

GOING CRITICAL

> ART BIBLE <

EXPLODING PENGUIN



EXPLOSIVE ENTERTAINMENT

// Outline

Going Critical is a co-op game where you play as a team of thieves escaping from a heist! To stay alive and escape, you must *work together with your team* to repair, refuel and maintain your ship. Succeed, and the bounty is yours.

Artists:

Caitlin O'Brien - Concept Artist, UI, Generalist
Jordan Thomas - Environment/Props artist
Isaac Berry - Character artist

Programming:

Thomas Dufresne - Systems Programmer
Len Farag - Systems Programmer

Designers:

Chelsea Ramirez - Level Design
Andrew Spinks - Systems Design

/// Artist Breakdown

Jordan Thomas



Responsibilities:

**Creating Space Vehicles
Creating Interior environment
Creating props and outside
environment
Creating environment textures**

/// Artist Breakdown

Caitlin O'Brien

Responsibilities:

- Creating Game UI**
- Creating Character rigs**
- Creating Props**
- Creating Concept Art**



/// Artist Breakdown

Isaac Berry



Responsibilities:

**Creating Character Sculpts
Creating Character Textures
Creating Character Reopology**

// Art Style - References



STEAMPUNK WEAPON
«ANNIGILATOR»



// Level of Detail - References



<https://sketchfab.com/3d-models/low-poly-dieselpunk-airboatgunship-338b64daaacc54c808f3b9ed8458ac8b1>



<https://www.artstation.com/artwork/GQVmV>



<https://urgo-game-creator.itch.io/personal-space-station>





Preliminary Concept Art



This is one of the first pieces of concept art that was produced for this game. From the early stages we had a clear vision of one main concept: the ship would serve as the main gameplay area and would use around a third of the screen real-estate to allow for UI elements and for players to see events outside of the ship.

// Colour Palette





Environment

// Environment - Ship

The ship is to be the main environment asset. Attention to detail is the main priority for this environmental piece.

The idea is to have a full scale model of a ship with a transparent roof for the players to look through to control their avatars and do tasks.

Aesthetic references:

- Firefly spaceship (Serenity)
- Star Wars rebel ships



<https://urgo-game-creator.itch.io/personal-space-station>



<https://www.artstation.com/artwork/OKgk8>



// Environment - Ship



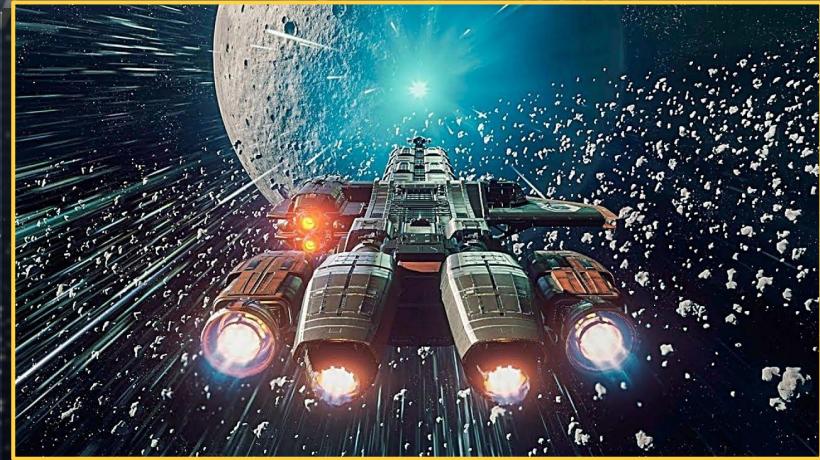
It was extremely fun working on these ships. Trying to tie them to the diesel punk aesthetic was difficult at times. Overall, I think the outcome of these models represent the game how we initially intended.

// Environment - Asteroids

Although this part of the environment won't be the main focus, it will play a major part in the game as it better represents the space (Pun intended) the game will be played in.

The idea will be to race through an asteroid field, dodging asteroids, to complete the race.

Additionally, if we as a team can build this game faster than planned, we can add planets, satellites, debris etc.



