

Retro Resurgence

Game Design Document

Designed By:
Yatharth Padharia and Gabriel Whitson
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Index

1. Title Page
 - 1.1. Game Name
 - 1.2. Tag line
 - 1.3. Team
 - 1.4. Date of last update
2. Game Overview
 - 2.1. Game Concept
 - 2.2. Target Audience
 - 2.3. Genre(s)
 - 2.4. Game Flow Summary – How does the player move through the game? Include both the interface and the game itself.
 - 2.5. Look and Feel – What is the basic look and feel of the game? What is the visual style?
3. Gameplay
 - 3.1. Objectives – What are the objectives of the game?
 - 3.2. Game Progression
 - 3.3. Play Flow – How does the game flow for the game player
 - 3.4. Mission/challenge Structure
 - 3.5. Puzzle Structure
4. Mechanics (Key Section)
 - 4.1. Rules – What are the rules to the game, both implicit and explicit.
 - 4.2. Model of the game universe. Think of it as a simulation of a world, how do all the pieces interact?
 - 4.3. Physics – How does the physical universe work?
 - 4.4. Economy – What is the economy of the game? How does it work?
 - 4.5. Character movement in the game
 - 4.6. Objects – how to pick them up and move them
 - 4.7. Actions, including whatever switches and buttons are used, interacting with objects, and what means of communication are used
 - 4.8. Combat – If there is combat or even conflict, how is this specifically modeled?
 - 4.9. Screen Flow -- How each screen is related to every other and a description of the purpose of each screen
 - 4.10. Game Options - What are the options and how do they affect game play?
 - 4.11. Replaying and saving
 - 4.12. Cheats and Easter Eggs
5. Story and Narrative
 - 5.1. Plot elements
 - 5.2. Game story progression
6. Game World
 - 6.1. General look and feel of world
 - 6.2. Areas
 - 6.2.1. General description and physical characteristics
 - 6.2.2. How relate to the rest of the world
7. Characters.
 - 7.1. For each character

- 7.1.1.Back story
 - 7.1.2.Personality
 - 7.1.3.Appearance
 - 7.1.4.Relevance to the story
 - 7.1.6.Relationship to other characters
- 7.2. Artificial Intelligence Use in Opponent and Enemy
- 7.3. Non-combat and Friendly Characters
- 8. Levels
 - 8.1. Training Level
 - 8.2. For each level
 - 8.2.1.Synopsis
 - 8.2.2.Required introductory material and how it is provided
 - 8.2.3.Objectives
 - 8.2.4.Details of what happens in the level
 - 8.2.4.1. Map
 - 8.2.4.2. Critical path that the player needs to take
 - 8.2.4.3. Important and incidental encounters
- 9. Interface
 - 9.1. Visual System
 - 9.1.1.HUD
 - 9.1.2.Menus
 - 9.1.3.Camera model
 - 9.2. Control System – How does the game player control the game? What are the specific commands?
 - 9.3. Audio, music, sound effects
 - 9.4. Game Art – intended style
 - 9.5. Help System
- 10.Production
 - Team List
 - Prioritize Features List
 - Milestone Timelines
- 11. Workflow

Game Overview

"Retro Resurgence"(WIP title) is a 3rd Person where two heroic cops try to save the city of Los Angeles from the local cult ("Cult of the angels") who are set to change the face of the city by bombing it and amidst the chaos they wish to erect a new city. The event is called "refining" and they wish to achieve "New Dawn".

Target Audience

Late Teens and Adults.

Genre

Third Person Shooter

Game Flow Summary

In *Retro Resurgence*, the game flow alternates between cinematic storytelling and intense gameplay. The story unfolds through cutscenes, introducing key moments in the narrative, such as William's past in Vietnam and his current mission in 80s Los Angeles. Each cutscene transitions smoothly into gameplay segments, where players take control of William, navigating through different environments like rain-soaked streets, neon-lit bars, and gritty parking garages. The flow maintains a balance between story development and action, with tutorial and combat sections integrated naturally, building momentum as players uncover the deeper plot through a mix of narrative-driven scenes and high-stakes gameplay.

