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Bachelor's Degree in Audiovisual Media

VENDETTA

Cinematic of a game

ALBERT INIESTA MONTORO

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Resum

“Vendetta” és una cinemàtica d'un videojoc en 3D amb la finalitat de què l'usuari s'enganxi un cop l'hagi vist.

La cinemàtica explica la història d'un policia que busca venjar-se de l'assassí del seu company de treball. És una història que té un final obert per tal de crear expectatives a l'usuari i fer-lo pensar de com seguirà la història d'aquest personatge.

Resumen

“Vendetta” es una cinemática de un videojuego en 3D con la finalidad de que el usuario se enganche una vez que la haya visto. La cinemática explica la historia de un policía que busca la venganza con el asesino de su compañero de trabajo. Es una historia que tiene un final abierto para crear expectativas al usuario y hacerlo pensar sobre cómo seguirá esta historia.

Abstract

“Vendetta” is a cinematic of a videogame in 3D with the finality to attract and like the user. The story explains about the revenge of a police, who is looking for the murder of his police partner. It is a story with an opened final to make the user think about how is going to end this story.

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1. INTRODUCTION

“Vendetta” is a cinematic of a game created in 3d about the revenge of police men, who is looking for the murder of his work partner.

1.1. Mission or Purpose

My mission with this project was to create a cinematic of a videogame, which simulates a virtual reality. I took some references in some videogames like "Grand Theft Auto", "Watch Dogs" or "Saints Row 4. That games show are really good and shows an amazing quality of modelates and graphics. I am honest and I know that I could not achieve this type of quality, but I could achieve a good project since my story and the type of the game.

With this cinematic, my purpose was to call the user attention and make him wonder what is going to happen with the history and what ending is going to be. I wanted to connect with the target of this game and make he feel comfortable and identified, with the virtual reality, that he is watching.

The most important point of the project is the story. We have to enhance the story and explain it without any speech. That would give us an international project that everybody would understand. It is not going to be a national project, that only understands right there. Is not going to have a specific language. Everybody would understand the story with corporal movements, signs and expressions.

Another important fact is the quality of our characters and the stages, where the mains characters would act. That point, will give us, reality and the target will detect what kind of game is going to be. For example with good graphics and our history, people knows that is not going to be a cartoon game, it is going to be a more seriously game.

1.2. Goals or aims

One of the key parts to come out this well is the explanation of the story without speech, just with body language. It has made a script with storyboard and everything fits. The script has been approved by supervisors of the project and has expressed their approved. So that means the story can understand perfectly without any speaking. We can achieve this aspect through the gestures of the characters and their body movements or the development of situations.

Another important point, which we have to get, is to give the sense of reality and make a parallel link between things we usually do. It will be difficult, because I do not have the domain that would require the program to get a optimal graphics, but one of the goals is to try to do my best to get it.

1.3. Scope or Terms of reference

The project will include a video with all the work, which I have done along the year. In this video you can find the story of a character, which is looking for the murder of his co-worker, but at the end he realize that he was looking for the wrong person.

This video of the cinematic has an opened story to create doubts and make thinking about to the target and to make them buy the game to see what finally happens.

It is a short cinematic because only needs to explain the main porpoise of the main character and make the user think about it, what is going to happen. It is a video promoting the game, does not explain the whole story. We will try to offer a realistic cinematic that make curiosity to the target without any speaking, only including background music and some sound to enhance the story.

1.4. Constrains and Resources

The limitation that I found it during the project is the lack of staff; it would have been perfect to work with a minimum of three or four people. Thus, the preproduction would be bigger, because each one would have contribute with their grain of sand, bringing their points of view, and also in shaping stages, characters and animate them would be really helpful.

I have done the project alone without a team, so I had to do all tasks and that makes slows down the time to do the project and carried out successfully. Moreover, there was any local or site, where I could do all the work without any problem and with the support of good equipment, which would have been effectively to make tasks easier. Having some sponsors or a capitalist, to bring some money would make it more attractive to users. This money would give an extra to the project, because we could hire more personal to do all the tasks.

And finally, I did not know and had the necessary skills to master Maya program, meant that I had to waste a lot of time in silly things. For example, if I did not know how to do one thing, you have to search it and spent time looking for it, and it was time you thought you would have.

1.5. Cost-Benefit analysis

The project had carried out with Autodesk Maya, using a student license, and therefore does not have any cost. I had considered the hours of dedication I had to spend it to carry out successfully the project. Things would change, if I were to rent a place to work with specific equipment, and had to pay the staffs, who were working

with this project too. But there would be only the electricity and own hours of dedication, the cost of the project.

In terms of benefits, I know that I cannot get money from the project, but I can use it to show to another people, who are working in the same world of audiovisual and animation. I think this project can help you to meet with other people that are beginning in this world and can help us to contact with important people, who can support you with futures projects. Also, you can put it in your demo reel to look for new jobs.

It is an attractive project, which for people loves games like Grand Theft Auto or another virtual reality games, you will appreciate and even who knows if proposed to make a game, which is based on this project.

Moreover, the knowledge and skills acquired are great benefits, which are connected to achieve the proposed goals.

1.6. Risk analysis

On the one hand, the main risk I had found and had affected the outcome of the project and also the quality, was the lack of time, that I found it as I was doing all tasks and was finding problems that were not expected like a disease or not know how to do satisfactorily a specific task. These unexpected problems made me to postpone for another week. For example the modelate of characters, are really hard because I do not have a good knowledge of how to do it good.

On the other hand, not having a team to do the work, that makes me only have the responsibility to pull ahead and try to get the tasks in delivery dates to keep going good with the project and can delivery at the end.

I thought that also could affect the production to not having good equipment, which made things easier with the correct computer and with all software, which I needed.

1.7. Project Roles

The project roles of this project were:

The project initiator was Albert Iniesta.

The project manager was Albert Iniesta.

The project team members were Ian Lee, Simon Hall, Marisse Mari, David Minguillon and Albert Iniesta.

As it was an individual project, it would not be project partners, who gave us money and support us with their influences. However, there were supervisors to the project, who gave us their point of view and would tell me what weaknesses were in this project and how I could resolve it. Moreover, I could have a view about what people of outside of project were feeling and thinking about the story and all.

These supervisors I had listed as a team member, unless they would not do any task of the project. They would give me knowledge and would help me to know how to do the task correctly.

2. PREPRODUCTION

2.1. Initial idea

The idea came out, when I was in Glyndwr University and all classmates had some days to take the decision of what we were going to do. I had some ideas about what I would like to do it and I met with Ian Lee and Simon and we put all ideas on the table and we commented, which one will be the best and how we could do it, to get a good result with my skills and my habilities.