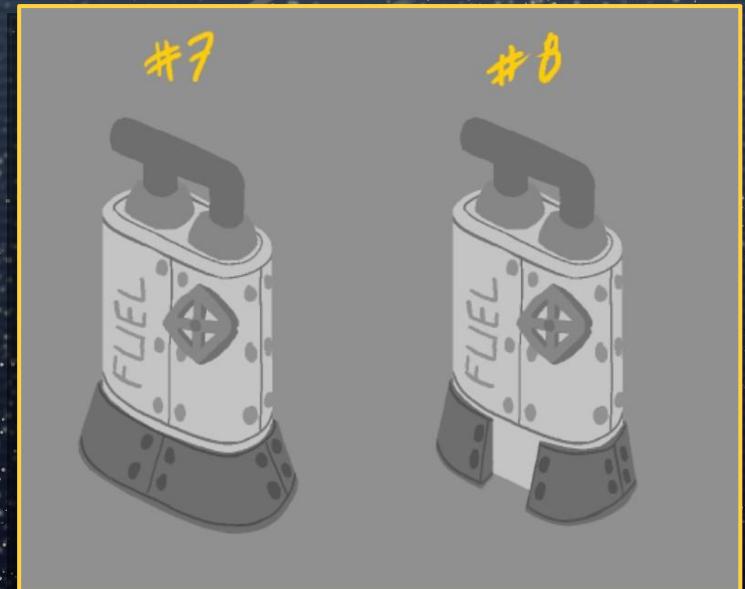
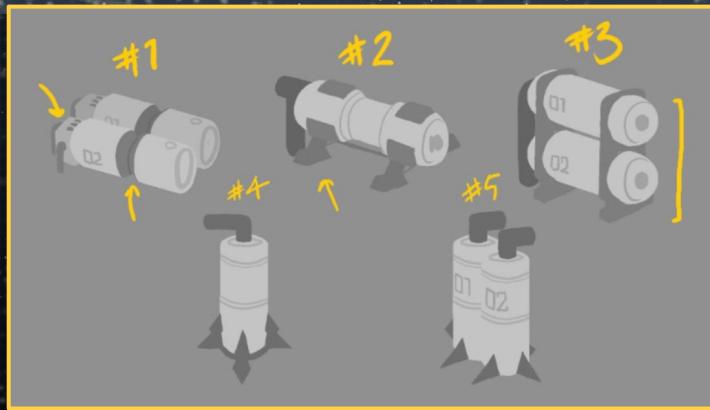
// Environment - Props

The idea is to have modular props we can use in multiple areas of the ships on different ships.

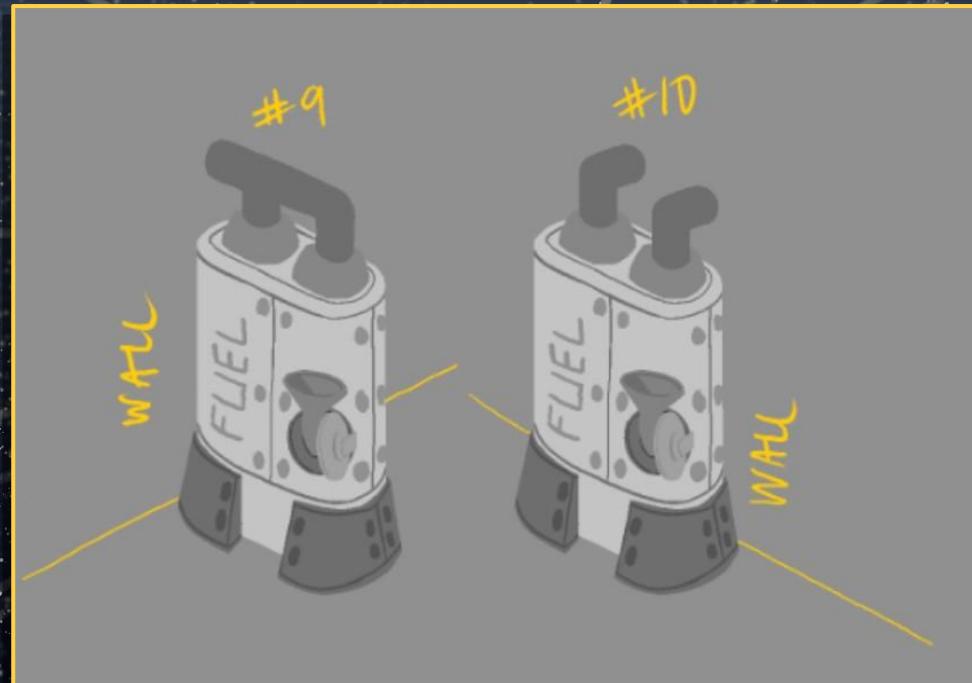
This can include barrels of oil, to plants, to gas canisters etc.