Look and Feel

The game's visual aesthetic captures the duality of 80s LA. The streets are alive with neon lights, bustling crowds, and the vibrant energy of a city that never sleeps. Billboards flash advertisements in neon pinks and blues, synth music pours out of nightclubs, and people fill the sidewalks. On the surface, the city appears lively, thriving, and full of excitement. But beneath this façade of brightness and life, there's a sinister undercurrent. The streets may seem happy and alive, but corruption, crime, and decay are lurking in the shadows. The neon lights only serve to highlight the stark contrast between the glittering surface and the darkness that seeps into every alley and corner.

This juxtaposition of lively color and hidden evil is at the core of Retro Resurgence's aesthetic showing that even in a city full of life, danger and darkness are always present.

Gameplay

The gameplay will feature high risk gunfights and combat where the player can be attacked from any end with the AI system. The game will have dynamic environment elements where the player can use the environment for their benefit.

Objectives

The game features multiple levels where the player has to complete a certain set of objectives in order to advance in the level.

Game Progression

The game progresses as the character passes through all the challenges.

The first Level :Meet Jack

The Second Level : Find out the motives of the antagonist

The Third Level : Sneak into the Assembly

The Fourth Level : Chase the Antagonist. (Citywalk part)

The Fifth Level : Fight the Ambushers(Vietnam Backstory)

The Sixth Level : Find the captured assets of the squad.(Vietnam Backstory)

The Seventh Level: Chase the Antagonist (Universal Part)

The Eighth Level: Fight Back to the parking.

The Ninth Level: Reach the Burbank Airport

There will be different enemy types as well:

- Assault Class: Enemies using Assault rifles and pistols.
- Marksman Class: Sniper and Pistol.
- Medic Class: SMGs or Shotgun and pistol.
- Brute Class: Sledge Hammer or Axe.

Killing these enemies will drop loot such as Ammos and other gameplay ability items.

Mechanics

The main mechanic of the game is the gunfight. Where the player will be able to engage with the enemies in a gunfight or hand to hand combat,

1. Grenades : Explosives and Hand Grenades
2. Beatdown Takedowns: The player will be able to perform dynamic takedowns once the enemies health is near zero and is vulnerable.
3. Stealth Takedown : It is possible when the character is in stealth mode and is not visible and the enemies are not aware of the player's presence.
4. Gunplay: The Player will be able to experience a more diverse type of gun play where they can play with their own style.

Model of the game universe

The universe of *Retro Resurgence* is set in an alternate 1980s, blending gritty realism with cinematic flair. The world mirrors the urban decay and neon-soaked aesthetic of classic 80s action movies like *Terminator* and *RoboCop*, while adding a darker, more atmospheric tone reminiscent of *The Batman* (2022). Los Angeles is the heart of the story, with its rain-drenched streets, neon lights, and shadowy alleys creating a moody backdrop for the unfolding narrative. Beyond the city, the game dips into William's war-torn memories of Vietnam, where the jungle, scarred by conflict, stands in stark contrast to the urban sprawl. Each environment—from the grimy parking garages and steampunk-themed bars to the stormy Vietnam jungle—evokes a sense of danger and mystery. The game universe is gritty and raw, steeped in 80s nostalgia but with a more modern, textured edge that reflects William's internal struggles and the turbulent world around him.

Physics

- Characters: The characters will have full IK bodies where they will have accurate foot placing. Also the characters will have Locational Damage Animations where the characters will change their animation form based on the part of the body they're injured on. The characters will showcase accurate ragdoll physics once they are dead. There will also be dismemberment of players where the damaged limbs will be detached from the body upon immense damage.
- Foliage: The foliage will have accurate vertex based wind animation which will be a result of importing from Speedtree. The foliage will also showcase interactivity with players and AI that will add a layer of realism to it.
- Environment: As Stated above the environment will showcase physics dynamically when it is interacted with. For example pieces of rubble can be shot

to simulate physics as if they are actually being shot at. Liquids such as water will react according to the bullet, for example spraying a mist of water particles and forming ripples on the water.

