Design Document

DAVID KUNZMANN, DANIELA ŠŤASTNÁ, TAREK
BLEDARD, YIN LUI, PATRIK MADSEN

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Contents

1 Introduction

This document discusses the design of the game Ancient and delivers detailed description of the background story, graphical and sound assets used, as well as game structures. Moreover it lists other ideas and approaches for future expansion and sheds light on non-explored game areas and corners.

2 Pitch

Counting the year 2718 anno domini, the White Spacecraft Laboratory is the biggest research center of the galaxy, built by the Galactic Government. It's a place where scientist from every planet come and contribute to the scientific society.

A team of scientists was working on a project, that if successful would revive an extinct and highly powerful life form. The outcome was terrible as the creatures rapidly create chaos throughout the ship which eventually crashed on an unknown wild planet. The scientists who survived this disaster are being persecuted by the Galactic Government which doesn't want any witnesses.

In the single player game Ancient you are in charge of the surviving scientists. The game consists of dialogues and turn based battles, where you can attack your foes and defend yourself. There are no main characters and bear in mind that the death of any of them is irreversible!

3 Demographics and Psychographics

3.1 Demographics

The target audience of the Ancient game are players form 16 up to 99+. This is based on the complexity the game has to offer and a wide range of possible scenarios. Due to its requirement of tactical and strategical skills its well suited both for genders, however the expect base is the male sex with ratio approximately 67:33. Based on the demographics from recent years is our target player is a 25 years old male.

3.2 Psychographics

There are different game styles possible in the Ancient game. Player can either decide just to immerse into the battles and choose options for a further scenario just randomly or to focus on all possibilities and develop a shrewd strategy. These two game layers make the game accessible and enjoyable for wider audience. Due to convoluted background strategies it is aimed for an upper half of better educated population.

4 Game Design

4.1 Game play

The Ancient is a tactical RPG where a player has an opportunity to experience sci-fi game universe of the Ancient. The player is led through the game with a help of gripping and light-sheding dialogues ad stories creating a connection between strategical battles. The game story develops dynamically since all the characters (except for the Ancestor) are mortal and their deaths mold the story and its branching. The game is thoroughly constructed to be intuitive and self-explanatory.

4.2 Mindset

The Ancient game aims to create an adventurous tacticising feeling. The player should not feel hurried and have time to think about his/hers moves in advance. Players should also feel connection between himself and the characters created by gripping dialogues, slowly discovering more of Ancient's game universe and curious to explore more.

5 Game Structure

5.1 Control

The Ancient is a turn-based game. In the left screen corner is visible who is playing - the user or the computer. When clicked on character its action menu will be displayed in the bottom part of the screen. User can choose from changing characters position or performing an attack action. Game characters are controlled

by click-and-click mouse actions. When a character is clicked on tiles its movement range will be highlighted. Character can move only on these tiles. An attack can be also performed only on enemies located on highlighted tiles. Any damage caused will be estimated based on characters skills. If a character is attacked its remaining life points may be diminished. After each level there will be displayed options for the planets to visit in the future. These options are character-bound, if a particular character dies during battle, its option vanishes forever. The Ancient is a single player game, which means the enemy's moves are operated by implemented AI.

Figure 1: Game screen, Level 1

5.2 Screens

- Preloading screen

Preloading

Figure 2: Preloading screen

- Menu screen is always displayed on the game start. It consists only of one option enabling to start the game.
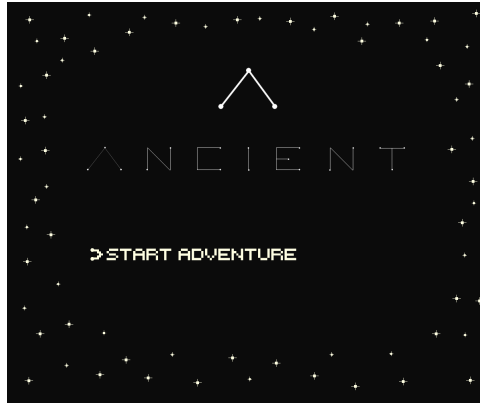
Figure 3: Menu screen

- Loading screen

Figure 4: Loading screen

- Tab logo
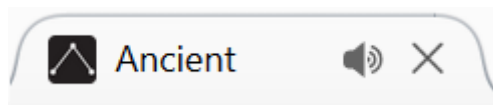
Figure 5: Browser tab logo

5.3 Actions

Characters can be moved along the tile edges on the tiles with blue overlay. They can with a range marked by red tiles overlay. A character can be deselected by clicking on the deselect button.
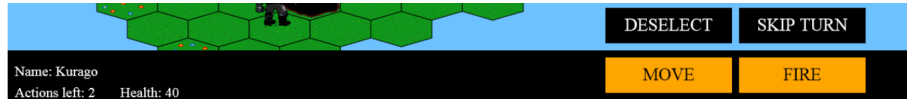
Figure 6: Bottom action bar

5.4 User interface

5.4.1 Buttons

Buttons can be divided into 2 categories:

- **Administration buttons**
  - Game start button
  - Next dialogue button
  - Skip dialogue button

- **Game play buttons**
  - Move
  - Fire
  - Deselect
  - Skip

5.4.2 Game controls

- Computer's\Player's turn

- Lower bar with character's specifics

5.5 Game Mechanics

In the Ancient you control multiple characters by first selecting it with a click of the mouse. Selecting a character, ally or foe, will give you information on its status. If the selected character is playable, you will be able to select an action such as move or fire. Upon selecting an action you may choose a target in range (highlighted tiles). Ancient is a turn based game, alternating between the player and the computer's turn. The switch between one turn or another is made when the number of action of all the currently playing characters equals to zero. It is also possible to skip an action. Every character is granted two actions per turn, and moving or firing will consume one action. Once every character of one side is considered dead (health equals to zero), the battle is finished and the story follows its course.