My first idea was about doing a trailer with 3d Autodesk Maya and make characters speaks in English or Spanish. It was very ambitious project and it scared me a little bit but I was decided to do it because I thought I would be able and I would have enough time. But I had some meetings with my teachers, and they told me to do it without speech because I would have a lot of work and it was too much to do for only one person. I saw the challenge was too big for me and I could not succeed in. Therefore, we decided to do it without speech to do it international and everybody would understand it.

The main issues, which I thought about it, were kidnapping, murder or a history with crime, which would impact the costumer and would make it buy the game that my cinematic show. After some discussions with some teachers and some classmates I decided to define my cinematic as revenge with a few of crime.

After, have determinate my project issue, I took some references about how I could do it and I have focus on the video game called "Grand Theft Auto", which is perfect to compare and see how I could do some objects or stages.

2.2. Work-plan

Along July of 2013, I plan the tasks of preproduction about, my plot, the storyboard, the design of characters and also the design of the stages, and the cinematic.

I decided to organize the whole time I was at the University of Glyndwr in order to use well all the time that you were there. So, the planning of a month there was this one:

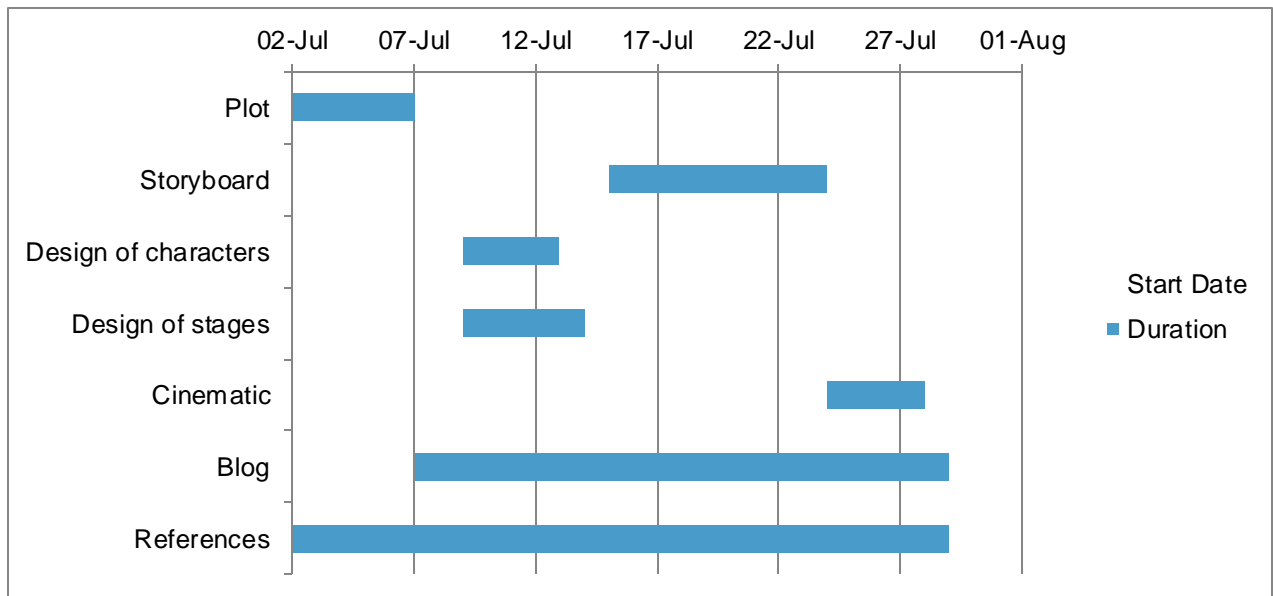


Fig.1, Preproduction's work-plan

I follow this planning along July and I did the presentation the last day in Glyndwr University showing the cinematic and all work, which I did in that month. As you can see, this was a month of preproduction time; preparing as well as it could be possible all the base of the following work in production.

2.3. Plot

As I said before I did some meetings with my tutors Ian Lee and Simon in Glyndwr University and I did some plots and I exposed to them to look for the best one.

My first idea was to make a story with kidnapping and the main character was collecting information in different scenarios with various characters and in the end had to know who was the kidnapper and managed to save his daughter. There would be some dialogs between the characters a. It was a very ambitious project, but if we are realistic we can see that it is not possible to do without a team behind you that give support and helping to you doing the modelate of characters and all the stages, the riggings and all the animation. After, expose this idea to Ian and Simon they told me to adapt my first idea and took out the speech and make me think of others ideas to improve the first idea that I had.

Then, after looking some references of some criminal films, series and videogames I did another plot that was accepted for my tutors and despite of being ambitious it could be carried out. The final plot is this one:

It's about a police, called Mike, who has lost his best police partner. He is looking for the last murderer of his friend.

First of all, you will see Mike's coming inside a room, where there are a wall full of papers with locations, faces of both murders, newspapers and some details of those people, like the tattoo of the band. While you are seeing Mike in this room, there will be some flashbacks in black and white, about the murderers talking and some details that Mike remembered about this people. Then, when Mike leaves the room, he will take a photo of his friend and he and he will stare at the photo.

In the second scene, you will see how Mike is following the murdered carefully. When they are really near, Mike is pointing with the gun to the murderer, but he doesn't fire, he will hit him with the gun. So, the murderer will fall down and Mike will get remarkably surprised, because the murderer had dropped an identity card of FBI.

After that, Mike got shocked and will try to look for the tattoo of the band, but he won't find it... Mike got wrong! It wasn't the person who was looking for!

As a cinematic it must be an opened ending to keep happening new stories related with the main story, which is Mike looking the murderer of his police partner. This cinematic should create curiosity to users about what stories are going to happen.

2.4. Design of characters and stages

As I am not very good at drawing and I had to do my drafts on the main characters in the story, I had to grab some references on how to draw bodies and faces of characters from Internet and also Ian Lee helped me and showed me how I could to my drafts more realistic.

First of all, I did some drafts and then I have chosen which one would be the most suitable. Now I add some photos without the outfit and then with the outfit of the characters.