- **Vehicles:** The Vehicles will have procedural physics on them. When dragged forward the wheels will animate according to the direction of the locomotion. Additionally the vehicles will showcase damage based on the location on which it was received, Like the hood will pop automatically when shot repeatedly, the engine will start smoking once it has been dealt enough damage and it will eventually catch fire.
- **Simulations:** The Simulations will be mainly carried out by in-engine particles system Niagara and cascade Particle systems and Houdini particles. Complex physics simulation particles such as smoke and fire will use flipbook animations but will react to the environment's collision by bouncing the sprites off.

Economy

The economy in Retro Resurgence revolves around managing limited resources such as ammunition, weapons, and grenades. Bullets are scarce, requiring players to be mindful of their shots and encouraging precise aiming. Weapons vary in availability, and more powerful options are found through exploration or defeating certain enemies. Grenades and explosives are rare, making them valuable assets reserved for challenging situations. Players are encouraged to scavenge environments for supplies, carefully rationing their resources to adapt to different combat scenarios.

Character movement in the game

Movement Abilities

- **Omni-directional Movement:** Characters can move in 8 directions, granting players more control and tactical advantages in combat.
- **Sprint:** Players can press "Shift" on the keyboard or the left analog stick on controllers to sprint, allowing for quicker movement, helpful for chasing or evading enemies.
- **Locational Damage Impact:** Characters will adapt their movements based on the injured part of their body, displaying unique animations for injuries, adding to realism.
- **Vaulting & Climbing:** Characters can perform simple vaulting and climbing actions over obstacles, enabling fluid traversal.
- **Sliding & Crouching:** Characters can slide and crouch to stay low, helping with stealth and tactical positioning.

- **Hand IK Actions:** Characters will use their hands to balance and react to tight spaces, enhancing interaction with the environment.
- **Idle Animations:** While standing idle, characters perform different animations such as checking their watch or cracking their neck, adding life to their movements.

Movement Mechanics

- **Standard vs. Tactical Movement Modes:**
 - **Standard Movement Mode:** Uni-directional movement, where character orientation is more controller-based, independent of the camera's direction, ideal for straightforward navigation.
 - **Tactical Movement Mode:** Omni-directional, where the character's movement is based on the camera orientation, giving players greater flexibility and control, beneficial for combat situations.
- **Locational Injury Adaptation:** Characters' movement changes according to the damage sustained, showcasing altered walking or running animations when injured or dismembered.

This system provides a comprehensive movement experience, allowing players to switch between standard and tactical modes based on their gameplay preferences while adapting to different combat and exploration situations.

Objects

Destructible Objects: The objects or the environment props will have a complex destruction system where there will be visible destruction using Render Targets and Niagara System. Although the environment WILL have some physical destructible objects which will be chunked using a 3D Voronoi texture.

Physical Objects : Physical objects such as barrels and trash can will be simulated upon hit to optimize gameplay, Other objects such as hanging lights will simulate rope constraint mechanics and react according to events.

Foliage: The foliage such as grass blades and ferns will react to all characters and human beings in the level and react accordingly to their movement such as bending of leaves and grass getting squished as the players steps on it.

Combat

The enemy AI in game showcases a sophisticated and dynamic combat system that is built on strategic communication and intelligent behavior. Each enemy type has its distinct roles, tactics, and weaponry, making every encounter challenging and engaging for the player. The enemies can operate individually or coordinate as a team, and their combat behavior shifts based on the current state they are in. Here's an in-depth breakdown of how the enemy AI functions in your game.

Enemy Types and Classes

1. Assault Class

- **Weapons:** Assault Rifle, Pistol
- **Combat Behavior:**
 - The Assault Class is the most versatile and aggressive in combat. They frequently communicate with their team to decide whether to push forward, maintain their position, or shoot from cover. If they sense the player is pinned down, they might take advantage of the opportunity to flank or launch an all-out attack.
 - If the player gets closer, they are capable of switching to melee attacks using the butt of their rifle or their pistol.
- **Role:** Frontline attackers, capable of handling mid to close-range combat, and they often engage first when the player is spotted.