5.6 Artificial Intelligence

The AI in the game is quite simple. It consists of two phases:

- The AI checks on change of players if there is any character that could be attacked. If there is more than one character, the character with the least health will be attacked.

- If there's no one that the AI could attack, it will move to one tile closest in its range, closest in this context meaning the direct distance (number of tile in between) between this tile and the character is the smallest.

Path finding: As the game doesn't possess any complex maze, and there's the possibility to jump above unwalkable tiles. There's no need for a more complex path finding algorithm, than just the direct distance. The situation where an A* algorithm would be needed is when for instance we would have multiple consecutive rows of unwalkable tiles. Also when the number of rows is greater than the range of movement of an AI controlled character.

6 Story

Several millenniums ago, the Ancestors, the most powerful specie of living beings, were ruling the Galaxy and established justice and peace for everyone by chasing the Krodux, an evil race. They were genetically linked by an incredible source of

power, the Ancient Fluid. This special liquid conferred them special abilities as gravity control and very long life expectancy. However, the Krodux were hiding, preparing their revenge, waiting for their age.

Century after century, disagreements and discords between factions of Ancestors were shaking the stability of the Galaxy's peace.. Until the Civil War began. The Ancestors fought against each other with no mercy while other races and other living species started a rebellion. At this moment, the Krodux joined the war and won. Indeed, they had found a way to revive Ancestors massive weapon, "the Xens", and use it to exterminate every and each of the remaining rebels. They made a coup d'état and established their power throughout the Galaxy by creating a oligarchical dictatorship : the Galactic Government.

Nowadays, the Krodux have established an evil dystopia. Hopefully, a few people have gathered into the Rebellion, fighting for liberty and justice. While they're getting stronger and stronger, the Galactic Government have decided to build the biggest research facility of all time : The White Spacecraft Laboratory.This place should server for gathering the best scientists of the Galaxy in order to create the Perfect Xens, an army of immortal Xens. With this enormous weapon, The Krodux will be able to destroy the Rebels once for all.

Nevertheless, nothing worked as expected. The scientists succeeded, but the Xens started killing everybody in their way. Fear and chaos spread quickly in the W.S.L. The scientist crew lost control of the spaceship which lead to a grand crash on a wild dangerous planet : Cerinia.

This is a disaster. Only five members of the crew survived. The Galactic Government immediately sent their assassin group, the CP0 to kill all the witnesses of this terrible accident. The heroes, the last scientists, have to survive at any cost. The game begins.

6.1 Endings

The end of the game depends on the Last Ancestor's plan. Either escaping to another galaxy or staying and fighting.

Possibilities:

- **Escape** Heroes decide to escape to an another Galaxy because they don't trust the Rebels. Plus it is way safer. Therefore, the last battle will take place in Venom where the Rebels and the Krodux are fighting each other. The Heroes are trying to survive while the Last Ancestor is creating the

Worm Hole. If at least one of the characters is alive once the Worm Hole is ready, the Heroes will manage to escape to another galaxy and the game ends.

- **Fight** The Heroes decide to fight against the Galactic Government with help from the Rebels. Therefore, they will go first to Venom to charge the Last Ancestor's powers. The Ancestor will use that power in order to teleport the Heroes and the Rebels directly into the Capitole benefitting from the surprise effect. Thus, the final battle will take place in "The Core of the Capitole" against the Krodux' army, having help from the Rebels. If the Heroes win the battle, the army surrenders and the Rebels make their coup d'état. The game ends.

6.2 Dialogues

The dialogues are displayed directly on the canvas, formatted using Canvas Text 0.4.1 properties.

6.2.1 Intro

Dear Krystal,

Peace, Quiet and Order. Those are the three things guaranteed by Our beloved Galactic Government and its first figure : Granda Frato. In them, we believe and we put our trust. Thanks to them, our life is happiness and serenity. Thanks to them, our children are safe, educated, raised with joy and love. Thanks to them.

I was chosen, can you believe that? I was chosen by the Great Scientific Committee to be part of one of the most important researches of all time, in the White Laboratory Spaceship. Unfortunately, the whole thing is classified, so I cannot tell you any details about it. However, you have to know that if we succeed, it will be the end of those infamous Rebels and other heretics.

I cannot see you, neither the kids, for a long time I'm afraid and you have to know, my love, that these thoughts make me desperate. Nevertheless, it gives me strength to accomplish my duty towards Granda Frato. Then, when it will be done, He, as Merciful and as Great He is, will reward us in the best way you can imagine.

Kiss the children for me, and tell them they can be proud of their father. I swear I will come back to Corneria to see you as soon as possible. Darling, I love you. As much as we love Granda Frato.

Peace, Quiet and Order. Your husband, Kûrago.

Act 1 : Crash, survival and wild planet.
The heroes wake up in the jungle. They are lost, scared but safe. They're talking about the experiment, the Xen, the Crash...", "Fire, debris, and corpses. When the heroes woke up, they couldn't believe their eyes, they were witnessing a complete mayhem. The WLS, the biggest laboratory facility of the Galaxy collapsed on this wild planet. Completely stunned, they tried looking for any survivors...Until one of the heroes saw something moving...

