

Creative Practise 3 (M5X01568): Critical Reflective Analysis

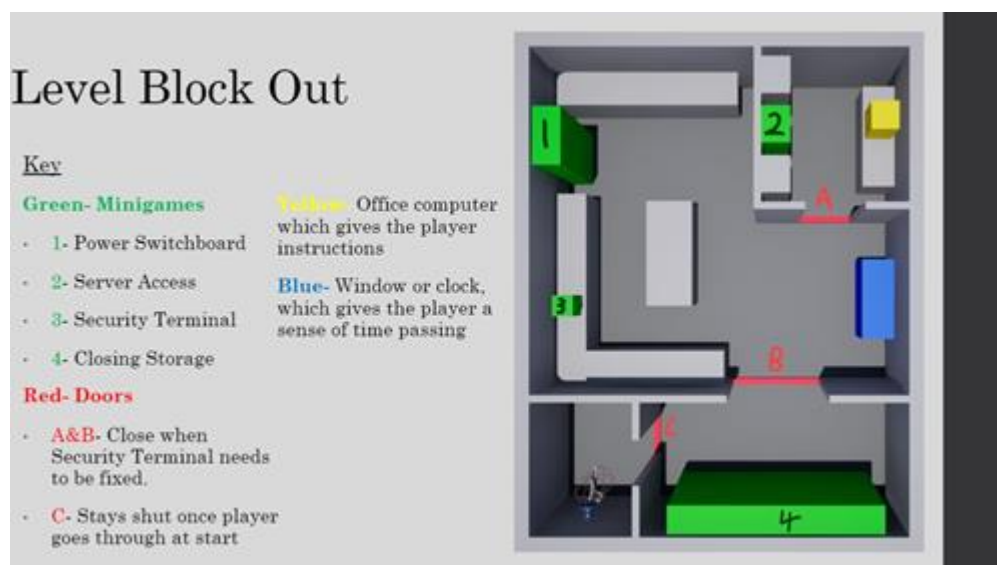
(1,369 words)

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Initial Presentations

My idea for a 'Survival Horror Game' (Morgue Maintenance) focused on the player locked in a morgue and having to complete minigames successfully to make it to morning (survive 7 minutes). My first presentation went well, as I pitched what themes would be present in the game and the central feeling to the game, isolation. After viewing peer's presentations, we discovered that isolation was central to all our ideas and would be the focus for the collaborative game development.

A second pitch allowed me to develop the 'core framework' to my game, via a rough 'GDD-style' presentation. Through the pitch I was able to expand my explanation on the gameplay features. However, I believe I could have given a better explanation to the process of the gameplay and to improve on this I should go 'step by step' when explaining gameplay. I would also not focus too much on the details of each game feature (a more orderly, simplified explanation should be used for future pitches).



Above- Slide from Morgue Maintenance Pitch

The chosen game to collaborate on was 'Submerged', my main reason for choosing to develop this game was because of its setting and straightforward gameplay layout (which had possibility for the integration of additional mechanics). I wanted to further my knowledge of organic asset creation, the cave and creek setting for 'Submerged' would be a way for me to develop organic asset designs.

Preliminary Research and Planning

The plan of the collaborative game was developed by the entire team. Each member of the team considered how the game would be structured and gave feedback (to map layout, theme and setting, etc.). After choosing group roles (roles depended on individuals' primary interests and capabilities), members of the team could apply their focus (mine being asset creation) to how the level would plan out. I added that the interior of the level should focus around a limestone cave, as the group decided a stream of water would guide the player through the level, which affects the aesthetic of the cave interior and alters the visual style.



Above- Limestone cave reference example.

As a team we agreed on the layout of the level (focusing on a ring layout, making the player go back through for additional replay value), however, consideration could have been implemented on the areas of priority on the map (areas to focus asset construction and level

of refinement) and in what order sections should be completed. To further improve on initial planning, the quantity of models could have been discussed, in order to formulate a better structure of the amount of assets needed and how soon they would be required for the white box build.