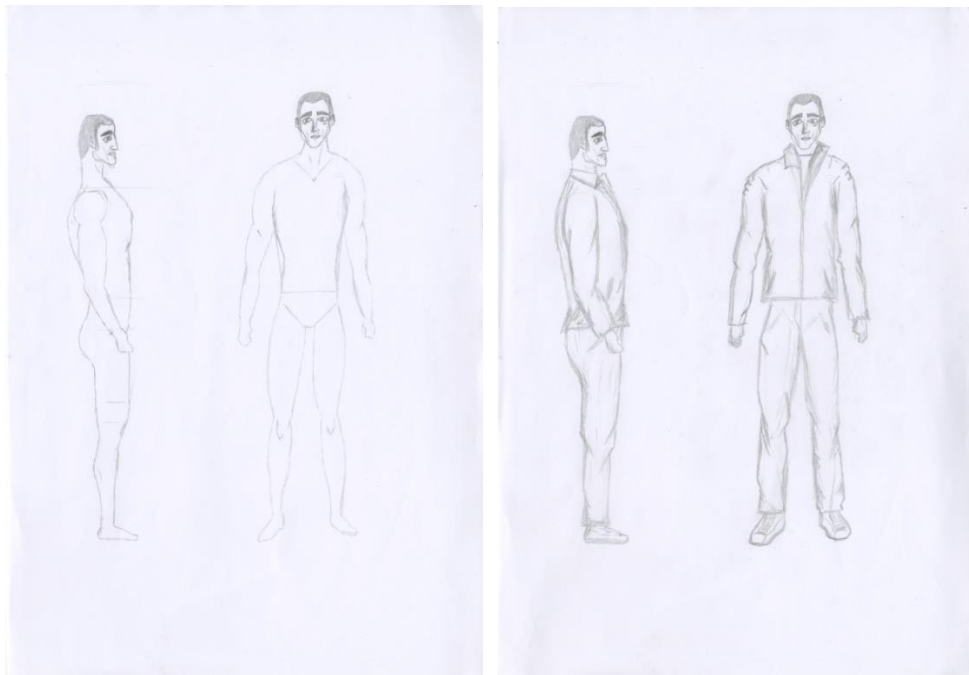
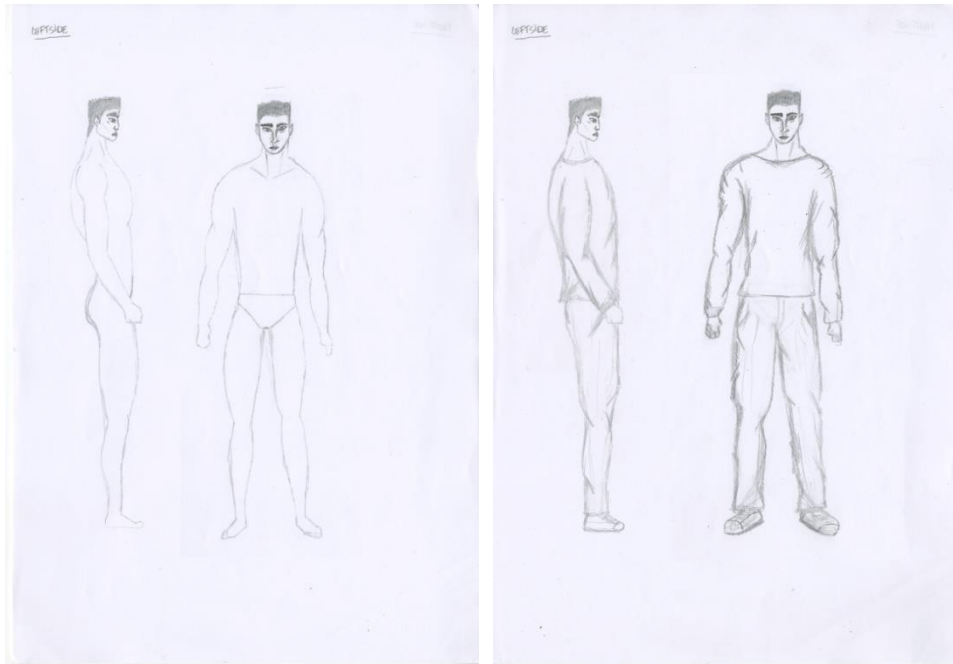


Fig.2, Main character designs**Fig.3, Second character designs**

Then I did some drafts of my stages how they could be and this is the result of some stages I selected this from another ones that I did.

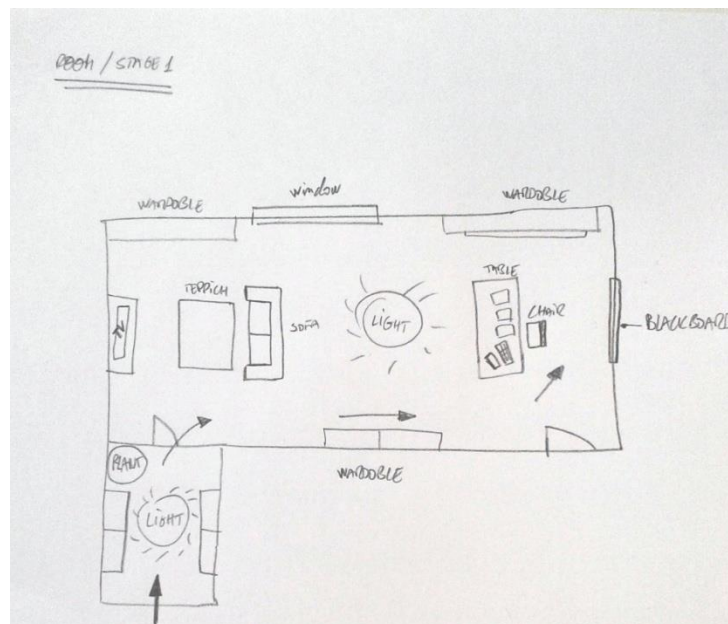
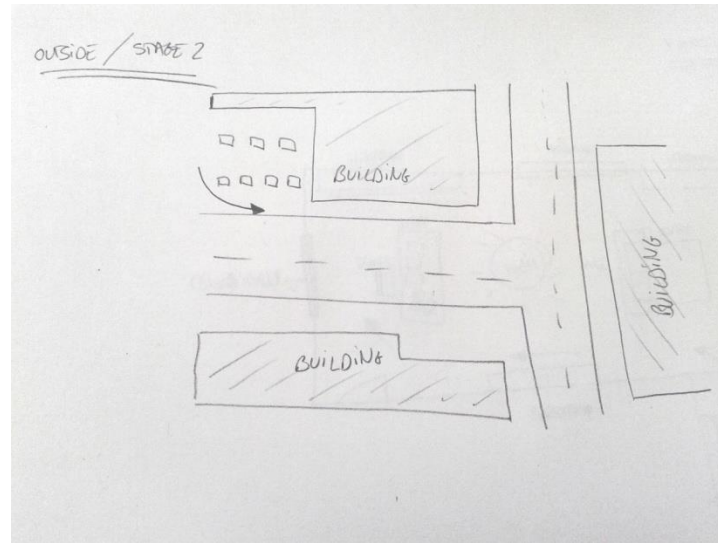


Fig.4, Design of first scenario**Fig.5, Design of second scenario**

2.5. Storyboard

In this image, you can see the guide, that I had follow along my production and animation. This was a really grateful task, which I had done in my pre production. With the storyboard with all the necessary information if I did not remember what was going to see in my plan or scenes I looked at my storyboard and I forget about all my problems about what I would put in this scene.