-Oh! Are you Okay?
-Yes! Yes! Yes, I guess I'm okay!
-Praised be Granda Frato! I thought I was the only one.
-My Goodness.. It was a nightmare.. Do you think it is still alive?
-I don't know. I don't think so. But we shouldn't stay here too long...
-What have we done? What was that? What have we created?
-I don't know, the Galactic Government will figure it out. Come on. We have to move. Oh look, there is someone over there! I hope he's fine. Wait he's not alone...
-Heyyy!! Come over there! We are survivors too!
(Two others persons join them...)
-Hey! Help us! It's coming!
-What's happening? Wild animals!
-Take those weapons! We have to help them!!
(They take some weapons laying nearby and join the fight against the wild animals.)

6.3 Level 1 dialogue

-Hey! Are you all right?
-Yes, fortunately. Thanks a lot for the support.
-Don't waste your time, come on.
-Hold up, where are you going?
-We're taking some gears, supply, weapons, and getting out of here!

-In this wild forest, are you kidding? We should stay near the WLS so the rescues will be able to see us.

-What? The rescues?

-Come on... There will be no rescue...

-Rescues or not, waiting here is dangerous. We don't know if it's still alive or not.

-True that. Let's go.

The heroes go inside of what was left from the WLS and use a localisation device to geolocate their current position. They manage to find a weak signal, there is a little city nearby!

After grabbing everything worthy (weapons, precious resources, money, gear...) inside the WLS, the heroes begin their walk through the jungle towards the city. They explore the region and some of them break the silence.

-What the hell is it? Hein? I've never seen that before. They've killed everybody! I need some explanations here!

-I don't think that you're allowed to know that. But under these circumstances, I think that we ought to tell you the truth.

-Hey! Stop that madness! He's not a part of the researches crew, he mustn't know. You are aware that it's classified, aren't you?

-I have to know! I almost died there!

-I will explain everything once we'll have arrived in the city. Oh, speaking about the city...

After several hours of walking through the forest, they find a local little city. Once they arrived there, one of them proposes selling of everything in order to acquire a spaceship and escape. However, the heroes don't agree.. While they are debating, they get surrounded by the police. After being arrested, they're interrogated by the police forces.

Police Officer:(Consulting his files)-Well, I have a lot of questions...

-We won't answer them. I mean, unless we have received the authorisation from the Great Scientific Committee. The whole thing is classified. And by the way, we're part of a very important research crew. Where are the rescues? Is there any message from the competent authorities?

-You really don't want to understand, do you? There will be no rescue, the Government want us dead! And now it's too late...

-What the hell are you talking about?

-Your problem is that you're too brainwashed to see the reality! We're witnesses,

and it's just a matter of time that they'll understand that we're alive and...
(To the police officer) -What are you waiting for? Arrest this heretic!
Police Officer: -Fellas, fellas.. There is a great misunderstanding here... Our planet Cerinia is not a part of the Galactic Government... But still, your story is kind of interesting, tell me more about what happened in that Sp...
An Another Policeman:
-Officer! The Galactical Government's special force!...
-The CP0..!
An Another Policeman:-They're killing everybody over there! All the policemen you sent to investigate and explore the WLS are dead! And an army is coming to Cerinia!
Police Officer:(Chocked) -All right, all right! Call the local authorities! Tell them that I have dealt with the scientists.You were right. Do you know have to pilot a spaceship?
-Yes, we know.

Police Officer: - Okay. So listen carefully, take one of the police spaceships and go to the Asteroid X57. It's the only place I know of where the Galactic Government won't find you! Leave now, you're free! But do it quickly before they kill everybody in this planet! Because they will!
-Why are you helping us?
Police Officer:-Because we hate the Galactic Government. Now, go!
Thus, the Heroes take the police spaceship and successfully to escape, while the CP0 and the Galactic Army are attacking Cerinia.

Acte 2: It's a trap!
The heroes land on the Asteroid X57. It is a little black market base where people land to party, drink, buy forbidden commodities such as drugs, slaves, weapons... Our heroes think they are safe, and well hidden. But a very powerful criminal organisation Nur Kaüzas, is actually watching them. Indeed, the wild planet police forces work for them. The protagonists are trying to get some informations on how to escape the galaxy, quietly, without being spotted by the CP0. While they are discussing that with the bartender, they're being attacked and taken as prisoners. The boss of Nur Kaüzas wants the result of the experiments done by the researches in the WLS. They're are confined in a dirty cell shared by others slaves. In the meanwhile, the CP0 was torturing the policemen in the wild planet, and learned the heroes' location. The Galactic Government decides to send an

army, the heroes have to be captured, too much resources were spent on those researches.

Inside the cell, the heroes are frightened and begin to dispute against each others.

-It was a great choice to trust this guy! All the Officer's words were lies... There was no killing, no Government Army in Cerinia.. And now we are stuck, waiting for a certain death. Great! They are aware of what we know about the WSL researches but we won't say anything.

-Come on, you still believe that the Government is on our side? They don't care about us! They just want the informations, and some results, and when they'll have understood that we are criminals' prisoners, they will eradicate the asteroid before we can say anything!

-We're not heretic!

-It's not about being a heretic or not here. It's about survival! The Perfect Xen Project was dangerous from the beginning, it's even worse than we thought! Granda Frato will never forgive us for our failure!

-Of course he will! Don't say anything about Granda Frato or...

A slave: Granda Frato doesn't exist.

(All the Heroes look back, there is a very old man, looking at them, confident on his words).

-Watch out Grandpa. You can be executed for saying those words.

The slave:(amused) If you think so.. I was puzzled about what you said. You were working on reviving the Xens for the Galactical Government?