// Fuel Canister Concept Art



// Fuel Canister Concept Art



// Lighting + Atmosphere

- Neutral and even lighting when ship is running smoothly
- Red lights for emergencies





Characters

Character Art Style Guide

Animal Head Style

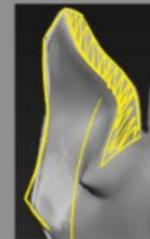


thick ears!
(no thin ears)

prominent brow + jaw

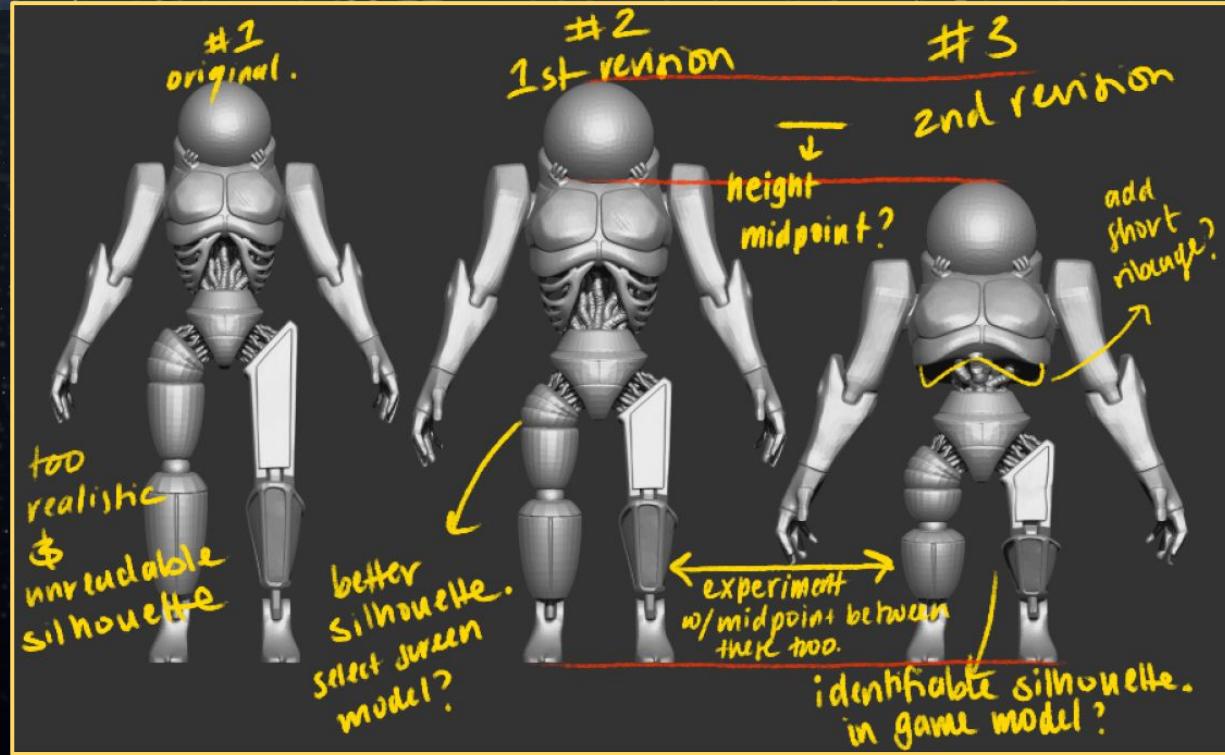
semi-detached nose

smile!



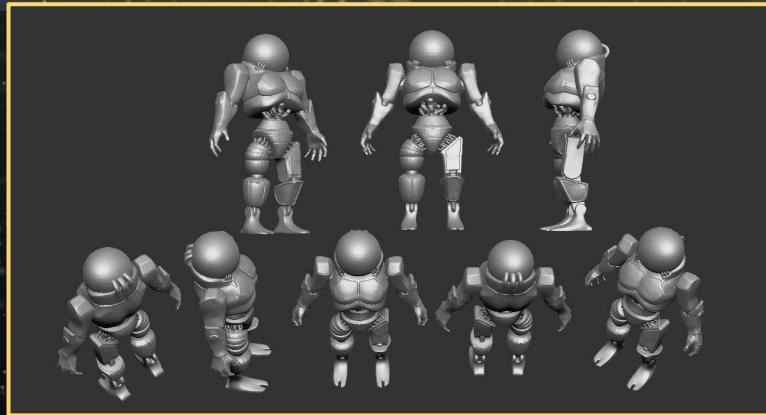
all 'thin' parts
of skin must
have extra
dimension