First scene:



Fig.6, First scene in Storyboard, paper1



Fig.7, First scene in Storyboard, paper 2

Second scene:

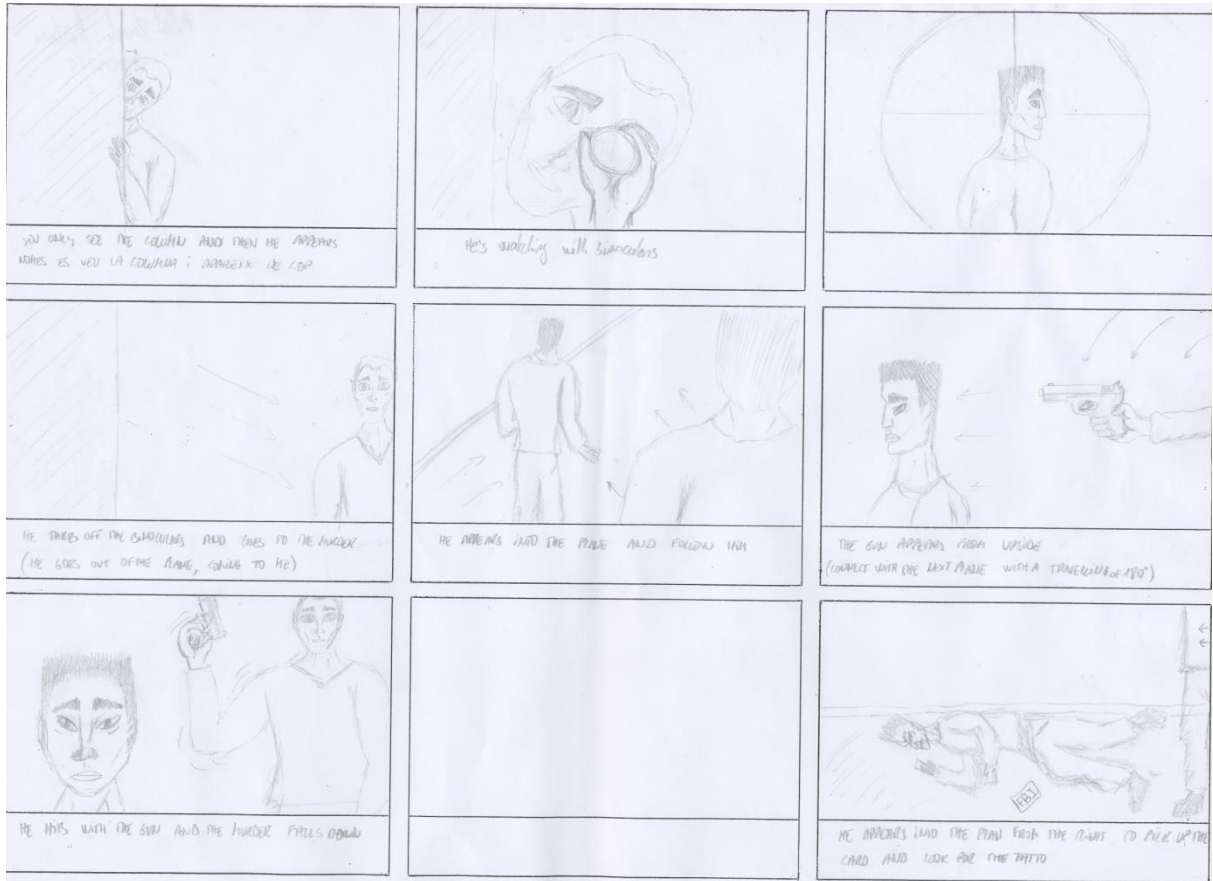


Fig.8, Second scene in Storyboard, paper 3

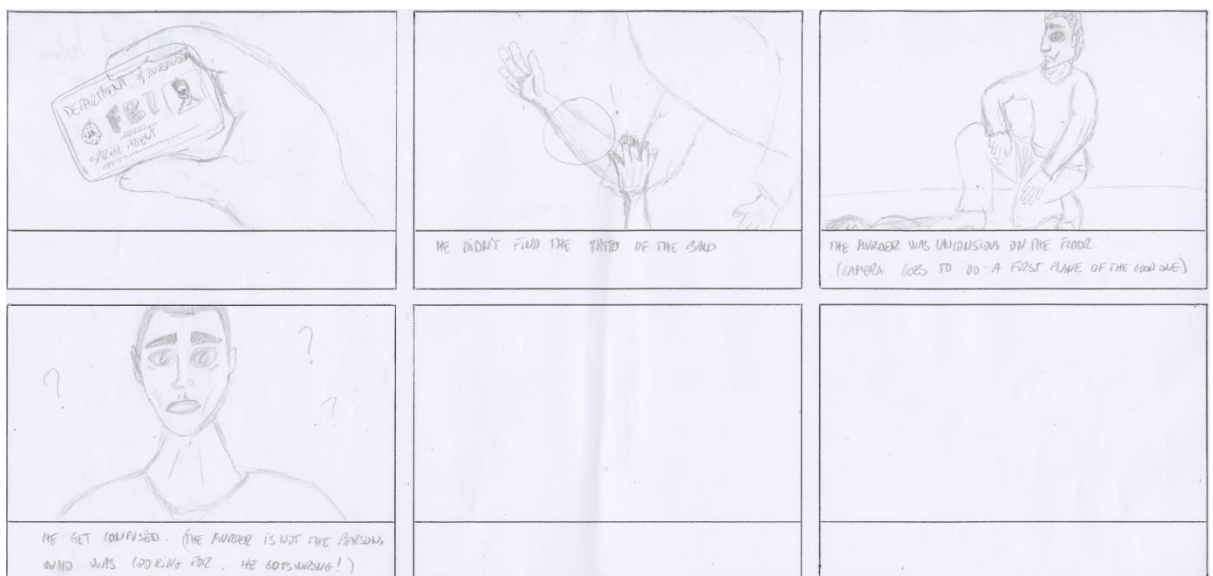


Fig.9, Second scene in Storyboard, paper 4

2.6. Blog and cinematic

Along my entire project I had done a blog, where you can see all the work I had done since I started this project. This is the direction of my blog “<http://albertiniesta.wordpress.com/>”.

You can see my progression of the project in the section “Negotiated Studies”, where I explain each season of my work and also you can see some renders or photos of what I had done it.

Moreover, you can see in the section “Creative Futures”, all work that I had done along this year related with my studies and some projects apart from the “Vendetta” projects. Then, in “Project Management” there was a planning of my preproduction and in section of “Dissertation” there is a work of the power of illumination in the scenes, what can you brings a type of light at a certain time.

Also, I did a cinematic after all my designs of characters, stages and the storyboard. This cinematic you can see in this link “http://www.youtube.com/watch?v=lyUwuaNTaX0&feature=player_embedded/”, or in the blog I named before in the section of “Negotiated Studies”.

3. PRODUCTION

The production of “Vendetta” was done it from the middle of January to the first days of June.

3.1. Work-plan

In this timetable you can clearly see the dates, which more or less I should have made certain tasks, unfortunately I could not follow this dates and some of them were been modiflicated while the production was doing. There are always unexpected events and sometimes the project did not depend just on me, so it has been difficult to try to keep on this plan.