2. Medic Class

- **Weapons:** Shotgun, Stim Gun (used for healing)
- **Combat Behavior:**
 - The Medic Class stays slightly behind the frontline but actively engages with their shotgun at close range. They periodically shoot their allies with a stim gun to heal them, which makes them a priority target for the player.
 - They communicate with other enemies to determine when healing is needed and might fall back to safety while still providing support.
- **Role:** Support units that maintain the health of other enemy AIs, ensuring that the player has to make a calculated effort to deal with them first.

3. Sniper Class

- **Weapons:** Sniper Rifle
- **Combat Behavior:**
 - The Sniper Class always seeks high vantage points, remaining distant from the main action. They communicate with their team to alert them of the player's position.
 - Before taking a shot, the Sniper Class aims with a visible red laser. If the player lingers in their line of sight, the sniper will fire, delivering high damage. They are also capable of relocating if their position is compromised.

- **Role:** Long-range support, providing high damage from a distance, and acting as an area denial unit that the player must be cautious about.
- 4. **Brute Class**
 - **Weapons:** Sledgehammer, Throwable Hatchet
 - **Combat Behavior:**
 - The Brute Class acts as the tank of the enemy team, charging fearlessly toward the player. If the player maintains a distance, the Brute will throw a hatchet as a ranged attack.
 - They communicate with the Assault Class to determine when to push forward and often draw the player's attention, allowing others to flank.
 - **Role:** Heavy hitter and distraction, capable of absorbing damage and delivering devastating melee attacks.
- 5. **Flamethrower Class**
 - **Weapons:** Flamethrower
 - **Combat Behavior:**
 - The Flamethrower Class specializes in close-range engagements and will slowly advance toward the player, spewing fire to force the player out of cover. Their weakness lies in the gas tank on their back, which can be blown up for an instant kill.
 - They coordinate with the Assault Class to apply pressure from multiple angles.
 - **Role:** Area denial and crowd control, capable of blocking off routes and forcing the player into open spaces.
- 6. **Grenadier Class**
 - **Weapons:** Grenade Launcher
 - **Combat Behavior:**
 - The Grenadier Class stays behind cover and lobbs grenades at the player, using their weapon to flush the player out of hiding or deal damage in enclosed spaces. They frequently communicate with their team to decide when to fire.
 - They might switch positions to gain a better angle for their explosive attacks.
 - **Role:** Explosive support, disrupting the player's positioning and applying pressure from a distance.

Enemy AI States

Idle State

- Enemies in this state roam around or follow a patrol path. They are not actively searching for the player but maintain awareness of their surroundings.

Investigating State

- When an enemy AI hears or sees something suspicious, they enter the Investigating State, carefully examining the area. They communicate with others to be alert and might call for reinforcements if they confirm the player's presence.

Combat State

- Once the player is detected, the enemy AI enters Combat State. In this state:
 - Enemies constantly communicate to strategize their attack, flanking the player or taking cover.
 - They wait for openings to engage in melee combat if the player gets too close.
 - If overwhelmed, they may call out for support from other classes, such as requesting healing from the Medic Class.

About to Die State

- When an enemy's health reaches a critical level, they enter this state. They will:
 - Call out for a Medic if one is nearby.
 - If no Medic is available and they are the last remaining enemy, they will beg for their life, playing a unique animation.
 - If not the last enemy, they simply fall to the ground and die.

Dead State

- The enemy is dead and no longer poses a threat, becoming an inanimate object on the battlefield.

Weapon Classes

Assault Rifle

- Versatile mid-range weapon used primarily by the Assault Class.

Shotgun

- Close-range, high-damage weapon wielded by the Medic Class.

Pistol

- Sidearm used by the Assault Class for backup or when in melee range.

Sniper Rifle

- Long-range precision weapon used by the Sniper Class to deal significant damage.

Grenade Launcher

- Explosive weapon used by the Grenadier Class to disrupt the player's cover.