-Yes! How did you know? They want to use that weapon to get rid of the Rebels, they're beginning to be powerful enough to fight against the Capitole.

-That's it! You have told enough! (They start fighting against each other. Slowly, the heroes begin to levitate. They don't understand what is going on...)

The slave: -Come on, kiddos. There is enough violence and hate in this Galaxy... It's been centuries that I haven't use my powers...

-Let us down! How can he do that?!

-I know that power.. But I thought it was a myth! A legend! You can't be a..

The slave: I am. You have in front of you the Last Ancestor.

The discussion is interrupted by a huge sound. The Galactic Army is raiding the asteroid. Panic breaks, everybody is running in all directions, Nur Kaüzas's boss wants to move the prisoners and protect the worthy informations they have. During the extract, the heroes take advantage of the explosion to escape, taking the old Ancestor with them. But a few member of the Nur Kaüzas are guarding their

spaceship.

6.4 Level 2 Dialogue

Act 3: Ancient Fluid
In the spaceship, the old Ancestor begins to explain everything. He is the last of his kind, a very ancient and powerful specie called Ancestor. The Last Ancestor: Millenniums before, I was living with my people in Venom. We were ruling the Galaxy at this time, trying to build the Utopia that everybody was dreaming of. I was young ans very powerful, thanks to the Ancient Fluid. This was our source of power in Venom, all the Ancestor get a long life expectancy, and with some training, have access to many abilities.
-Like gravity control?
The Last Ancestor: Exactly, *(He takes control of some objects gravity)* it is my speciality. But we can also feel the presence of life and getting access to people's memory. It depends on the skills, training, and how strong an Ancestor is linked with the Ancient Fluid.
-You told us about the non-existence of Granda Frato.
The Last Ancestor: That's true. Granda Frato is an invention, a symbol created by the Galactic Government. This charismatic, perfect character is used to make people believe that the Galaxy is ruled by a semi-god, to make them feel safer and understood.
-The story of your people has been erased by the actual government, but still remains a legend on several planets like mine. Can you describe how this regime was created?
The Last Ancestor: When we were ruling, we were trying to assure liberty, equality and justice for everybody. But one evil race in particular, the Krodux, wanted to take our place. Century after century, disagreements and discords between factions of Ancestors were wakening the stability of the Galaxy's peace... until the Civil War began. We fought against each other with no mercy while several races and other living species started a rebellion. At this moment, the Krodux joined the war and won. Indeed, they had found a way to turn the Ancestors into a living massive weapon, "the Xens" and used it to exterminate each and every last of them. They made a coup d'état and established their power throughout the Galaxy by creating a oligarchical dictatorship : the Galactic Government. You know what happened next.
-I can't... It's..impossible. Everything we knew..

The Last Ancestor: You understand now that no matter what they decide to do, they will kill you eventually...

-We have to fight back. We know the truth now. It's our duty.

The Last Ancestor: I can't.. I was a coward hiding all those millenniums. I even accepted my enslavement... We can't defeat them! Plus, we're alone.

-With your Ancient Power, we can make it to Venom! Flee from this galaxy forever!

-Our families... We can't leave them behind like this.. I cannot leave them, I made a promise.

-Listen, buddy... First, we go there, and if everything goes perfectly, we will teleport ourselves to Corneria...

-Come on! We don't have time! The sooner the better. Let's go.

The Heroes choose to escape. Cap towards Venom, the Ancient Planet! If the heroes manage get there, the Ancestor could recover his Ancient Power and be able to teleport a few people. Once they arrived, the Ancestor finds the Ancient Fluid and begins to absorb its power. But the CP0 was already there. Heroes are condemned! Fortunately, an incredibly huge Rebel spaceship landed to help them. Heroes start fighting against several member of CP0.

6.5 Level 3 Dialogue

After the battle, the Rebel commandant approaches the heroes. The dialogue begins while The Ancestor is receiving power from the Ancient Fluid and the Rebel Army is fighting the Galactic reinforcement.

Commandant Cef: Hey everybody. I hope everybody is okay? My name is Cef and I'm the leader of the Rebels. Don't worry, the Galactic Government hasn't sent enough reinforcement to win this battle, you're safe with us. I'm here to convince you to work with us on a special plan...

-As you can see, the Rebels have the same uniform as I have. I'm sorry to inform you guys that I was a spy during the whole time.

-What the hell is going on?

-Don't worry. The Rebels are here to help you. In fact, we can work together for the same goal: the end of the Galactic Government. The plan is attacking and destroying the Capitole. However, this one is protected by an electromagnetic shield. Therefore, we need to teleport a commando there who will destroy the shield generator.

The Last Ancestor: You need me. You need my Ancient Power.

-My goal at the beginning was to take some information to get the Perfect Xen. But nothing went as planned... But why haven't you captured us? You could have gotten hold of some informations about the Perfect Xen.

Commandant Cef: I have the Last Ancestor in front of me, right now. You can easily understand that the Perfect Xen has just become the last of my interests. With the Ancestor on our side, we can crush them before they get the Perfect Xen. And I prefer to think that you have a role to play in this civil war, I need you because only the scientist know the location of the shield generator. And you can fight pretty well... Ancestor, the whole Rebel's philosophy is based on your people's.. Do you...

The Last Ancestor: Of course I accept. I can feel your honesty, your respect for life and your desire for liberty... Let's do this.

Commandant Cef: I had sent some Rebels to Corneria before the Galactic Army arrived there.. Your families are safe in the secret Rebel's base. You will be able to join them sooner than you thought...

