Orbital blast

Level Design Document

Level Design Blockout Project

1. General Game Info

1.1. One Pager

Personal Solo Project - Level Blockout
Multiplayer (+Single player?)
Genre: third person arena shooter
Themes: sci-fi, space station, shooter, arena battle

Elevator Pitch
A classic arena shooter with fast paced action, unique sci-fi setting and stunning modern visuals.

Description
A third person arena shooter with 4+ player action (other combatants AI bots at the moment). Set on a derelict space station, orbiting a strange extraterrestrial planet, players are battling against time and themselves to win before the engines of this sci-fi compound implode and launch everyone into the vacuum!

Inspirations
- Unreal Tournament 2004
- Quake 3 Arena
- Halo 2,3 multiplayer

1.2. Game Design

Core Game Pillars
Shooting - Arena combat - Fast paced

Experience goals
- fast paced action
- unique sci-fi locations
- next-gen graphics
- single player campaign and challenging multi player

Core Loop
Spawn > collect weapons and upgrades > shoot > defeat opponents > win round > rinse & repeat

1.3. Game Features

Player Mechanics
     Skills & Skill Chart
- running
- crouching
- jumping
- directional dash
- shooting

NPCs - Enemies
     Enemy Chart
- other AI characters - same as the PC

Items
- health pickups
- weapon pickups and ammo
- weapon types
     - pistol
     - automatic rifle
     - shotgun

Environment Mechanics
- jump pad
- dash pad
- end timer

2. Level Overview

2.1. General

Level Concept
- exploding orbital space station first person shooter arena

Playable game modes:
- deathmatch
- team deathmatch
- capture the flag
- duel (1on1)
optionally:
- king of the hill
- search and destroy

Objective-Challenge-Reward
O - win the match
C - enemy AI players, environment hazards
R - arena winner, highscore

Tech
- Unreal Engine 5
- Lyra Sample Project

2.2. Setting

Level Narrative
Players find themselves on a crumbling space station once used as a mining colony on the other side of the galaxy.
The station used to have functioning living quarters and work areas for the mining operations. The station's inhabitant numbers dwindled with time as the mining operations became financially unfeasible, until there were so few of them left they became an easy prey for the pirates. One such attack left the station with its core engines overloaded and prone to implosion.

Mood & Atmosphere
- sci-fi, industrial hallways, mixed up with once living quarters of a giant circular space station
- derelict, gritty

Scale & Architectural Style
- orbital space station is circular in shape, consisting of hallways and multistory connection areas
- encompasses only a part of the full space station
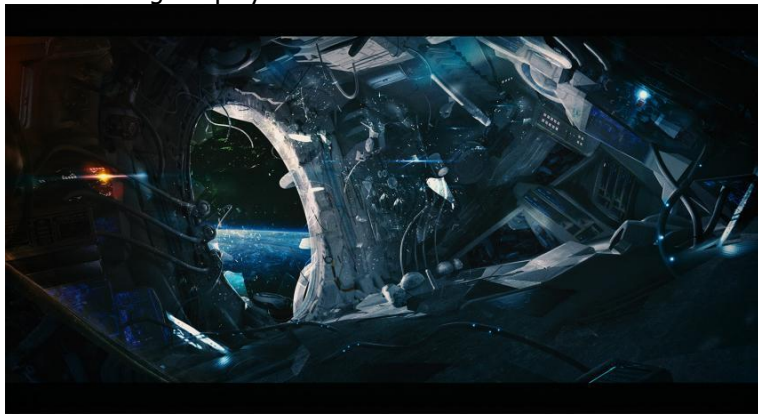- gritty industrial with parts being almost high futuristic laden in paneling and holograms
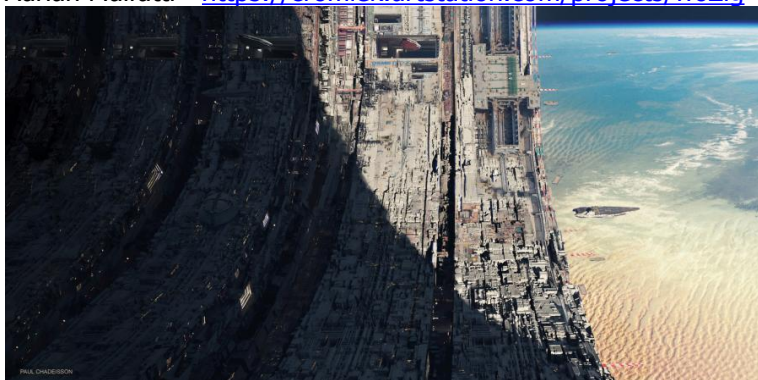
2.3. Moodboard

Blake Rottinger - https://blakerottingerart.com/projects/On5eg

Doom 2016 gameplay screenshot

Adrian Malfatti - https://cromlek.artstation.com/projects/woZlg

Paul Chadeisson - https://www.artstation.com/artwork/ogwwL

2.4. Structure

Landmarks
- imploding engine core
- planet overview
- ventilation shafts
- crashed spaceship?