// Character Proportion Revisions

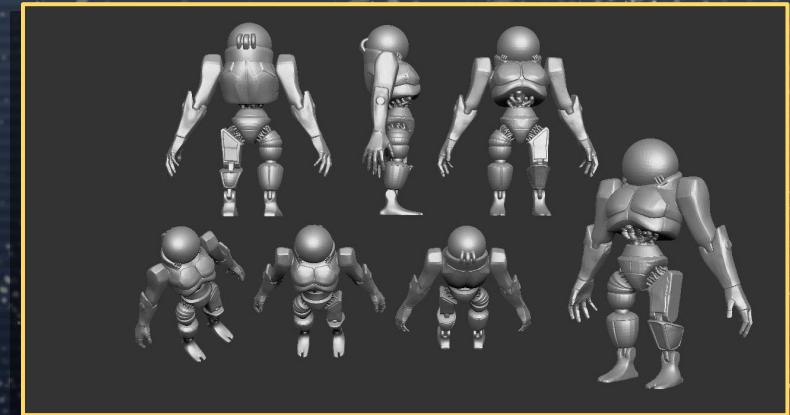


<
Early on in the concept stage we did a lot of experimenting with our characters proportions in the interest of a **clear silhouette** for readability to a high-angle orthographic camera. This was our first round of revisions.

// Character Proportion Revisions - Forced Perspective



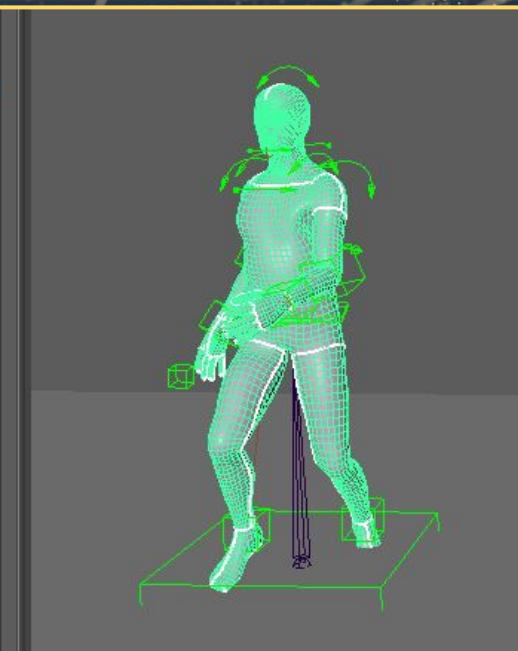
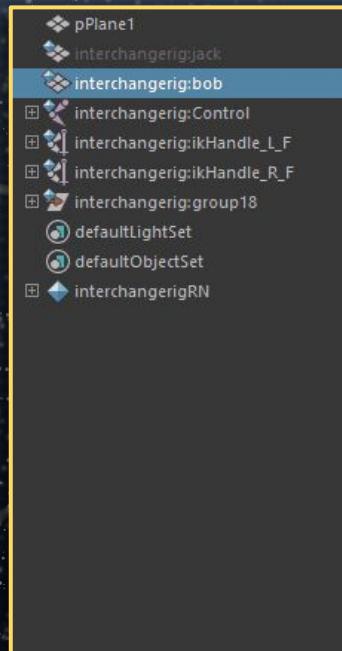
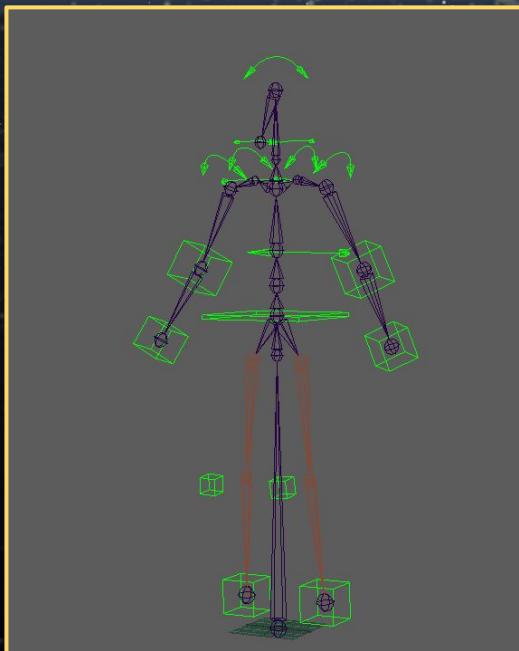
^ character with 'correct' arm proportions



^ character with elongated arm proportions

When putting character models in engine we quickly noticed that at the games forced perspective, the arms looked disproportionate. We found better results when we **purposefully elongated the arms** past the 'proportionally' correct length it would be when viewing the character from the front. By doing this we found that we made a clearer silhouette in game. Similar to how Michelangelo's 'David' is scaled larger in the top half since the sculpture was meant to be viewed from the ground.

// Modular Characters - Proof of Concept



We've decided to use a **singular, universal rig** for all of the characters to save time with rigging and animating while still having the ability to have specialised animation that you wouldn't get from something such as mixamo.

