top left button, players can go back to the home page.

Weapons

Overview

Generally, there are four kinds of weapons in this game. We do not want to have combat mode everywhere in the game, so there are not a lot of weapons for players to choose. We thought only basic and simple weapons will be enough for players to finish the game. If there are several heavy weapons which cause critical damages, the game would become too easy to play.

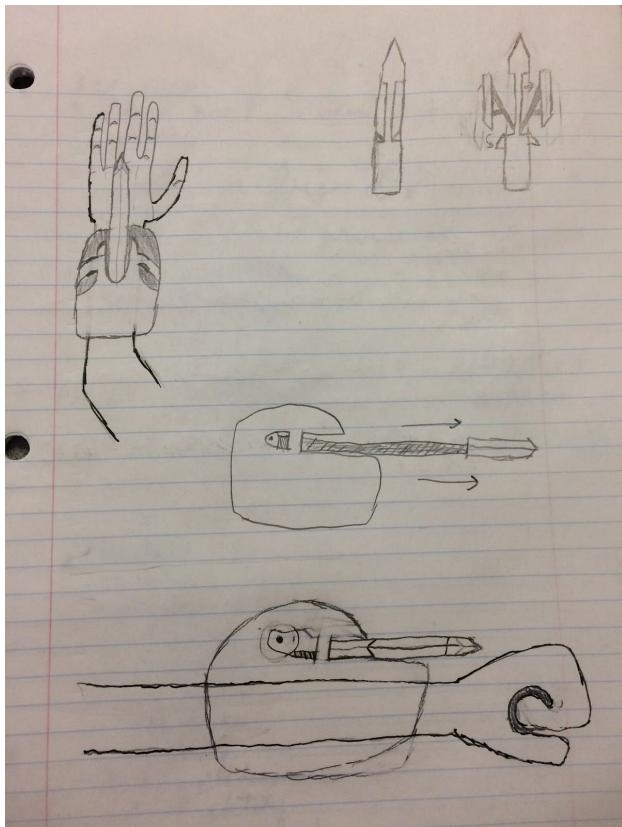
Stun Gun

It is a weapon that can stun/disable robots for a small time. It has limited ammo before recharge. Players can upgrade its clip size, stun duration, recharge time, and range.

Pistol

Close range weapon. It originally has 8 rounds of ammo and the player can carry at most 50 rounds before any upgrade. The player can upgrade the clip size, reload speed and damage as the game proceeds.

Dart Gauntlet



A gauntlet on the player's arm contains a sci-fi rope-dart. This dart can extend outward to act like a knife or sword for melee combat. Alternatively, the player can aim the gauntlet at enemies to fire the rope-dart to deal some damage. The dart then gets pulled back by its cable. (This is to give a melee option and to provide a way to continue fighting if out of ammo.)

Thrown Object

“False alarm” can emit a fake “enemy last spotted” signal to lure in robots. The effect ends when the device either times out or a robot approaches the device. The device will affect enemies in a certain radius. Possible upgrades can be radius, duration, and level of enemies it affects (i.e. starts only affecting standard, upgraded can affect security, etc.) The Capture, Combat, and Titan robots are always immune to these effects. (Collectible documents can explain why.)

Background Music and Sounds

Overview

Background music will be played based on player's current game progress, so players can immerse in the game play. Background music has loop parts, so that it can repeat until the event ends. Each segment of sound or music should be in readable format, such as MP3, OGG, or WAV.

Background Music

Combat with robots

Genre: electronic with brutal drops

Style: fast, fierce

Condition: when robot enemies spot the player and combat begins. Stop if the player is dead, completes mission or clears all enemies.

Combat with humans

Genre: rock music

Style: fast, fierce

Condition: when human enemies spot a player and combat begins. Stop if the player is dead, completes mission or clears all enemies.

In human camp:

Genre: symphony

Style: mild and comfortable

Condition: when a player enters territories of human camp. Stop if the player leaves.

In AI camp:

Genre: electronic

Style: weird and exotic, lack of melody

Condition: when a player enters territories of AI camp. Stop if the player leaves.

General:

Genre: pure music of piano

Style: mild and comfortable

Condition: when the game is not playing any music provided above, and the player is not in battle.

Sounds

Attack: each weapon has its unique sound. The sound will be played when player or enemies attack.

Suffering Attack: when entities including player, NPCs and enemies suffer attacks, they will make different sounds, such as screaming, moaning and noise of electricity.

Death: when entities die, they will make sounds that indicate their deaths, such as explosions of robots.

Grab/Use Items: a general sound will play if player obtains or use an item.

Moving: actions, such as jumping and running, will have sounds. Player can recognize nearby entities based on their various sounds of moving.

Stunning: when player is stunned by enemies, the sound effect will be low-pass (reduce high frequency), so that it can reflect the status of player.

Others: opening menu/map/bag, selecting buttons and other system operations will have simple sounds as feedbacks.

Single-Player Game

Overview

This game is a single player game. Although Katya will have interactions with other NPCs, the player mostly controls Katya and goes through missions.

Story

The storyline for the single player game is the same as we mentioned previously in the story section. (See P46)

Hours of Gameplay

Based on the difficulty level and different gaming experience of players', we tend to limit the hours of the game between 1-2 hours to finish all missions and achievements. Since the whole game is a single player game, the time for single player will also be 1-2 hours.

Victory Conditions

There is no clear identification of victory in our game. As we mentioned before, there are multiple endings in the Future World, which is also the most attractive feature of this game. According to player's choices and performances, the system will automatically generate a score for the final ending. For example, if Katya chooses to find evidence in the robot base for human side in order to help human military to take down AI party, then it indicates that the player decides to stand with human side and fight against robots. Therefore, at the ending, Katya might help human to win the war or build an Utopia on her own with help from her friends. Either way, the choice in the game has indicated that Katya will not help robot side in any approach.

Hence, the “victory” of the game does not contain only one possibility. In fact, there are six potential endings for the game, and some of them do not even considered as victory, such as extinction of the world.

“Objects Appendix”

NPC: Non-player Character

AI: Artificial Intelligence. In this game, it's the same with robots.

Robot: robots are the enemies of humans. They have self-awareness and can think independently.