A rough asset list was created to identify the key models (organic/human influence) needed for the current stage of the white box. The list gave ideas of what would be developed in a more finalised version of the game, the assets which were more 'texture appropriate' (mossy stones, glowing fungi) could be put aside for this part of game development. To improve upon this asset list, a secondary list could have been drawn up. A second list would have focused on the specifics of what would be currently needed for the 'white boxing' process of game creation (Mainly consisting of basic rock structures for blocking out the shape of the cave and assets which were necessary to visualise certain mechanics of the gameplay), this would have given a better representation of a timeframe (e.g. Two plateau-style rocks by the 24th etc.).

To ensure that the style (and primarily shape) of the assets was appropriate to the game's environment (limestone cave), research was conducted to work out the basics of where the game should be set. Valuable feedback from team members was used to work out what real-world place would be appropriate to use as inspiration for the cave. The team feedback added specification to where it could be based, and I determined that the location with the most similarities to the feedback was Banff National Park, Canada. The location was shared with the team, the information would be useful for concept art, character/outfit design and the white box design.

For a basis of how my individual assets would be shaped, I used; reference imagery of locations (Mood board of limestone cave formations), concept designs from 2D designers (to assist with the theme) and sketches I created (based around silhouettes of reference imagery). To improve reference material for the future, I would expand on the variations of assets to create (e.g. take creative license and used a different variation of stone formation which would not be found in limestone caves; obsidian or crystal type rocks for inspiration could give a unique aesthetic style).

Creation Process/Workflow

To make sure I could be consistent with my asset creation I developed a workflow which involved; a basic shape of the model, which was then detailed in higher poly and then finally converted to low poly for the game engine. The workflow was efficient as the models could be created with three versions of each asset (Maya block-out, Zbrush detail file and the final retopology in Maya). For some assets, the detail in ZBrush was not as necessary as some others but modelling in Zbrush assisted in visualising the shape of an asset and the possibility for detail when it comes to texturing.



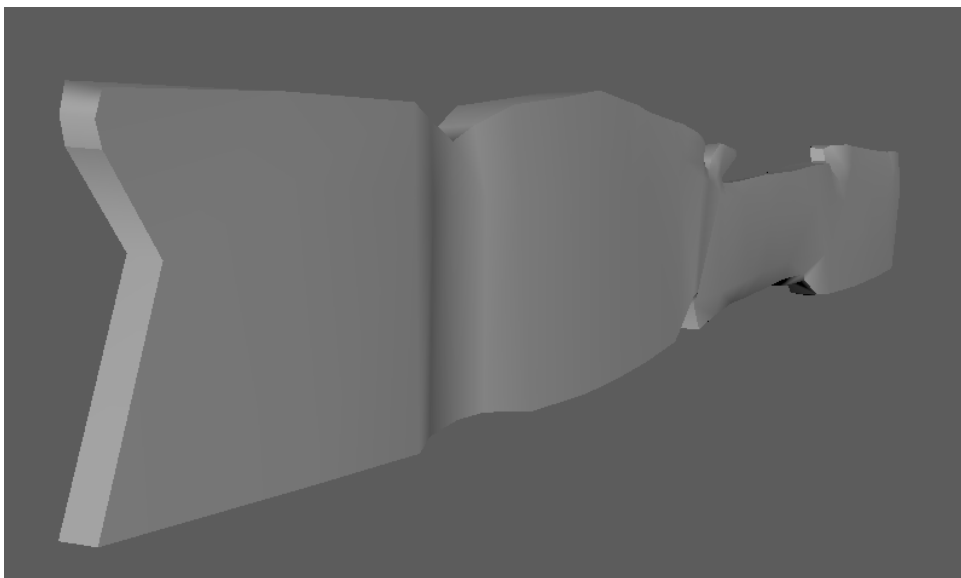
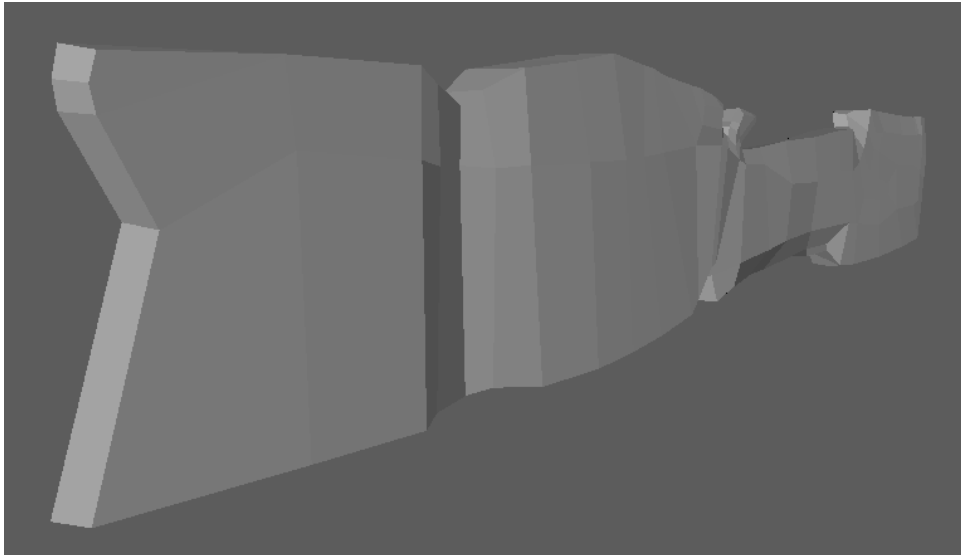
Above- Plank model in ZBrush, with some detail texturing applied and placeholder texture