Human Concept Art

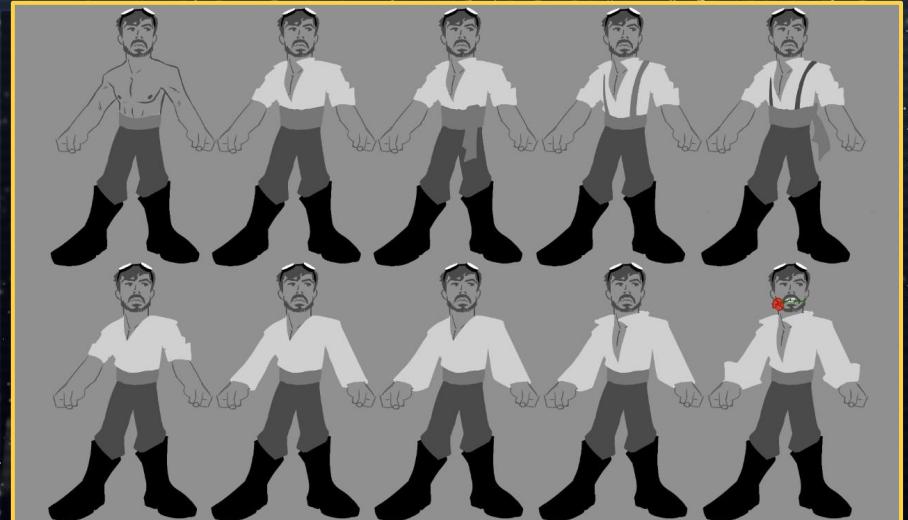
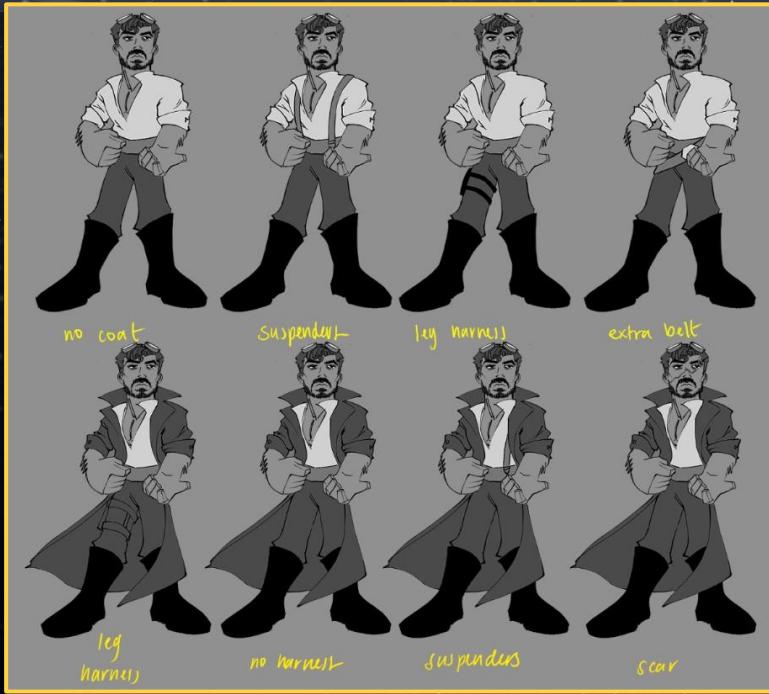