Flamethrower

- A weapon capable of dealing damage over time, wielded by the Flamethrower Class to force the player out of cover.

Grenades

- Standard explosives used by various enemy classes for area-of-effect damage.

Screen Flow

Main menu

The main menu will appear when the player starts the game. It will contain Options such as:

1. Continue
2. New Game
3. Options (Settings)
4. Character Library

Options (Setting)

1. Gameplay
2. Audio
3. Graphics
4. Controller and Keybinds

Pause Menu

1. Continue
2. Save Game
3. Load Game
4. Reload Last Checkpoint
5. Photo Mode
6. Options (Setting)
7. Exit to Main Menu

Game Options

1. Gameplay
2. Audio
3. Graphics

4. Controller and Keybinds

Replaying and saving

In Retro Resurgence, the saving system is designed to offer both convenience and strategic checkpoints for players. The game automatically saves progress at key moments, such as the conclusion of cinematics or after significant events, which act as primary checkpoints throughout the story. This ensures that players can resume from pivotal moments without losing progress.

Additionally, players have the freedom to manually save their game at any point during gameplay. This gives them complete control over their progress and allows them to capture specific moments or decisions. From the main menu screen, players can access their saved files and reload from any previously saved point, providing a seamless and flexible experience.

Easter Eggs

The game will contain many pop culture references and will also be accompanied by songs, which can be disabled in sound settings with the option to disable copyrighted music. There will also be a hidden room with a torch and a revolver(Pickupable) as a nod to Alan Wake.

There will also be posters of visiting bright falls for the holidays and a deer mask hung on it to also give a special shoutout to Remedy's alan wake 2.

There will be a certain skeleton trapped in one of the cages in like the one in Uncharted 4 to which Johnny will see and reply, ("For those who prove worthy paradise awaits") adding a little nod to the finale of the series.

There will also be an axe on one of the trees with a bow laying on the ground nodding to latest god of war series.

A particular man in suit looking at you through the window with referencing to Gman.

The ring necklace from wolfenstein on one of the storefront near the bar.

Story and Narrative

The story takes place in 1980's LA. The game features the story of two heroic cops who attempt to take down a local cult whose aim is to give birth to humanity again and aid the world. The story plays in two parts, one is in 1980s LA where the main character William and his partner Owen take on the cult. And the second part of the game swims around the backstory of William. What happened to him in the Vietnam war. After the Vietnam's story the story continues in LA where William chases Valkov to the ends of the earth. After cornering him on the bridge William learns a dark truth about his past which leads to Valkov's demise. Now acquiring critical information from his body, William and Owen try to flee the scene but are greeted with Valkov's mercenary. And the chase begins.

Plot elements

- Level 1(Los Angeles)
 - The story begins with meeting Jack in the bar, after the messenger gives you the green signal. Where Jack debriefs William over the situation (Bar)
 - The following of white van to Universal Studios (Freeway)
 - The sneaking to the mercenaries of the white van (which can be then change to combat if detected) (Parking)
 - Interrogating one of the mercenary (Parking Garage)
 - Meeting the gatekeeper in the bar (Restaurant)
 - The meeting (The Lair)
- Level 2(Los Angeles)
 - Food court fight (The sniper sequence)(Food court)
 - Chase towards the ends of the mall
- Level 3(Vietnam)
 - Vietnam opening scene.
 - Ambush from the VC
 - Traversing the forest to the Village
 - Village (Sneaky but can be changed to combat if detected).
 - The Main Building's cave encounter
 - Escaping from VC
 - Death of Johnny
- Level 4(Los Angeles)
 - Continuing chase in Universal Amusement park
 - The reveal on the bridge.
 - The car chase.
 - The airplane runway brawl

- The death of the heroes.

Game World

General look and feel of world

The game being set in the 80s Los Angeles, it will have the feel of retro to it, with realistic graphics. The world will replicate realistic physics along with realistic weather conditions. The world will be dangerous but won't be empty. Despite being dangerous it is still full of life. The models and surroundings will have high fidelity of details.