One of the few assets that was prioritised for scale was the pickaxe, which would be equipped by the player. To make the pickaxe 'unique', I researched into the practicality of how a pickaxe could chop wood and found a specific pick which was purpose made to cut through wood (mattock).



Above- Final white box model of 'Mattock Pickaxe'

Using retopology allowed for cleaner and more precise line flow. After finalising most assets through retopology, I then learnt how vertexes can interpolate light data across polys to make edges visually 'smoother' and then applied this knowledge to my assets (giving a more 'finished' look to the models). With my new understanding of how light affects polys, I would apply this to future asset creations, making sure the asset encompasses the application of hard and soft edges (I found that implementing soft edges would greatly reduce the polycount for my 'rock' assets).



Above- Top: Plank model with hard edges, Bottom: Plank model with some smooth edges

To finalise the asset and make sure they were prepared to use in the white box. I loaded the assets into an empty Unreal level, this allowed me to apply high quality lighting, making sure the assets' UVs could display lighting effects correctly. Rendering the assets could present any issues before going to the white box (e.g. If any polys didn't render correctly, the asset could be adjusted and altered). By using retopology on the assets I could avoid any irregularities in the assets meshes and prevent most problems (with improper geometry) before the assets even got into the engine. There were only a few problems with some asset geometry, and they were easily resolved (through correcting the UV in Maya). UV editing was not essential to this stage of asset creation, as the models would have a solid white/grey texture applied, and for future texturing of these models I can reconfigure the UVs or use Substance Painter.

Team Communication

Communication within the team went well, we were able to give feedback to design styles/ideas before they were developed and implemented. We were also able to establish early on, what 'overarching' aesthetic and gameplay we would be working towards. Through communication with the team, we were able to develop an initial white box game and an understanding of the practical development of continuing the game's creation (e.g. To assess and refine aspects of the game).

However, in the future I would utilise a team GDD much more and add more specifics to each of the team roles (as this would provide a more efficient use of time to choose what to focus on). It would also be more beneficial to have more organised meetings around the GDD to ensure that goals could be completed.