-How do you know all these details? And why should we trust you?

-You have to keep in mind that we can't live in this kind of dystopia anymore. By helping us, you'll guarantee safety for you and your family. Running to an another galaxy is not a solution. The Rebels have worked for centuries to get the strength and the organisation they have now. We just need a little help to change the Galaxy forever.

-We're in. You will have your revolution. Let's pull this through!. The alliance between the Heroes and the Rebels is settled and the Revolution is coming.

Act 4: Viva la Revolución! The Ancestor is now capable of teleporting a part of the Rebel Army inside the Capitole, main planet of the Galaxy and the "Granda Frato's place". They have to killed the Govermental Guards and destroy the Shield Generator, which protects the planet against any attack. Once the Heroes and the Rebels enters the Capitole, they have to fight the Guards while the Rebels' engineers are unconnecting the shield."

6.6 Level 4 Dialogue

The Heroes won, the Shield is destroyed, the Rebels Army attacked the Capitole and won. The Revolution is a success, our Heroes aren't threatened anymore and became one of the leader of the Galaxy. Kûrago is finally able to return to his

beloved wife and children. The evil Krodux are defeated. After being chased by everyone, our Heroes will attempt a system reorganisation and creation of fairer political system, with more liberty and more justice for everyone. With the helping hand and wise advice of Last Ancestor they will succeed in building a New Utopia, like the one destroyed by the Krodux several millenniums ago. Even if Granda Frato had never existed, his symbol of order, security and love shouldn't be destroyed. The Rebels have made the choice to keep it. Despite the Galactic Government having been destroyed, the few good things they did will prevail.

6.7 Alternative Ending

After having killed the members of CP0, the Heroes are facing an another problem now: the Galactic Army is coming. The Ancestor is almost ready, but they have to beat the vanguard first...at least until the Ancestor managed to absorb enough Ancient Power!

A very bright light appears from the Last Ancestor's body. The Army's spaceship is beginning to land on Venom. The Ancestor! He got it! -So this is his real form...

The Last Ancestor: I.. am...ready.

-The Galactic Army! Look! They're coming!

-Ancestor! We don't have enough time!

-The Last Ancestor: Come. Come next to me.

At these words, the Ancestor raises his hands, and uses his Ancient Power to crush several spaceships. Nobody understands what's going on... The Ancestor closes his eyes. And then he disappears with the Heroes...to another galaxy."

6.8 Characters

6.8.1 Main interest groups

- **The Krodux:** ruling the Galaxy through the Galactic Government, they want to kill all witnesses before the Rebels get any information from them, they want to keep the power.

- **The Rebels:** fighting against the Galactic Government, get their liberty and the power, they are very organized and have spies everywhere.

Possibilities for the Rebels :

– The Rebels are allies, they want to protect the scientist and get all the informations about how to create the Perfect Xens.

– The Rebels are enemies, they want to kill the scientists before the Galactic Government get any information from them.

• **The Criminals:** a group of pirates who wants to create the Perfect Xen in order to sell them. They strive for nothing but money.

6.8.2 Special characters

• **Suspicious Guy (Lombardy):** a strange character, it's not clear whether he is a ally or a foe.

Possibilities for the Suspicious Guy:

The Suspicious Guy is a member of the W.S.L crew, he is a spy from the Rebels. It explains why the Rebels know about this weapon project, and the location and destination of the Heroes. The Suspicious Guy joins the team after the crash, he is a member of the Criminals. It explains why the Rebels know about this weapon project, and the location and destination of the Heroes.

• **New Ally:** an enigmatic character. He meet the Heroes after the crash. He is the Last Ancestors but he lost his power a long time ago. He wants informations from the Heroes about a planet, called Venom, where there is a lot of Ancient Fluid in order to recover all his power back. In exchange, he will help them to:

– escape through a Worm Hole to an other Galaxy far away OR

– take revenge against the Krodux (with help from the Rebels why not) (This idea is more interesting)

This character is essential because he is the key to the end of the game!

7 Level design

The game consists of following levels enumerated in their correct game order. Every level is created using the planet sprites and surface hurdles which disable

entering of the tiles they are placed on. There are always two types of surface hurdles - one big and one small, both residing on one tile. Each planet has also it's distinct background.

i **Grass planet**

The first level where the player enters the game is set on the grass planet. It's a rather peacefully looking place, but the looks are deceitful - enemies are already lurking there. Ambience of the whole planet is of a green nature with trees, bushes and wind blowing in the background. Some of the tiles hide a swamp and therefore are not walkable.
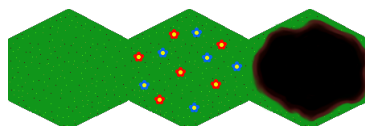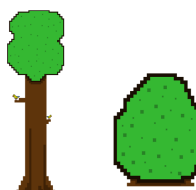
Figure 7: Grass planet sprite

Figure 8: Grass planet surface hurdles

Figure 9: Grass planet background

ii **Ice planet = Asteroid X57** The second level takes place in a icy surroundings with piles of snow and dangerous ice pillars. The ambience is despite cold colours mild.
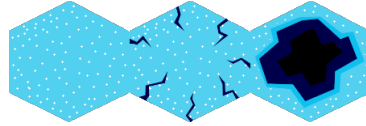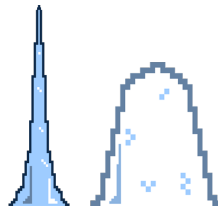