First of all, I am going to explain my work plan that I designed.

From September to December I would have done all tasks related with the preproduction, like the design of characters and the design of indoor and outdoor in stages. Also, I took some more references, which brought me more ideas, like films connected with revenges or films, that had some kind of mystery, that shock the attention of the user. Along this time, I did my Dissertation, which helped me learn some knowledge and it bring me some references concerning the subject of lighting I had in mind when lighting scenes. Later you will see as different interior lighting and lighting that can provide this and also if you change the lighting on the outside which brings if it gets clearer or darker or you change the position of the m, they can convey different things.

After doing all these tasks, I could start modeling all stages and the characters body and faces. That process was longer than I thought and it took it to me 2 month and a half, one month for stages and a month and a half for characters. Then, for rigging and skinning I had some problems, which I did not know how to resolve it and this made me lose some time looking for the answer of my problems. Fortunately,

I resolved most of them helped for my tutor David Minguillon. I thought it will take more or less two months, and it was a little bit more. Finally, I took a month to look forward the materials and put it and the illumination of the project. When I have made all this tasks, I only have to edit the video putting the correctly music and some sounds to make a nice project.

In this table you can see my first planning of my tasks:

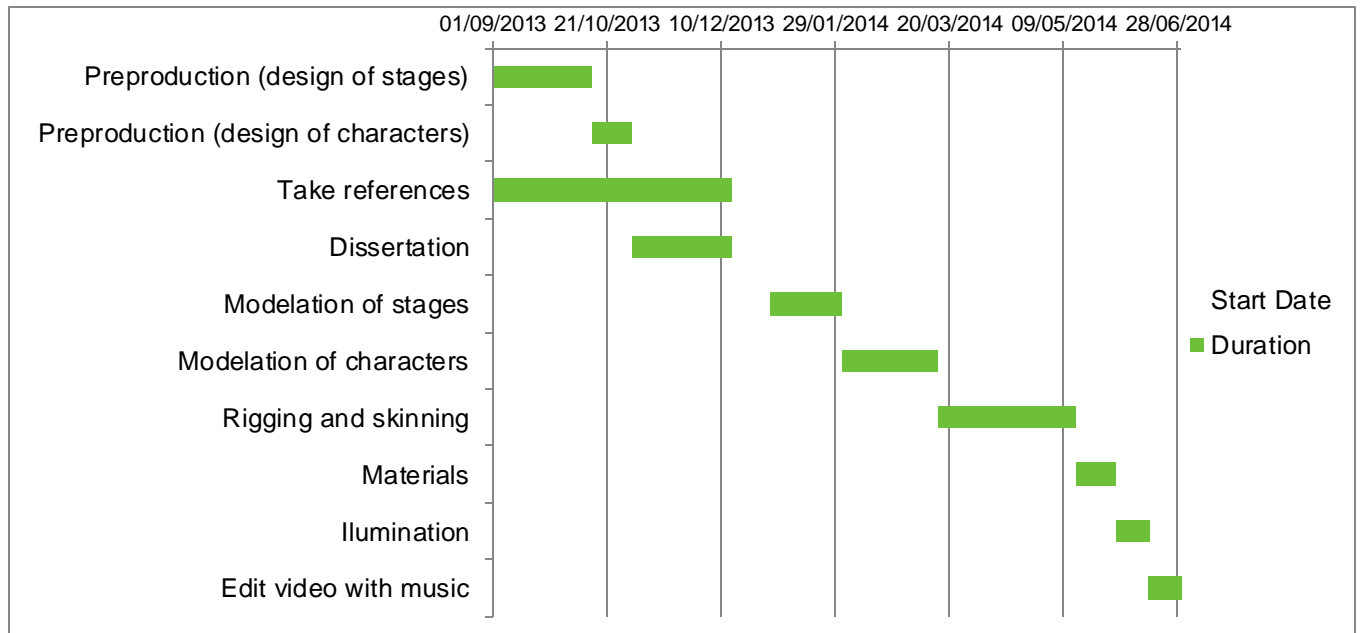


Fig.10, Production work-plan

When I started with all the modeling of stages and characters, I had some meetings with my tutor and he told me to restructure some of my planning because I should put all materials, all illumination and cameras before making my animation to know how I would see it and which parts users would not see.

So, I finally changed the order of some tasks and I did all modelate of stages and characters. Then I looked for all my textures and materials that I needed and I put in their respective objects and then I made some tests to see which illumination would be the perfect one for each stage. When I did all this tasks, I started with all rigging and skinning that took me a month, because I did it sometimes, because it was the first time I did these tasks and I

did not know how to put anything, and I searched information and tutorials in Internet to see how I could do it. After all, I started doing all the animation and the cameras settings and it took me as month and a half more or less. And finally, I had some problems with renders, because some objects were hidden and it made me do again all renders, then with some illumination I had problems and I did some scenes again to get a better result.

As you can see, I focused on the preproduction especially on July and almost from September to December. Moreover, the production was taken from the middle of January to middle of June. And finally, the postproduction was on June and July.

3.2. Modelate of objects

In this part of my project I created a lot of objects to do more realistic my scenes and I did it mainly with the tool of “Extrude” and then I modiflicated the vertices, edges or faces. With this tool you can do everything you want, obviously if you want to do an object that has too many faces and a lot of details, it will be harder to do it but the result would depend on the time you have dedicated to do it and with how many faces did you divide that object. For example, if you do an object with 40 divisions for each face of the object it would be harder than an object with 2 divisions for each face, because you only have to move few vertices to modiflicated it. You always begin with a polygon like a cube, an sphere or a plan and then you modiflicate whatever you want to get in your object.

Along this modelation of objects I took a lot of references in “[YouTube.com](https://www.youtube.com)” looking for how you could do an object and how other people did it, to make it more realistic and be easier to begin.

You can see here my first objects of the first scene a plant and a sofa. The plant was a bit harder to do it because I had to modelate each leaf. I did the leaf with a plan and then I moved some vertex and then I bend it.



Fig.11, Modelate of objects

3.3. Modelate of stages

After doing all my objects of each scene, I collected all together and distributed each one in the right place.

First stage without textures:



Fig.12, Modelate of first scenario without textures

First stage with textures:



Fig.13, Modelate of first scenario with lights and textures

As you can see after putting all the textures and the right illumination in the scenario, it changes a lot.

I did the second scenario twice, because the first time that I created it was not as I wanted and then I modificate some details, objects and I did it bigger to make more general plans and not much first plans. In the first image you can see a basic idea of the second scenario and then in the following image you can see how I it looks the new scenario. When I did all modifications in them, then I put all the textures and lights and it looks as I wanted.



