



CLANDESTINE LAB

GAMES PRACTICAL PROJECT

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OVERVIEW

My aim for the Final Year Project is to create a futuristic interior. I have in mind a room where an engineer or a technician lives and works (maybe against his/her will) incessantly making experiments either with robots, humans or other lifeforms.

Since the environment has to tell a story by itself, I find a laboratory a good starting point as one (or more) experiment(s) could go wrong. The place could be messy now, maybe there could be destroyed furniture, blood or chemical stains in the desk or walls.

Different lighting depending on the part of the room as it is seen in the main reference image could help to tell a story as well.

Warmer lights in the part where the desk and the mattress are making it feel more as home, and on the other hand, placing blue and white lighting where the scientific gadgets are so it looks more like a lab.



MOTIVATION/RATIONALE & RESEARCH

First of all, I chose this project because I think I can enjoy doing it and also investigate and learn new software and techniques.

Back in Spain we went through a generalist 3 year degree and the modules I enjoyed the most were those which involved 3D Modelling (Hard Surface in particular). I love futuristic, Sci-Fi, cyberpunk worlds so that's why I decided to try making a futuristic environment: To develop my skills in the area I like the most by doing an interior set in a world that I love.

As it is obvious, once I finish university, I would like to find a job in the games industry, specifically as an environment artist.

CD Projekt Red and Guerrilla Games are examples of companies I like due to the games they made so far and the



CD PROJEKT RED® GUERRILLA

ones they are currently doing. However I would like to start working in Spain. This is why I would not mind to work in a Spanish company called Elite 3D. These are the requirements for a job as an environment artist there, and therefore, the areas I think it would be convenient to focus on:

Elite 3D®

PROPS & ENVIRONMENT ARTIST

At elite3d we are currently looking for talented 3D artists specialized in props and environments for next-gen games standards.

Required skills and experience:

- Solid experience with Maya and/or 3DS Max and/or Blender.
- Experience with the process of generating assets from high poly to low poly (Creating normal maps, re-topology, optimized UVs unwrapping...)
- Experience in creating textures in Photoshop and Substance Painter.
- Experience in creating PBR materials.
- Artistic skills, creative initiative and flexibility to adapt to different styles.
- Team work skills, self-motivated and proactive.
- Capacity to adapt to a demanding workflow.

Bonus Points:

- Experience with videogame engines.
- Experience with Zbrush.
- Fluent English.

In order to give my environment a strong storytelling background I must choose a specific date to set the project in, so I can design everything according to it. I still have to decide one but it will probably be near future about 100-200 years from now.

I plan to do some research about futuristic architecture and interior design. I will look for minimalist spaces and architecture articles which hopefully will help me to organise and design the whole scene in a more credible way. In addition, I will probably look for texts and images that explains how prisons and its cells are designed, as well as, how are the wardens supposed to treat the prisoners. In the same way, I could also be informed about torture methods used in the last 50 years because, theoretically, the scientist who works in the laboratory does so against his will.

On the other hand I also have to do an academic research so that I can strengthen my weak points which are working in Unreal, creating realistic materials and texturing and lighting the final scene. Hopefully, this project will allow me to explore further these areas and improve them too.

Finally, I have considered my project and I believe there will be no ethical concerns.

TECHNICAL OVERVIEW

I plan to spend some time in pre-production. During this phase I will gather a good amount of references and look for some guides, tutorials or online courses that help me out with my weak points. After this I could do some concepts to clarify my ideas, but I'm afraid they might not be as useful as expected because I'm not very good doing concepts. I will create a 3D blocking so I can figure out the different assets locations and measurements, and check if they fit properly in the scene.

Once I start the production phase I will model the assets that are part of the room using 3D Studio Max and Maya (mostly the first one). Then I will unwrap UVs using Maya and proceed with the map baking in Substance Designer.

The next step will be creating materials I need and texturing the assets in Substance Designer and Substance Painter respectively.

The following task will be to import everything into Unreal, create a proper scene and set the lights and cameras.

Finally, I will record some movements through the scene and edit them in Sony Vegas or Adobe Premiere.



PROJECT DELIVERABLES

At the end of the project, my intention is to deliver the following:

- ARTIFACT: Video showing the scene
- Final scene fully polished
- Final report
- Project blog
- Preproduction work (References, blockings, discarded assets...)
- Source files (.max, .fbx, maps, textures...)

PROJECT PLAN

WEEK	DATE	PLAN
1	21/01/19 (Preproduction)	Discarding ideas. Choosing my final topic.
2	28/01/18 (Preproduction)	<u>PROPOSAL SUBMISSION</u> Writing and submitting the proposal. Creating first blockings.
3	04/02/19 (Production)	Research: -Architecture -Interior Design -Prisons/Cells -Software Concepts. Blocking changes.
4	11/02/19 (Production)	Start asset modeling. First attempts inside Unreal → Camera tests using blockings.
5	18/02/19 (Production)	Continue asset modeling. Keep iterating the scene in Unreal → Updating assets → New camera tests
6	25/02/19 (Production)	<u>PROGRESS REVIEW POSTER SUBMISSION</u> Approach the end of asset modeling. (Most important assets must be done) Map baking.
7	04/03/19 (Production)	Looking for Substance Designer and Painter tutorials/courses/guides Consider if I need specific materials and if so create them. Start texturing.
8	11/03/19 (Production)	Continue texturing.
9	18/03/19 (Production)	Finish texturing. Importing finished assets into Unreal and setting definitive lights and cameras (after previous weeks tests).
10	25/03/19 (Postproduction)	Polishing. Looking for problems and solving them. Trying to improve aspects I'm not good at: tweaking lights, cameras...
11	01/04/19 (Postproduction)	Final revisión: Ensure everything is fine. Writing report.
12	29/04/19 (Postproduction)	<u>PRODUCT/ARTEFACT SUBMISSION</u>
13	06/05/19 (Postproduction)	<u>REPORT AND DEVELOPMENT DOCUMENTATION SUBMISSION</u>

*This is not a definitive schedule. It may undergo changes during the course of the project.

**Unreal camera and lighting tests are intended to be done regularly.

***Everyweek includes updates in the development blog.