Concept Design for Jacket/Coat for Human Character

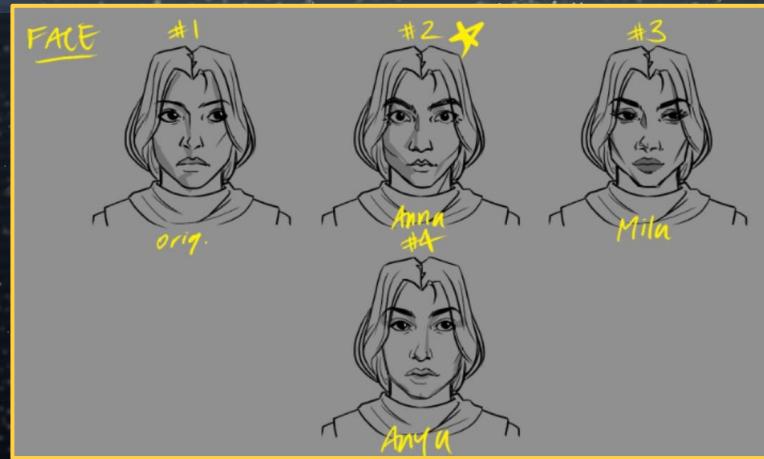
// Human Male Concept Art



// Human Male Concept Art



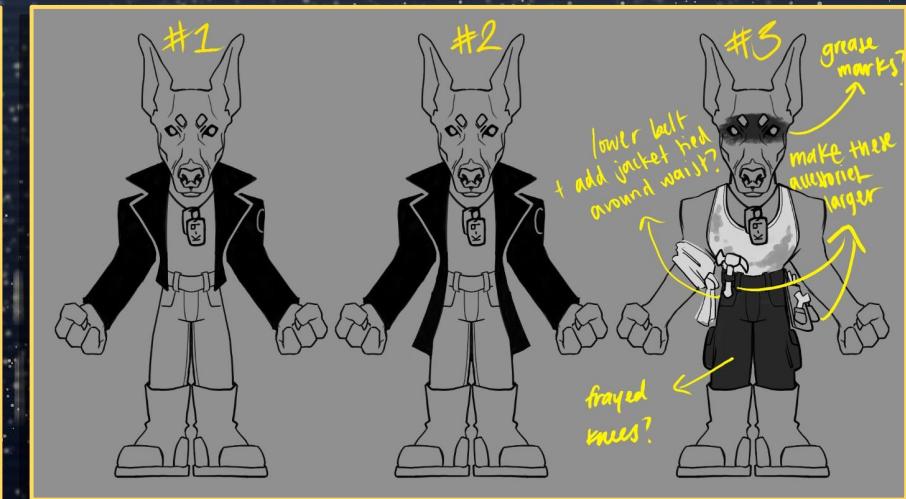
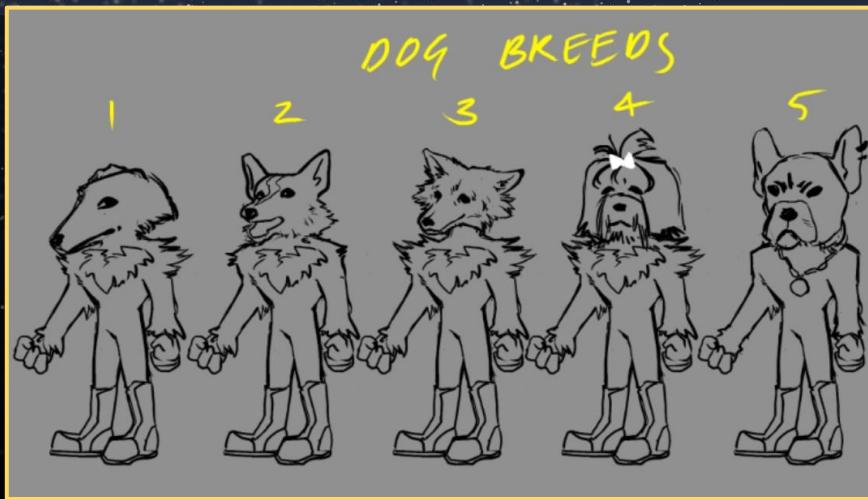
// Human Female Concept Art



// Human Female Concept Art



// Canine Concept Art





User Interface

UI Mood Board



^ We decided to take the UI in a different direction visually to the rest of the game, so we used a minimalist/8-bit style with some 'programming motifs' to contrast the diesel-punk aesthetic and compliment the old-tech vibe of our setting.



< Here we have some examples from Papers Please, Void Bastards and Deltarune that were used as inspiration.

// UI Design/Concept



< Chelsea Ramirez, our teams Level Designer also had her hand in the preliminary concept stage of UI. Her colour palette and VCR font was a huge point of inspiration and was used as a springboard to design all other UI elements. So we decided it was important to document her contribution to the games overall aesthetic.

// UI Mock-up

>
This is one of the first UI mock-ups for this version of the game. It was important to us that our UI elements were not intruding on the main gameplay space and in areas where asteroids would spawn (even though this changed later on)



// UI Sprite Sheets

```
> START THE HEIST <      > TWO PLAYER <          > EASY <
    START THE HEIST           TWO PLAYER                 EASY
> OPTIONS <                > THREE PLAYER <        > MEDIUM <
    OPTIONS                   THREE PLAYER               MEDIUM
> QUIT <                  > FOUR PLAYER <         > HARD <
    QUIT                      FOUR PLAYER                HARD
> SELECT YOUR GETAWAY SHIP <          > SELECT YOUR TEAM <
> SELECT YOUR ROUTE <
```

<
The text in the game menus are made up of three layers, The text in a primary colour, a drop shadow beneath it and a Linear Dodge layer with Gaussian Blur under that.