Fig.14, Basic idea of second scenario

After some modifications:



Fig.15, Modelate of second scenario with lights and textures

3.4. Modelate of characters

It was one of the hardest parts of my project because I never did any character and it was hard to know how I could begin, if I should begin with the face or the body.

After some classes with my tutor David Minguillon, toughing all classmates and giving some advice of how he should do the characters and telling us some problems that he found in some projects of him, I started with the faces of my both characters.

The first face of my character was really unrealistic and I decided to do another one taking some photos of Google to have a guide and follow some points, which David Minguillon told me to follow. The second face that I did was better than the first one but it was not as I wanted or I had designed in my preproduction, so I went to Youtube.com and I watched some tutorial about how I could do a realistic face and I put some details like the ears or the hair.

In this image you can see the beginning of one character, as you can see I began with the nose and then I follow with the eye. I put some crossed plans with the face of my character, which I had designed.



Fig.16, Beginning of the modelation of the face

After doing a lot of times that was the result of tutorials:

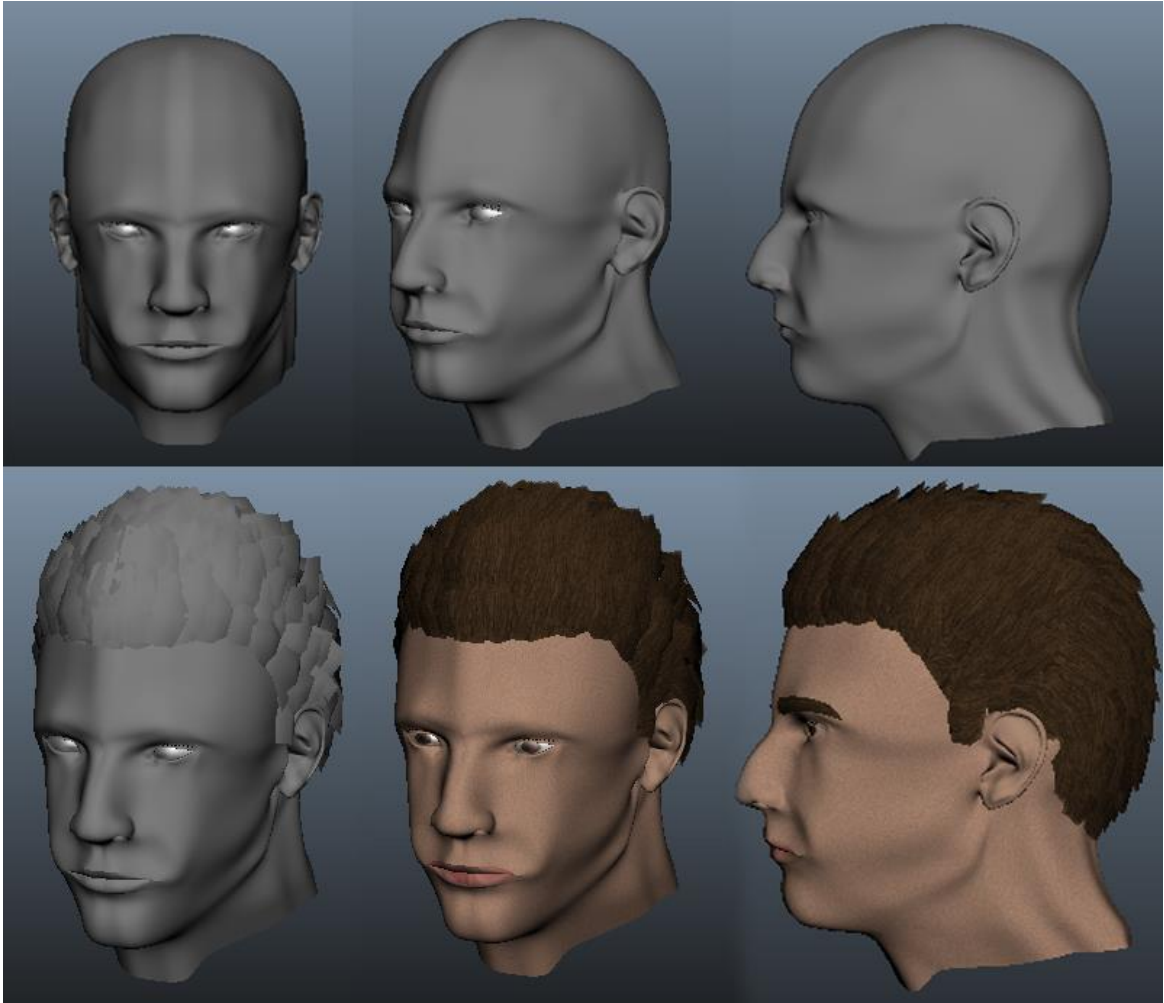


Fig.17, Progression of main character face

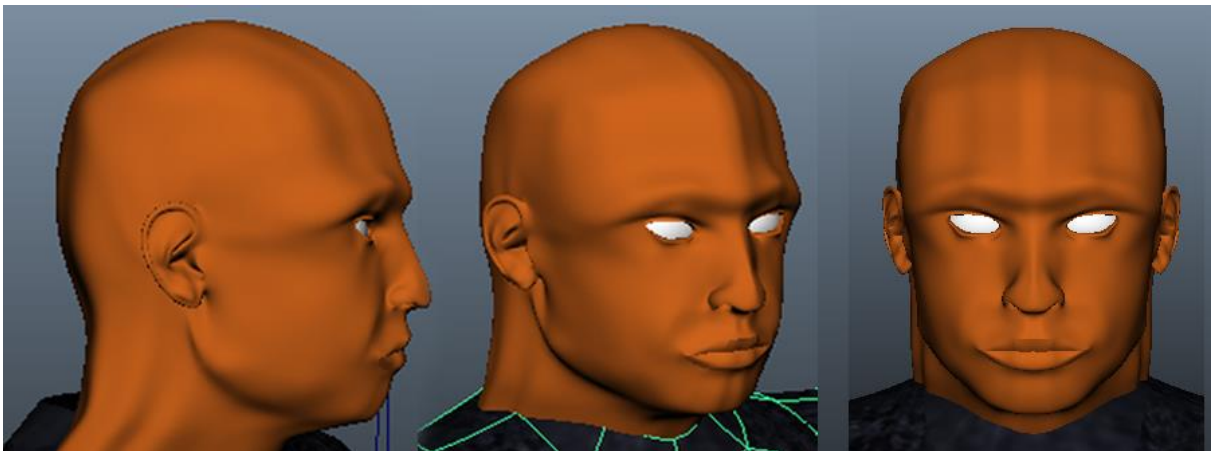


Fig.18, Second character modelation without textures



Fig.19, Second character modelation with textures

In this images you can see only the face without the textures and then with the textures that I did in Adobe Photoshop, where I painted the eye brown the beard and the eyes. You can see the contrast between the first images where is only the main colour of the modelation and then with textures.