Figure 10: Ice planet sprite

Figure 11: Ice planet surface hurdles

Figure 12: Grass planet background

iii **Poison planet** Poison planet creates psychedelic feelings in the player caused by chosen combination of colours, which is even more emphasized by magic mushrooms.
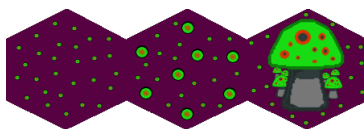
Figure 13: Poison planet sprite

Figure 14: Poison planet surface hurdles

Figure 15: Grass planet background

iv **Ash planet** The ash planet's ambience is sinister with amber-colour lava glowing in the dark and tiny vivid ashes and dust distributed over the tiles. The planet is bathing in radiant rays of a radioactive planet in the background.
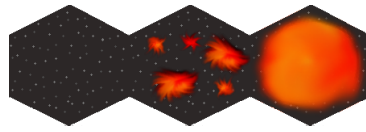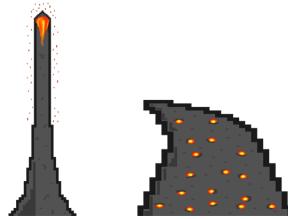
20

Figure 16: Lava planet sprite
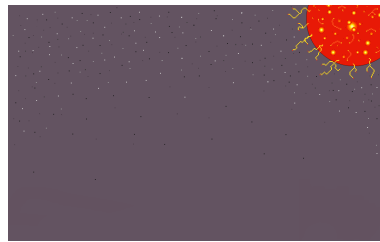

Figure 17: Ash planet surface hurdles

Figure 18: Grass planet background

8 Graphics

8.1 Style attributes

Game design was supposed to be done in cheerful warm multicoloured tones allowing for slightly darker toning of sinister characters. Main game design style is pixel art using 72dpi with fantasy theme and little space for non-symmetric tendencies. Pixel art was chosen due to loading speed as the Ancient is a online game. Game logos font was exclusively created using paths. Apart front that, only following font is used: Tw CEM MT to account for a consistent design. General game ambience is rather cheerful with some gloomy aspects based on level thematics.

Internal graphics format used is .psd, finished graphical assets implemented in the game are in .png format. Predominantly used graphical tool is Photoshop.

8.2 Game Board

The game board is represented by a HTML canvas of width 1294px by height 800px. This size was set based on multiplying the height by golden cut. These measurements were carefully selected as best trade-off of design visualisation and game loading speed. Game board is represented by multiple elements organized in layers. The bottom layer represents a background picture creating an underlay for net of hexagonal tiles. Into these tiles one of three different tiles is loaded.

Coordinates representation
The Ancient game board uses a system of 3 coordinates: x,y,z on a scaled game board in a 2,5D display manner to create an impression of depth with affordable graphic asset demands. The tile in the left lower corner has coordinates (0,0,0).

- x coordinates run from 0 to 17

- y coordinates run from 0 to -20
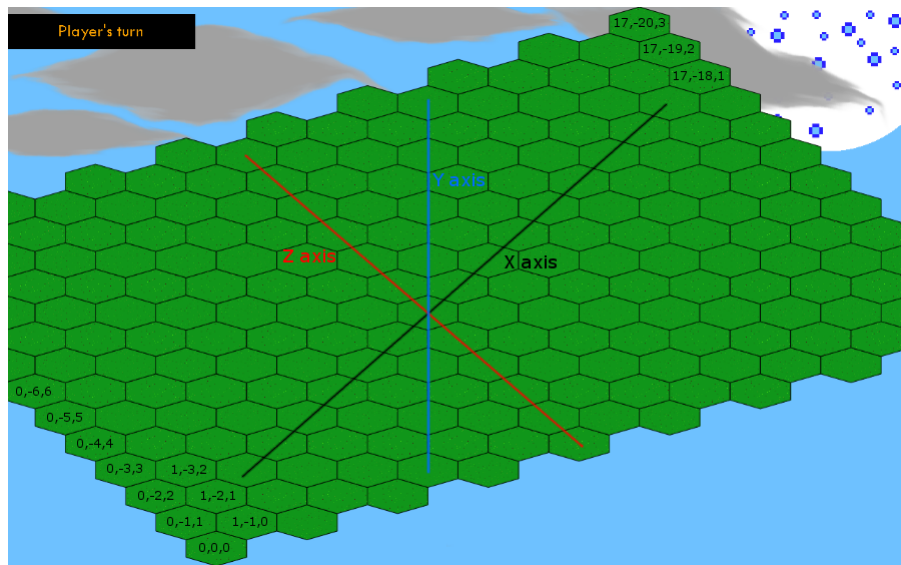
- z coordinates run from -7 to 10

Figure 19: Game tiles arrangement and their coordinates

8.3 Tiles and background

The game board consists of 216 hexagonal tiles (12 x 18 tiles), each 150px by 150px. The hexagonal shape enables more movement and attack possibilities, as the characters can move only along the edges and not along the vertices. Every level is constructed using 3 different types of tiles and using additional surface hurdles. Only 2 of these three tiles are walkable. Moreover surface overlays are deployed - blue for the character's movement range and red for the fire range.

8.4 Characters

Character in the game are designed using pixel art with 72dpi resolution and having size 100px by 100px. Characters can be seen only from the back or only from the front. Each character is represented by its alive and dead state. Representation of dead bodies is all the same to visibly distinguish them from playable characters. Internally in the game, characters are represented using sprite sheet for every character with size 200px x 100px consisting of alive and dead state of the character, each state taking 100px x 100px of the sheet.