Areas

- The areas are gonna be:
 - Playtest Level
 - Los Angeles (Freeway)
 - Universal City Walk
 - Vietnam
 - Vietnam Village
 - Universal Studios Theme Park
 - Burbank
 - Burbank Airport

General description and physical characteristics

Los Angeles (Freeway):

The freeway sequence is a non-interactive sequence where the player is static and an interactive cutscene plays where the two officers are following a van. The player can move the camera around but there won't be any movement.

Universal City Walk (Parking Garage)

The citywalk is the place where the main game begins. The player starts by hunting down the mercenaries they followed from the van. The first part of the "Tutorial level" will take place in the parking garage where there will be cars and road blocks that the player can use for their advantage in gameplay.

Universal City Walk (City Walk)

The city walk is where the main game begins. The city will be an original replica of the real city walk. It will be full of civilians in the beginning but as the combat begins it will be as like it was abandoned.

Vietnam

Vietnam will be presented during the events of the Vietnam war. The whole level will have lush green forest and but among the beauty their will be booby traps setup along the way which the players will have to avoid in order to progress the level. The environment will be filled with lush Ivys and mossy structures. The vietnam will be filled with mossy stone structures and wooden structures

Universal Studios

The Universal Studios will be empty except for the mercenaries and hostiles we are fighting. Otherwise it will be one to one replica of the universal studios. The Universal Studios will be filled with tons of rides and houses which will be a replica of the real life Universal Studios theme park.

Burbank

The burbank will be like any other suburbs where it will be filled with vehicles on the road but no one will be outside due to the attack that just happened.

Burbank Airport

The airport will be empty as well, the airport will have planes and helicopters but it will be action packed

How relate to the rest of the world

The levels will be interlinked with seamless loading where there won't be a loading screen. The levels will be drawing data with level streaming tech which will enable us to load levels as the game progresses.

Characters.

The main characters of the game are:

- **William (Billy)**

- **Back Story:**

William is an ex military veteran who fought in the vietnam war and lost his best friend in it. And he searches for ways to cope with this loss. And that is the reason he joined the spec force to cope with it and he can keep his mind busy with it.

- **Personalities:**

Billy's nature is strict in nature. He is a no nonsense fellow whose only goal is to complete the mission, without failing as there is no second chance for their survival.

- **Appearance:**

As for appearance, William wears a red jacket which showcases a sense of fearlessness and danger and a denim that accompanies his attire.

- **Relevance to the story:**

William is the protagonist of the story. The main controllable character.

- **Owen**

- **Back story :**

Owen is a rookie in the business who just joined the spec ops. He has a seven year old daughter, and a wife.

- **Personalities:**

For a rookie Owen knows alot of stuff around, he is able to learn and adapt to the situation quickly and is always aware of the situation they're in. But since being a father of a child he always takes his child into consideration before taking any actions.

- **Appearance:**

As for appearance Owen wears a blue jacket which is in contrast to William, which showcases a sense of .

- **Relevance to the story:**

Owen is the ally of the main character and mostly he is on screen as much as his- partner (William) is.

- **Valkov**

- **Back Story:**

A mysterious man of no origin. Literally a ghost.

- Personality:
A very secretive person with no identity.
- Appearance:
Valkov has a very long trench coat in name of appearance with a huge cross stitched on it. He will be wearing aviator goggles and a mask on his face to stay anonymous. Without revealing who he really is.
- Relevance to the story:
Valkov is the main antagonist of the story who is out to take over the country with launching his first attack in LA.
- Jack
 - Back Story:
Jack and William were old partners who were in the forces before the mission in which the game takes place. Jack is an ex detective who was in the force from a very young age.
 - Personalities:
Jack is an old cop who could care less about the system and hates the job, but does it anyway. He can be seen drinking alcohol and smoking cigars in the shop.
 - Appearance:
Jack is a 50 year old stout man who wears a brown suit and white shirt and tie and a brown fedora. He has a little beard on his face signifying he hasn't shaved in some days.
 - Relevance to the story:
Jack is the guy in the chair kind of guy, he supplies background information on the cult.
- Johnny
 - Backstory:
Johnny was William's best friend that died during the Vietnam War.