>
The Selection boxes used for character selection were a particularly puzzling to get right, they needed to function when layered on top of each other in the character menu while also staying out of each others way for clarity.

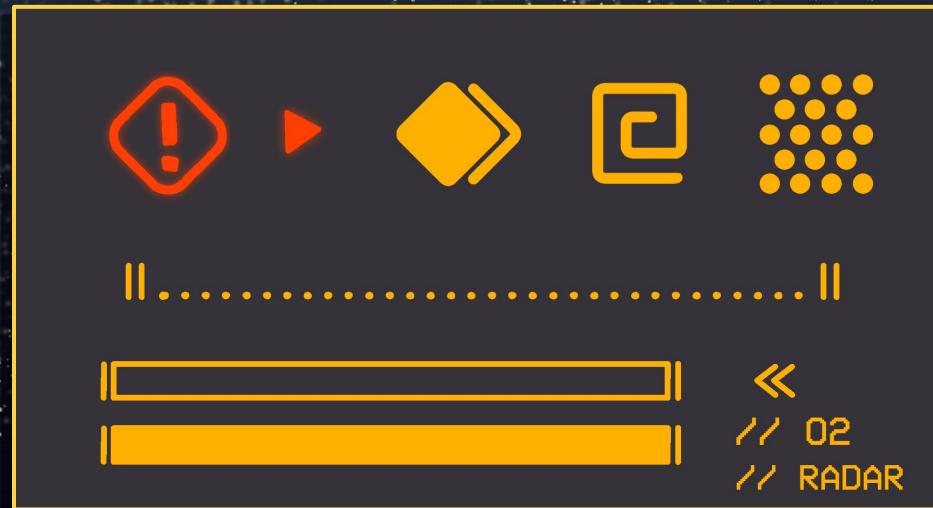


// UI Sprite Sheets

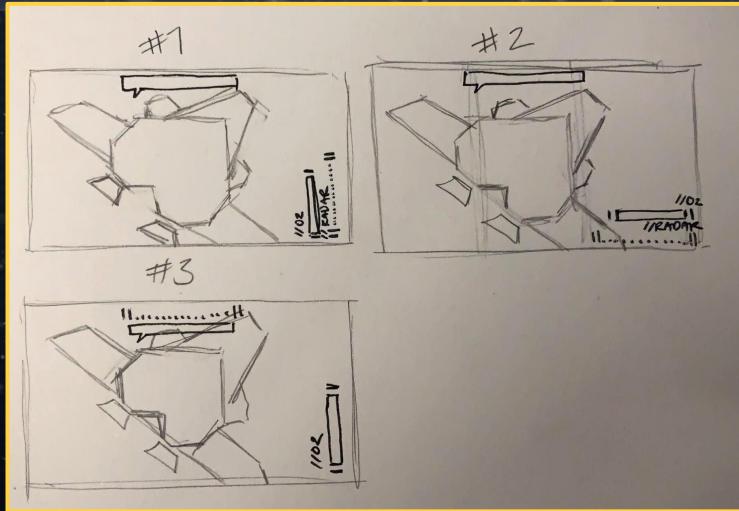


4

In an earlier version of UI, the Pickup Fuel icon was a simple up arrow while the fuel icon was used to indicate a refueling station, this ended up causing some confusion among players from poor UX so the icons were changed



// UI Refactoring



<

As we tested the game, we realised that having all the status bars at the top of the screen and dialogue at the bottom, it was beginning to get cramped, and it was cutting off visibility at the bottom of the screen for 'The Fuzz' event. We came up with some ideas for moving the status bars to the bottom right of the screen in **horizontal and vertical alignments** in order to avoid areas where asteroids spawn.

>

Final UI Layout





Opening Cutscene

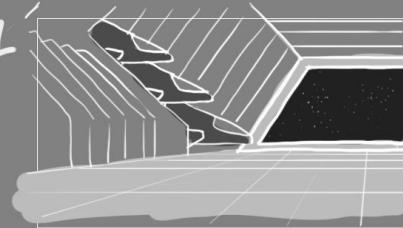
// Storyboard

>
We wanted some kind of backstory to our game so the player could have some context to what their characters are trying to get away with, so here we have a short opening cutscene showing our band of criminals infiltrating a ship hangar and hijacking a ship to make their escape.