8.4.1 Heroes

1. **Kûrago** - human scientist, who comes from a human colony, he's brain-washed by the Government, but loves his family. He's a specialist in biochemistry in the WSL. He adores the Granda Frato and the Galactic Government.

Health	Strength	Range	Fire Range
25	9	3	2

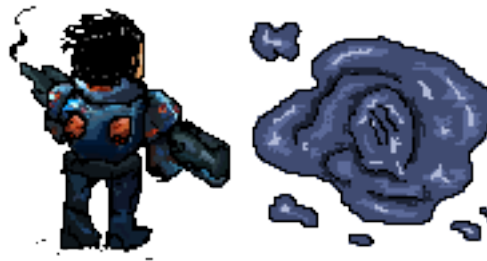Figure 20: Kûrago sprite

2. **Bela** - scientist, she is a Spirito, a race with some strange faculties. Her people are victims of injustice from the Galactical Government. They secretly hate them. She is a specialist in neurobiology in the WSL and Kûrago's friend.

Health	Strength	Range	Fire Range
12	5	3	4

Figure 21: Bela sprite

3. **Rebel** - laboratory researcher in the WSL. He's an Elcar, a very intelligent and wise race. He studying archaeology and phylogenetic. They don't know the others characters. He's neutral about the dictatorship.

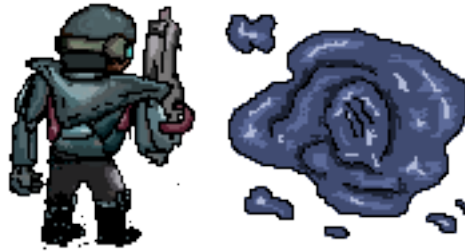| Health	Strength	Range	Fire Range
30	7	2	1

Figure 22: Rebel sprite

4. **Suspicious guy** - his suspicious suspiciousness, nobody really knows anything about him, his death offers a special game branching.

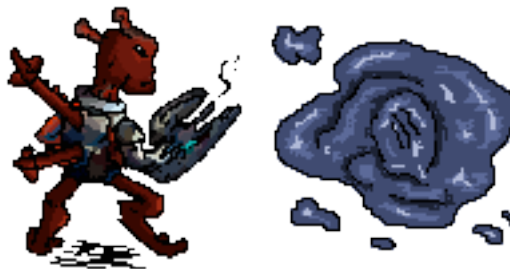| Health	Strength	Range	Fire Range
20	10	2	1

Figure 23: Suspicious guy sprite

5. **Last Ancestor** - he's a slave in the Asteroid X57, the last of his kind. Extremely powerful, with the age he lost some of his power and the sadness. He's the key of the story, and the only chance for the Rebels and the Heroes.
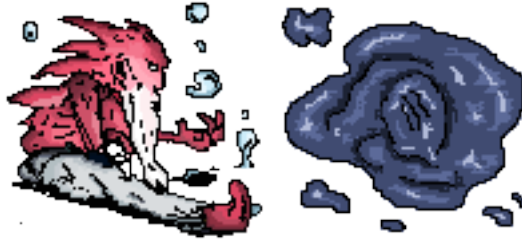
25

Health	Strength	Range	Fire Range
30	10	4	2

Figure 24: Last Ancestor sprite

8.4.2 Enemies

1. **Krodux**

	Health	Strength	Range	Fire Range
Krodux 1	15	5	3	2
Krodux 2	20	7	3	2
Krodux 3	17	4	3	2
Krodux 4	16	5	3	2
Krodux 5	16	6	3	2
Krodux 6	16	4	3	2
Krodux 7	16	4	3	2

Figure 25: kroduxPX sprite

2. **Criminal**

	Health	Strength	Range	Fire Range
Criminal 1	12	3	2	1
Criminal 2	12	4	2	1
Criminal 2	12	4	2	1
Criminal 2	15	4	2	1
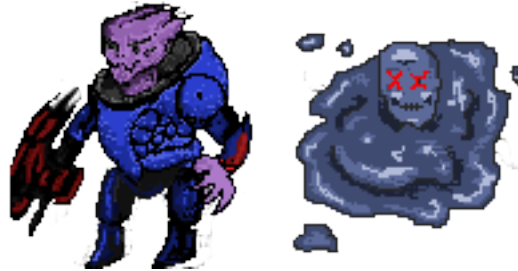
Figure 26: Criminal sprite

3. **Octopus**

Health	Strength	Range	Fire Range	
Octo	13	6	2	1

Figure 27: Octopus sprite

4. **007x**

	Health	Strength	Range	Fire Range
007x 1.1	13	4	3	1
007x 1.2	13	5	3	1

Figure 28: 007x sprite

5. **Astrogun**

Health	Strength	Range	Fire Range	
Astro	13	3	4	5
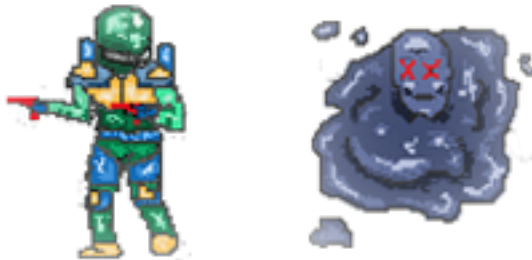
Figure 29: Astrogun sprite

6. **Wild animal**

	Health	Strength	Range	Fire Range
Wild 1	5	3	2	1
Wild 2	6	3	2	1
Wild 3	7	3	2	1

Figure 30: Wild animal sprite

8.5 Dead character

Dead character representation, this is used for representing any dead character either from the front or the back view.
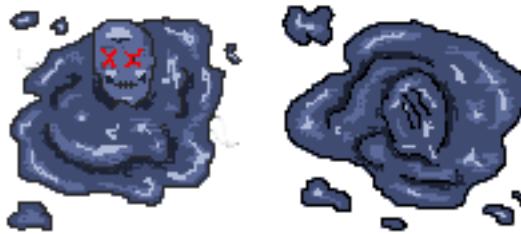

Figure 31: Dead state representation sprite

9 Skills & Features & Control bars

Each characters possesses the following skills and features: name, actions, health and intelligence. These skills and features have different values which may change during the game.