Possible Major Areas
- exploding core room
- central processing room
- elevator hall
- cryo chambers
- piloting room
- overlook galleries
- evacuation shuttles
- hydroponic hall
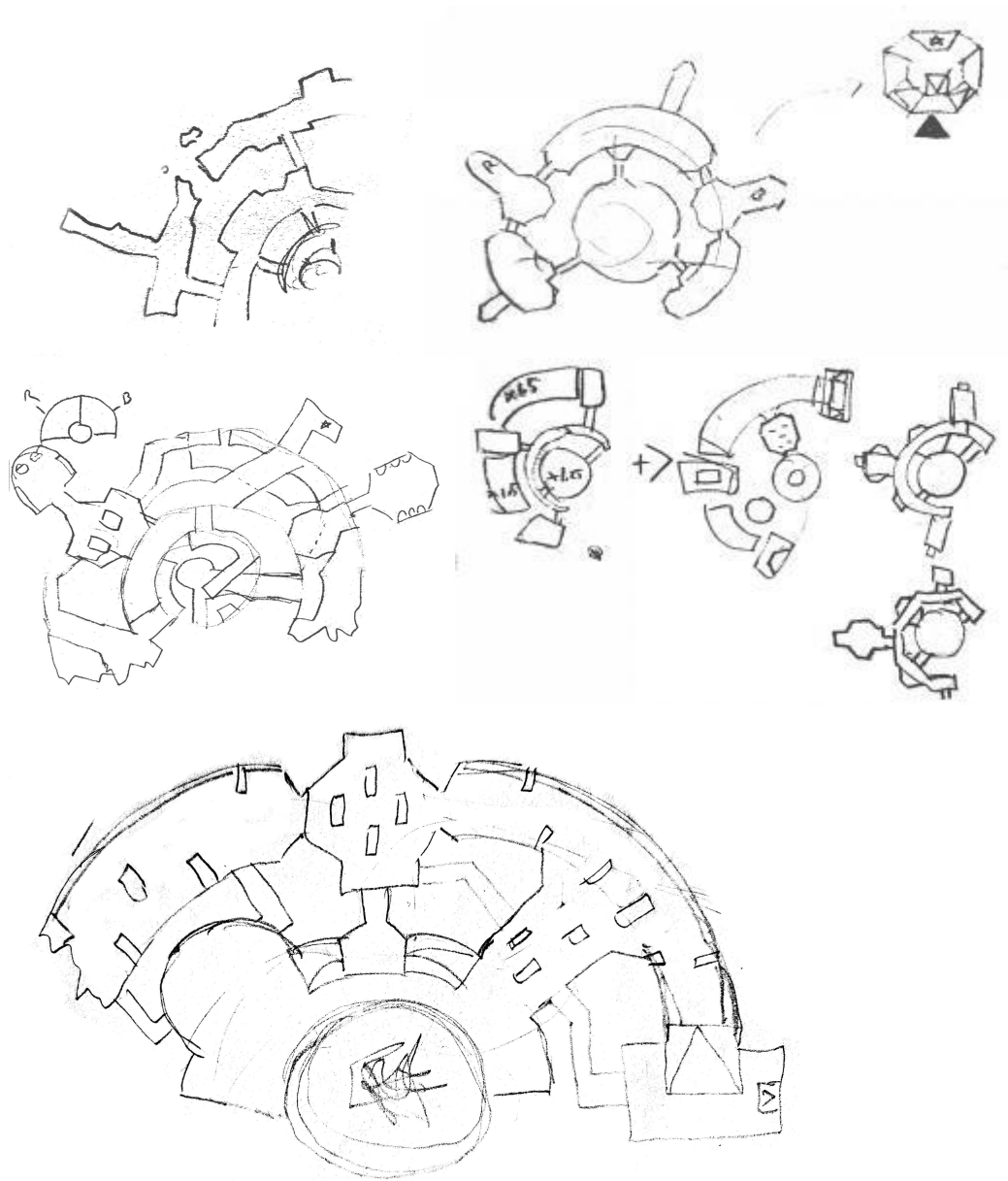- decompression zone

Sequences
- intro sequence with short text description
- explosion sequence - level ending