OPENING CUTSCENE

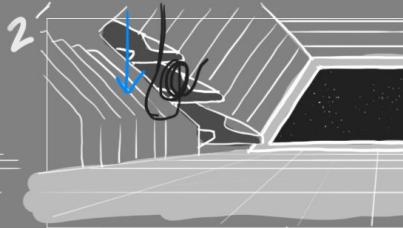
INT: SHIP HANGAR

1



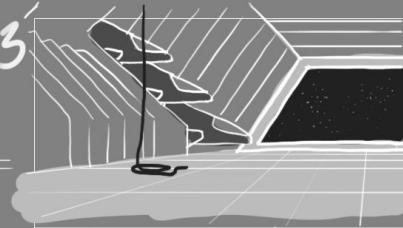
INT: SHIP HANGAR

2



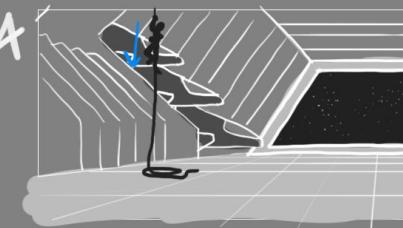
INT: SHIP HANGAR

3



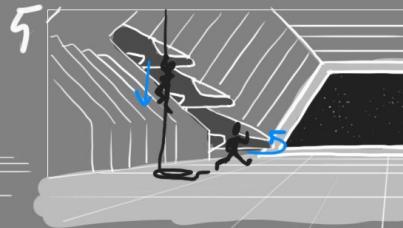
INT: SHIP HANGAR

4



INT: SHIP HANGAR

5



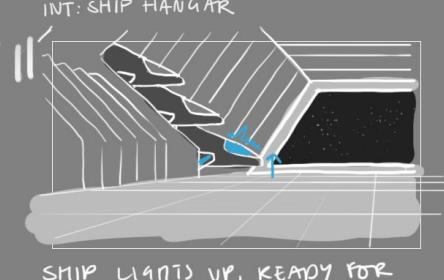
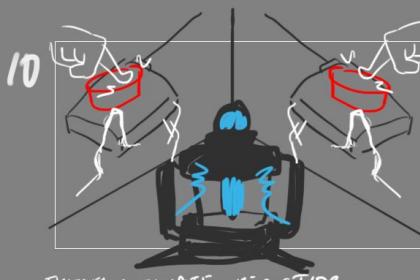
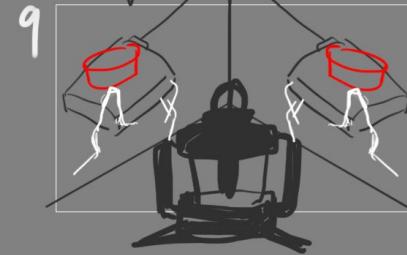
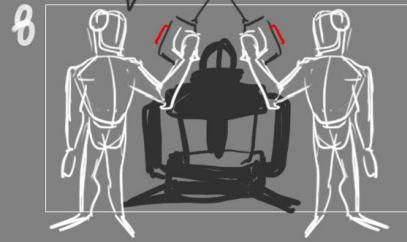
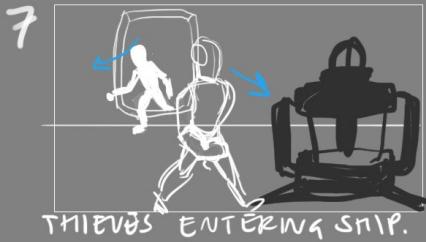
6



Storyboard

OPENING CUTSCENE

INT: SHIP



12

GAME
START!

< With the limited time, we set out to make the cutscene use **as little assets as possible** and do some simple animating in DaVinci Resolve. The entire scene uses only three backgrounds and a handful of 2d renders of already made 3d assets. The rest was illustrated in Photoshop.



// Technical Details

Technical Details



Photoshop
Concept Art
GUI



Marmoset
Baking
Rendering



ZBrush
Sculpting



Maya
Modelling
Rigging
Animation



Substance Painter
Texturing
Procedural + Hand
Painted



Substance
Designer
Tiling Materials
VFX Particles/Noise



Unity
Shaders
Layout
Lighting

// Pipeline Details - Character



Photoshop
Concept Art
GUI



ZBrush
Sculpting



Maya
Modelling
Rigging
Animation



Substance Painter
Texturing
Procedural +
Hand Painted



Unity
Shaders
Layout
Lighting



Marmoset
Baking
Rendering

/ Pipeline Details - Environment



Photoshop
Concept Art
GUI



Maya
Modelling
Rigging
Animation



Substance
Designer
Tiling Materials
VFX Particles/Noise



Substance Painter
Texturing
Procedural +
Hand Painted



Unity
Shaders
Layout
Lighting



Marmoset
Baking
Rendering

// Naming Conventions

<i>Asset Type</i>	<i>Prefix</i>
Static Mesh	SM_
Skeletal/Character Mesh	CM_
Animation	A_
Material	M_
Texture	T_
User Interface	UI_