After having done the faces of my characters I began with the bodies of them. I used the same method as I used to create the faces with some patrons of images to follow some points, I did the bodies. When I had the basic modelation of the body done it, I started with the outfit of each character. I looked what I had put to each one in preproduction and I adapted on my abilities to do it realistic but to not be so difficult. So, I did it with an “Extrude” selecting some faces to do the jacket, trouser and the trainers and then doing some modifications in their vertexes, edges and faces. In the following images you can see how I did it.

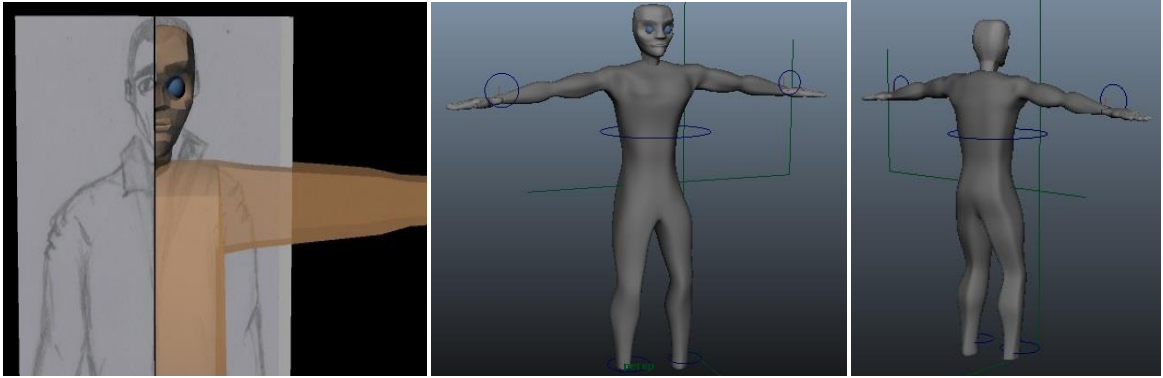


Fig.20, Firsts modelation of characters body



Fig.21, Evolution of modelation of second characters body

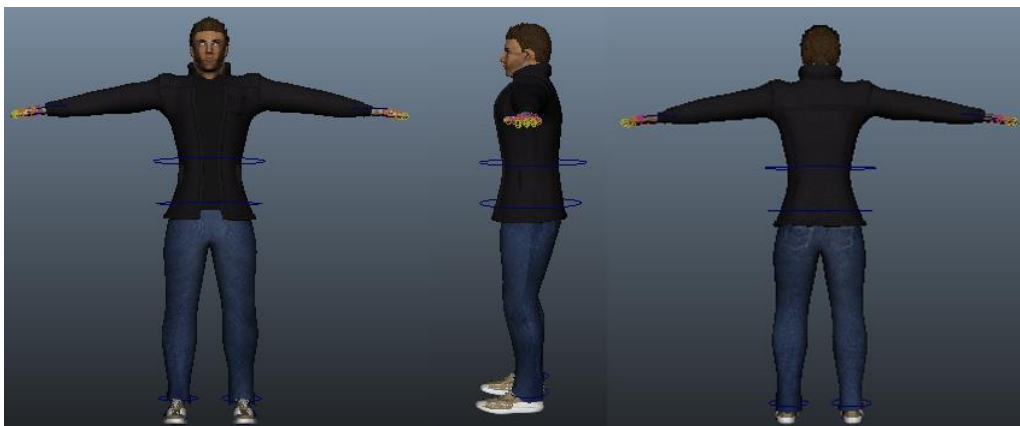


Fig.22, Evolution of modelation of main characters body

3.4.1 Rigging

This was the hardest part of my project because, depending on how you do this part the animation would be affected and all movements would have some limitations. I did some times this part because I tried moving for example the arms and legs to check that my bones were at the right place and Ik's to move properly.

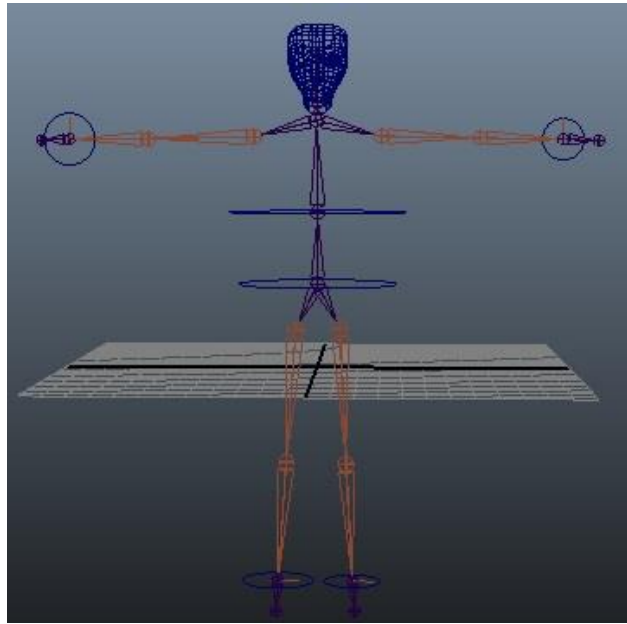


Fig.23, First rigging

In this task I put some controllers on the chest, waist, wrists and ankles to do the animation faster and do not have to look for my Ik's.

3.4.2. Skinning

When you do all rigging and you had checked that is all in the right place and everything is moving right. You have to paint the areas that would be affected by the movements of your Ik's and your controllers. Depending of the area you have to paint more or less to keep your texture in the right place. In this image you could understand all what I am telling you.

First of all, I select a selection a bone and then I paint the area. The black means any tolerance and the white tolerance 100% to keep the texture in the right place.