Level Description
Set on a derelict space station, orbiting a strange extraterrestrial planet, the level consists of a central engine core room, the room is circular and elevated on three floors. Around the core room, and connecting to it, circular hallway galleries overlooking the planetary system around it. The hallways are connected to the central core room via a set of radial rooms and corridors. The whole level is spread out over three floors differing in heights.
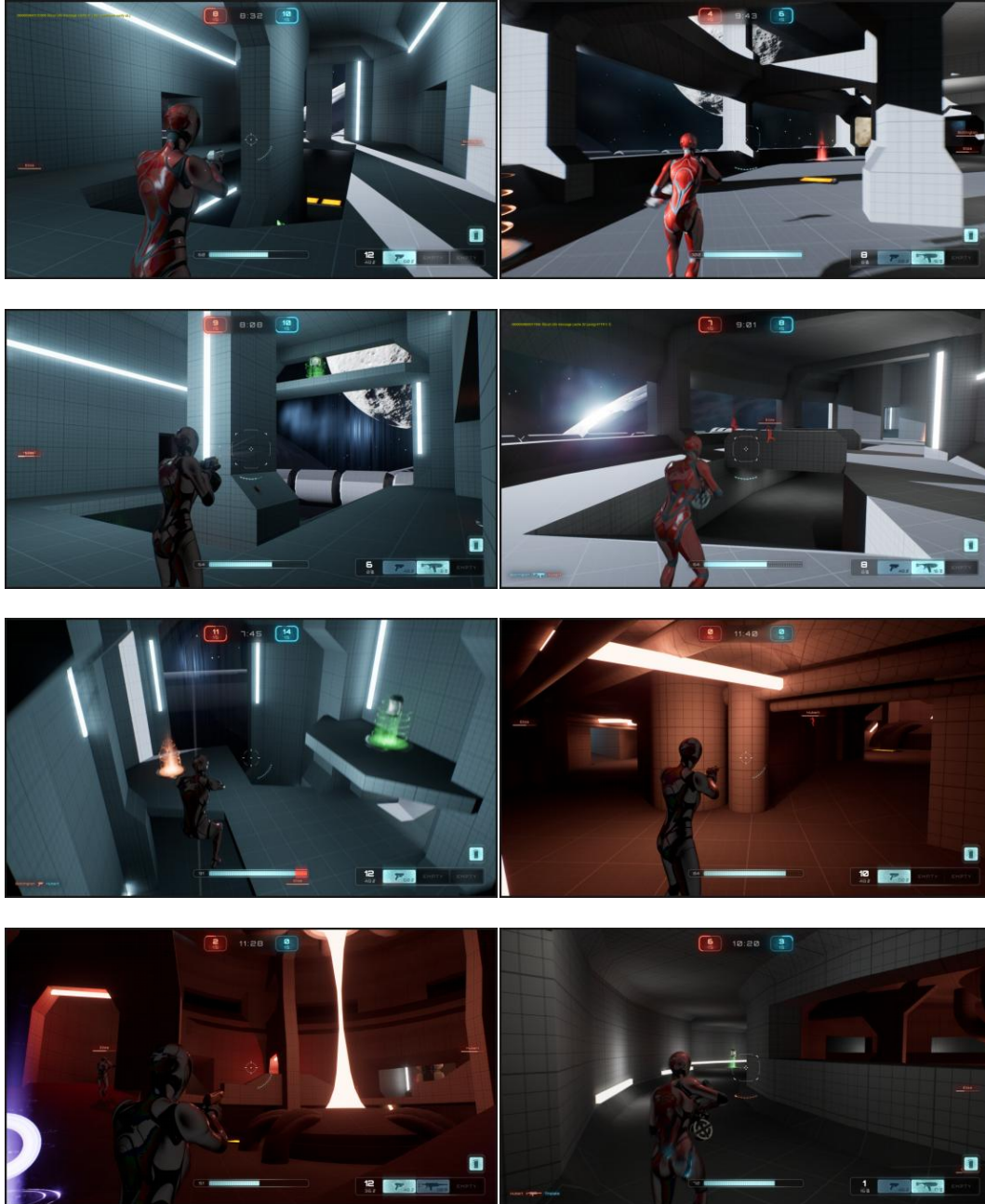
3. Layouts

3.1. Initial sketches & Diagrams

4.0. Blockout

4.1. Gameplay Screenshots

4.2. Level Diagram

Gallery N

Hall W

Gallery S

Hall S

Hall N

Engine Core

Infrastructure Hallway

Hidden Hallway

h — small health
H — large health
w1 — pistol pickup
w2 — shotgun pickup
w3 — rifle pickup