**Scene and Technical**

**Design Document:**

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**Introduction:**

This dark fantasy armoury project which has been inspired by the indie title: Dark and Darker by Ironmace (2022), which for context is a dungeons and dragons influenced PVPVE dungeon crawler game. I have plenty experience playing Dark and Darker; and to be given an opportunity to improve my development skills, gain marks for my course as well as pay homage to my favourite game, is simply too good to pass up.

This Scene Design Document will cover all non-technical, design related aspects of the project, and a sister document, the Technical Design Document will handle the technical specifics of what is required to execute the project.

The project consists of bringing together three main aspects of the 3D production pipeline: modelling, materials and level design for the purposes of limiting the scope of the project to ensure a high level of polish. I have limited experience with all three of these aspects, however they are areas of game production that I enjoy and would like to improve my ability in.

Modelling will be the primary and most heavily invested section of the project, as I will be modelling all the props in the scene myself. Specifically hard-surface modelling dark fantasy and medieval inspired props such as archaic weapons, armour, scene props and the environment.

Materials will be used to add further detail and aesthetics to the models I produce, this is an important step of the pipeline as the materials used can very much make-or-break the visuals of the models and when implemented into the scene, will have a massive effect on the scene in its entirety. Materials while so crucial to the desired result are also the aspect of the production that I have the least experience in and so will be a vital part of my research required to complete the project.

Level design will be used to layout the scene and inform lighting and spacing decisions, however as the scene will be mostly comprised of one room as a base goal, its more scene design than level design.

**Scene Vision:**

I envision a dark fantasy armoury 3D scene, inspired by real medieval props and weapons, using modern dark fantasy video media reference material to assist in scale, art style and architecture.

In this armoury I see a stone brick floor and hard wood weapon racks and furniture, I see iron fixtures and an ambient glowing hearth. The weapons, stored on the racks, crafted from gleaming metal, wielded by a knight in functional, decorative plate armour.

Outside the armoury is the edge of the scene scope, the scene will be set at dusk and the ambient lighting from outside will be low allowing more time to be spent on the interior of the scene as the exterior will be much less visible.

The scene itself consists of an armoury room with some smithy and crafting aspects, inside the room there are armour stands, weapon racks and scene props filling the space, on the edge of the room there will be a hearth, a forge and a workshop area including a workbench and anvil for metal work.

Armour and weapons will be plentiful in the scene to help convey the room’s purpose as a dual armoury blacksmith building, the key highlight of the room will be a full set of decorative and functional combat plate armour, lighting from the hearth, forge and torches will be used to accent the scene and drew attention to features.

The scene is set at dusk and so although there are windows it will be quite dark outside; it is my aim that combining the dim lighting of dusk and the interior lighting features will create an attractive ambience.

**Workflow:**

Create initial scene blockout, research required information, techniques and references, then progress onto asset modelling, next design scene layout and key features, complete documentation, retopology for assets developed, then UVS and textures, once asset development skills are stronger and ready develop highlight features, polish scene and assets.

**Research:**

Research areas include the following topics: advanced 3D hard surface modelling, high quality materials and textures for 3D models, 3D scene design x dark fantasy level design, dark fantasy art / aesthetics style including reference material and finally scene optimisation focused on PC platform.

Advanced 3D hard surface modelling:

[https://books.google.co.uk/books?hl=en&lr=&id=ieF9EAAAQBAJ&oi=fnd&pg=PP1&dq=advanced+3d+hard+surface+modelling&ots=rOnytD5xdR&sig=xszWXtways0gSXpmHj5Fxa2iZBU&redir\_esc=y#v=onepage&q=advanced%203d%20hard%20surface%20modelling&f=falsehttps://books.google.co.uk/books?hl=en&lr=&id=ieF9EAAAQBAJ&oi=fnd&pg=PP1&dq=advanced+3d+hard+surface+modelling&ots=rOnytD5xdR&sig=xszWXtways0gSXpmHj5Fxa2iZBU&redir\_esc=y#v=onepage&q=advanced%203d%20hard%20surface%20modelling&f=false](https://books.google.co.uk/books?hl=en&lr=&id=ieF9EAAAQBAJ&oi=fnd&pg=PP1&dq=advanced+3d+hard+surface+modelling&ots=rOnytD5xdR&sig=xszWXtways0gSXpmHj5Fxa2iZBU&redir_esc=y#v=onepage&q=advanced%203d%20hard%20surface%20modelling&f=falsehttps://books.google.co.uk/books?hl=en&lr=&id=ieF9EAAAQBAJ&oi=fnd&pg=PP1&dq=advanced+3d+hard+surface+modelling&ots=rOnytD5xdR&sig=xszWXtways0gSXpmHj5Fxa2iZBU&redir_esc=y)

<http://164.8.88.107/Dokument.php?id=172650&lang=eng>

<https://www.youtube.com/watch?v=JPRuT4X_LAk>

<https://www.youtube.com/watch?v=4BdJGojnHsw>

<https://www.youtube.com/watch?v=9NhLVyhSAic>

<https://www.youtube.com/watch?v=m8JkR6tI_q4>

Materials research:

<https://books.google.co.uk/books?hl=en&lr=&id=XrWqEAAAQBAJ&oi=fnd&pg=PP1&dq=blender+materials&ots=5nKE6GZPF-&sig=tQYkxGK8wh7-HmFjQOWTO1A3UA8&redir_esc=y#v=onepage&q=blender%20materials&f=false> (Part 1)

Reference materials:

<https://www.canva.com/design/DAGk-TOEeJo/pjPMFpgYDgkO8G4uBj9exA/edit?utm_content=DAGk-TOEeJo&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton>

**Scene Design:**

**Asset List:**

The asset list will contain all of the models used in the project, structured well in an excel spreadsheet for ease of access and strong documentation.

See excel spreadsheet.

[Dark Fantasy Armoury 3D Scene.xlsx](https://demontfortuniversity-my.sharepoint.com/:x:/g/personal/p2729452_my365_dmu_ac_uk/EdfOVyf7hnpLuhtw7BF7iJkBh9jt5uCKqCqKUELvzTGX0g?email=artur.machura%40dmu.ac.uk&e=qvhwTw)

**Modelling:**

BBLAH BLAH BLAH

To begin with the modelling, I will create a very simple scene blockout, using largely primitive shapes. The purpose of this blockout is to give the scene a digital representation early on so that I can identify areas that need more attention or development as well as use the blockout to help showcase or explain the project.

A grey and orange line

AI-generated content may be incorrect.

A grey triangle shaped object

AI-generated content may be incorrect.

**Materials:**