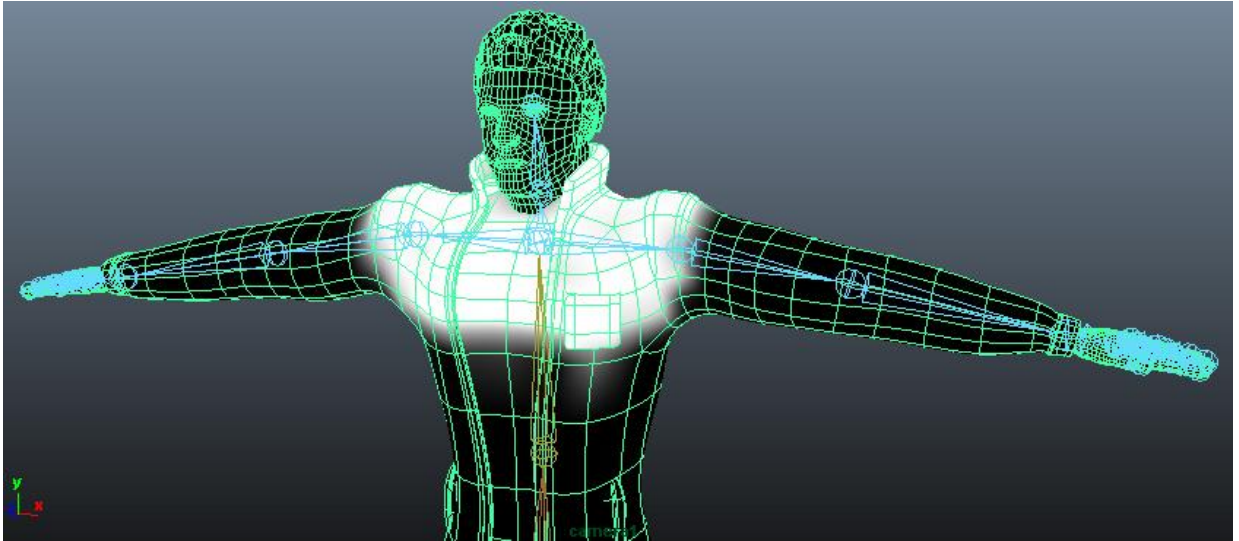


Fig.24, Painting chest area of main characters

3.5. Textures and illumination

After doing all the modelation of my stages and my characters. I have putted the textures in my both characters and their scenarios and it change it a lot. This make to get more realistic, as I wanted. Most of the textures were applied by UV's. You can see in this image how I painted in Adobe Photoshop the face of the second character. First of all, I took UV's from Maya and then I paint as I wanted in Photoshop and then I putted in their material the new texture file.

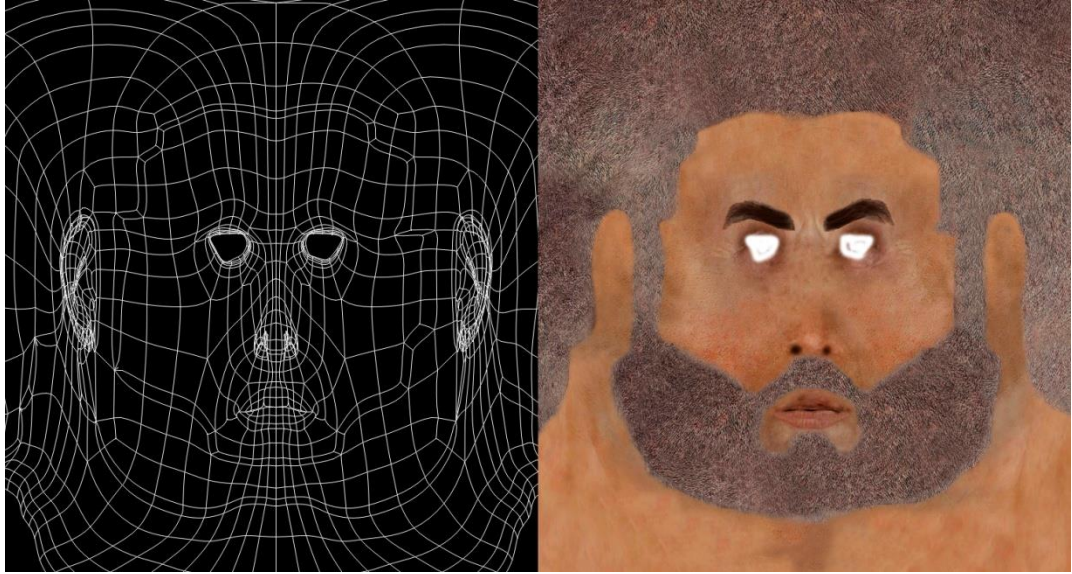


Fig.25, UV's textures and after painting in Photoshop

Then, I will do reference to my dissertation for the issue of illumination. I did this work of searching from October to December to improve my knowledge and to apply a good illumination in my project. This dissertation is available in my blog to see to everyone.

You can see two types of lights in each scenario. The first one is an interior light, which has got more orange and yellows. And in the second scenario you can find an exterior light, which has got more blues and it is darker.

4. POSTPRODUCTION

The postproduction lasted approximately two months (from the middle of June to July).

4.1. Work-plan

I had planified my month in Glyndwr University on July for my postproduction. As a resume I did:

- The visualization and selection of the correct renders it was the first postproduction's step. In this phase I had selected the properly renders and did some modification in what would be the better one in the edition.
- The editing was carried out with the software Adobe Premiere Pro CC.
- Create the title and credits with the software Adobe After Effects.
- Adding the melody of my cinematic

4.2. Fix some mistakes

Along July, I had got some problems with my renders to end my final project, which made me go slower than what I have expected. As I said in my presentation in class in Glyndwr University, these are my errors that I had in renders:

-In the first stage, the door that is behind the sofa, was black and in some files shows me like if it was white.

-The program Autodesk Maya did not make me the sky in the second scene as I wanted, so I replace it with After Effects and I put another sky.

-And the most time, which I spend, was with the illumination of the second scene, because in some parts of the scene it shows me a type of light and in other parts shows me another one. In this photo you will see how I got the renders and as I improved to see well.



Fig.26, Improving illumination mistakes

5. CONCLUSION

This project has lasted almost a year from July of 2013 in Wales. Along this year I learnt so many things about 3d animation and how to use the program of Autodesk Maya. If we went a year ago when the project has started and I felt totally indecisive between about what proposals I should do, what advantages and disadvantages had my ideas, and which one really fitted in my skills and I could succeed. There were months of indecision.

From September to February, I had done all tasks from preproduction and then I started using Autodesk Maya modelling and learning how to use this program. I had some problems that I had mentioned before like the lack of time or if I did not know how to do something it took me time that I needed and that was unexpected problems.

After have got my project finished, I am satisfied about the chosen subject, because when I started I knew only a few of using some programs of 3d and I think this is a powerful tool, that I can use in other professional projects that are related like in publicity or animation videos. The animation 3d is taking an important paper in all productions connected with audiovisual projects.

Nevertheless, I have been very motivated doing this project since I started modelling all my objects because you see the result of hours of dedication and it is really rewarding, especially when you put all textures and all lights in their objects and it changes completely your stage.

5.1. Strong points

First of all, I think I did a really good job with all modelation of stages and characters. I am proud of me, because I did not know how to use the program Adobe Maya. All stages remained with the textures and the properly illumination really well.

Finally, I think that the other strong point would be the topic's illumination. After doing my dissertation about the power of illumination and which paper has got the lights in animation, I think I have learnt a lot about which lights would be properly in different scenes and how to do it and adapt each one in my scene.

5.2. Weak points

One of my documentary's weak points is the movements of characters in some scene that we can saw it really poor. It was a problem, which I saw it at the end of the animation process and I did not have enough time to modificate all the animation process. The lack of time, was a problem because If I would had some more months to modificate all process from the animation to postproduction, renders and fix some mistakes, it would see better.

I realized this problem during the postproduction period and I tried to change some scenes or I tried to use another plans to show a determinate plans. But I didn't success without some of all movements.

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