- **Name** - Name is not a variable and serves solely better addressing and differentiating the characters from each other.

- **Actions** - Actions show remaining actions possible in the turn for each character and is diminished by one after and action. Possible actions are move and fire and it's not possible to skip a action.

- **Health** - diminished after a character had been attacked unless managed to shield him/herself completely

10   Development

The Ancient was developed to be a in JavaScript programmed online game with little loading requirements.

10.1   Classes

- **Character.js** - contains all the classes concerning the characters. This includes the class representing environment object such as tree or bushes, and also the class representing the AI.

- **Command.js** - a collection of function used for the command design pattern.

- **Grid.js** - contains the class Grid which represent the array of hexagonal tiles during each battle.

- **Main.js** - contains the main loop, and also the instantiation of object such as the canvas where the game will be drawn.

- **Scene.js** - the file where the scene manager is implemented, it also contains the classes for different scene such a the loading screen or the dialogues screen.

- **UserInput.js** - a collection of function used during the battle of the game, in order to capture the input from the mouse of the user.

- **CanvasText-0.4.1.js** - a library which helps displaying text in the canvas.

Engine

- AssetManager.js

- LevelManager.js

- SoundManager.js

Utils

- **Map.js** - implementation of an hash map.

- **Tile.js** - contains the class Tile which represent one hexagonal tile during a battle.

- **Util.js** - contains several useful function not directly related to the game

11 Sound

The game consist of one main sound theme looping around. This soundtrack was enhanced by special environment sounds such as rustling of leaves, whistling of wind, bubbling of lava or thunders based on particular planet.
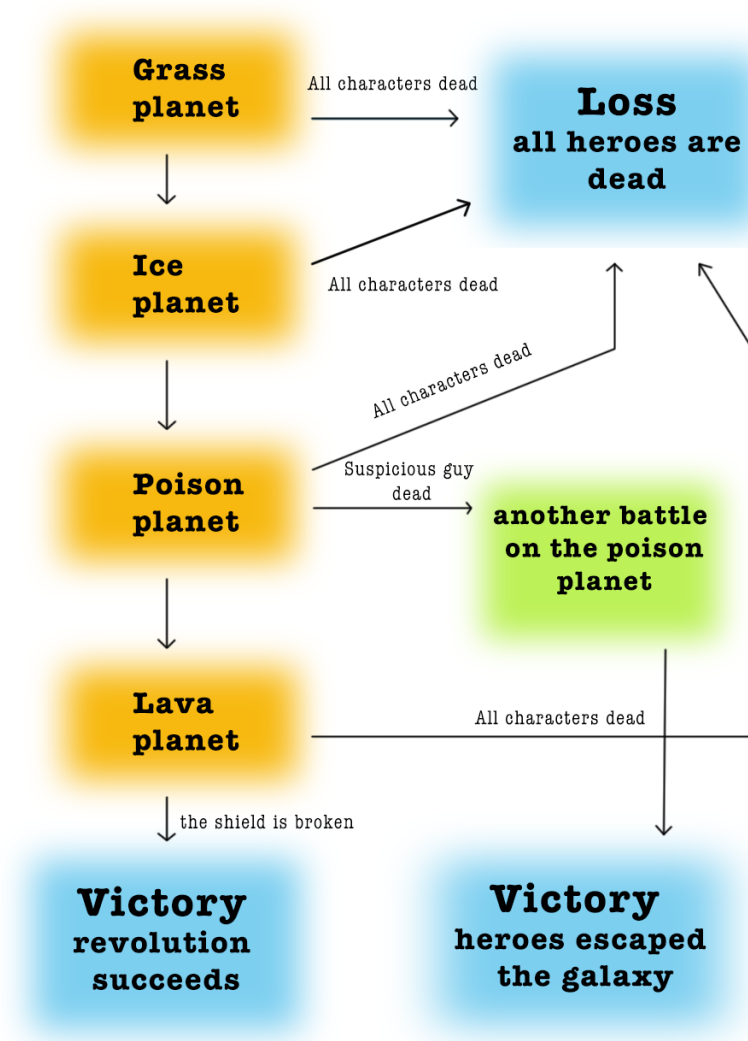
12 Game Flow

Figure 32: Game flow and branching

13 References

- Drawing formatted text on the canvas :
  http://www.canvastext.com

- Implementation of an HashMap Christophe:
  http://stackoverflow.com/questions/368280/javascript-hashmap-equivalent

- Implementation of hexagonal tiles :
  http://www.redblobgames.com/grids/hexagons/

- Base code for the asset manager from Seth Ladd:
  http://www.html5rocks.com/en/tutorials/games/assetmanager/

- Post Mortem Guidelines & template:
  https://lastbytes.wordpress.com/2013/01/15/a-postmortem-template/

- Background sound assets sources:
  http://www.sounddogs.com
  http://www.tabletopaudio.com

- Powerpoint template:
  http://www.51pptmoban.com/
  http://www.wallpaper4k.com/de/wallpaper/raum/wpw9s373.html