Artificial Intelligence Use in Opponent and Enemy

The AI will be like the most AI in video games. The AI will be programmed to replicate actual Human interactions, where they react to certain sounds, and attack and adapt to the particular situations. The AI will be completely built from ground up where they will be learning how the player plays and reacts according to it.

Non-combat and Friendly Characters

The non combatant or the friendly characters will be the npcs in the background who will be roaming around and doing various activities. Such as talking, buying food, waiting in line, coming out and going inside shops. Etc.

Owen, the other friendly character, will follow us as an AI character everywhere as he is a support to our gameplay. Owen works similarly to enemy AI where he reacts and works according to the player's gameplay and makes decisions based on it.

Levels Design

The first Level :Meet Jack

The Second Level : Find out the motives of the antagonist

The Third Level : Sneak into the Assembly

The Fourth Level : Chase the Antagonist. (Citywalk part)

The Fifth Level : Fight the Ambushers(Vietnam Backstory)

The Sixth Level : Find the captured assets of the squad.(Vietnam Backstory)

The Seventh Level: Chase the Antagonist (Universal Part)

The Eighth Level: Fight Back to the parking.

The Ninth Level: Reach the Burbank Airport

The levels in this game will have a seamless loading system where the upcoming level will already be loaded as you approach the end for the previous level. The levels will be using a system called level streaming system. With Unreal level streaming devices the levels will be crafted in such a way that very little loading screen shall be used.

Production

Team List

Director - Yatharth padharia

Writer - Yatharth Padharia, Ethan Strohm

Producer - Gabriel Whitson

Game Designer - Yatharth Padharia

Camera - Khush Patel

Lighting Artist: Khush Patel

Sound Engineer - Lucas Crain, Angelo Petrilli
Composer - Lucas Crain
Root motion Artist - Nathaniel Lares
Song Performed by: Bergan, Natalie

Cast:

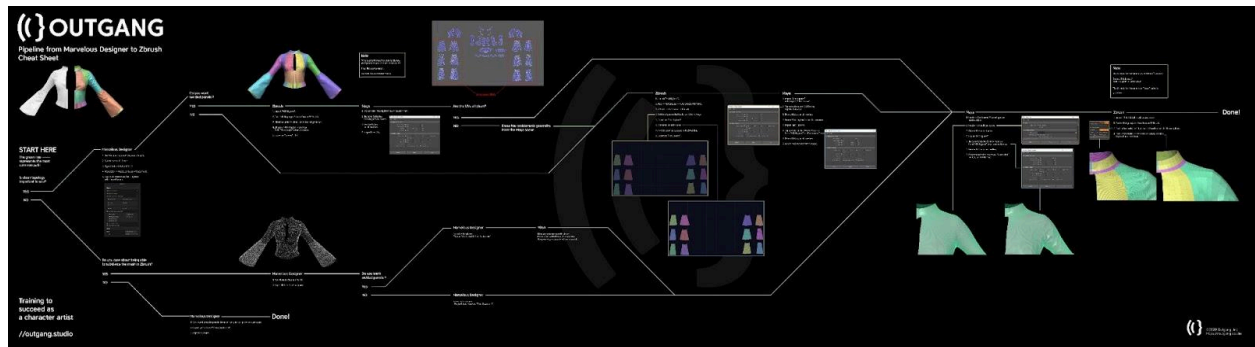
William - Mario
Owen - Brian
Valkov - Nathaniel Lares
Johnny - Andre
C.O - Elsi
Jack -
Merc #1 -
Merc #2 -
Pilot -
Merc(General) -
Merc (Woman General) -
Seth -
Vietnam pilot -

Workflows

Character Clothing:

(Program used: Zbrush, Maya, Marvelous Designer, Substance Designer or Painter.)
The workflow for the character creation will be similar to Hitman games and Cyberpunk 2077, Where the character will be sculpted in Zbrush by modifying the base created, and then retopologize in maya, which later will be took over to Marvelous Designer for Garments, where the character's clothes will be modeled according to the concept art. Once modeling of the cloth is over in Marvelous designer. The clothing will be fitted on the character using cloth simulation. Once overall fitting is done, the clothing will be retopologize and UV'd in Marvelous Designer and sent to maya for final model correction. Once Model is correction step is complete, It will be imported in Substance Designer and Painter for final Texturing, and export the textures in not more than 2048 x 2048 resolution, based on characters screen Distance(Update: It can be resized using mipmaps). The textured model will be then brought back into maya for final optimization and will be rigged by in-house custom auto Rigging tool created in Python, and be ready

for animations. Animation will be Motion Capture and hand key framed. And once all of this is ready it will be imported into Unreal Engine for the game.

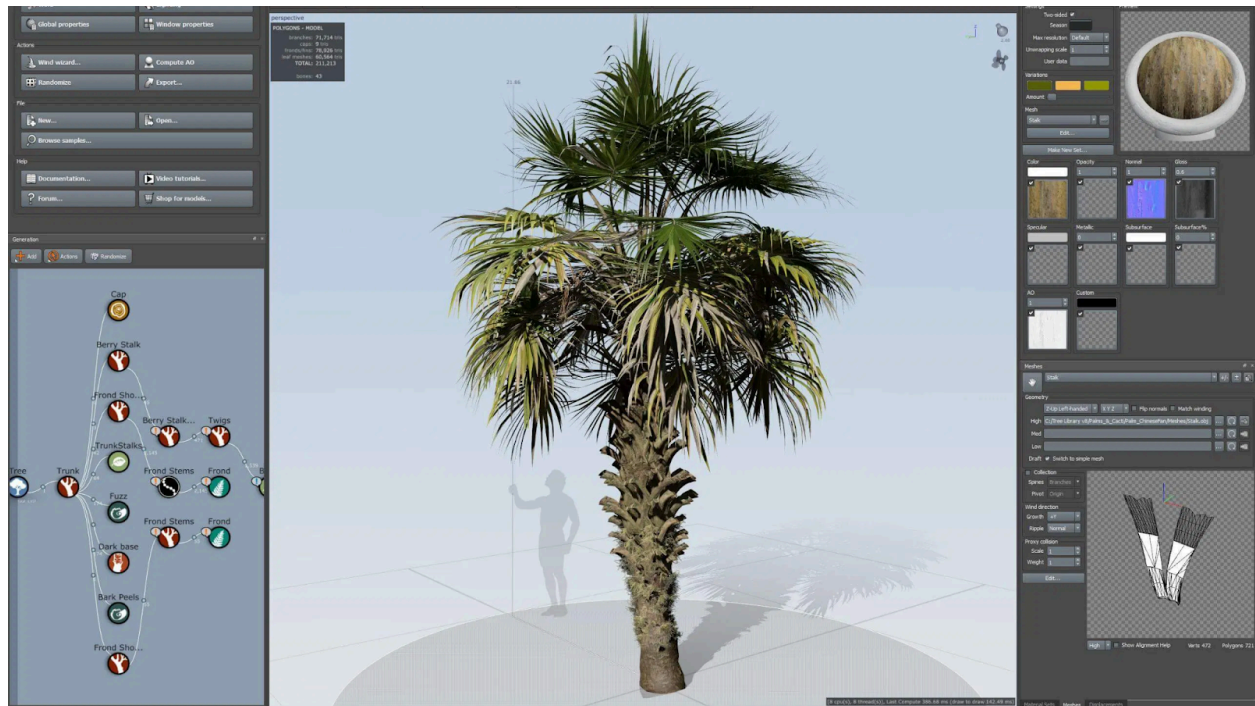




Foliage:

The foliage will be modeled and Texture in Speedtree where the program will be able to add vertex paint to the model. With vertex paint incorporated in the model we can make them interactive in the world b y adding wind animation and interacting with the player. The textures will be generated in Substance designer, Quixel Mixer, Quixel Bridge and

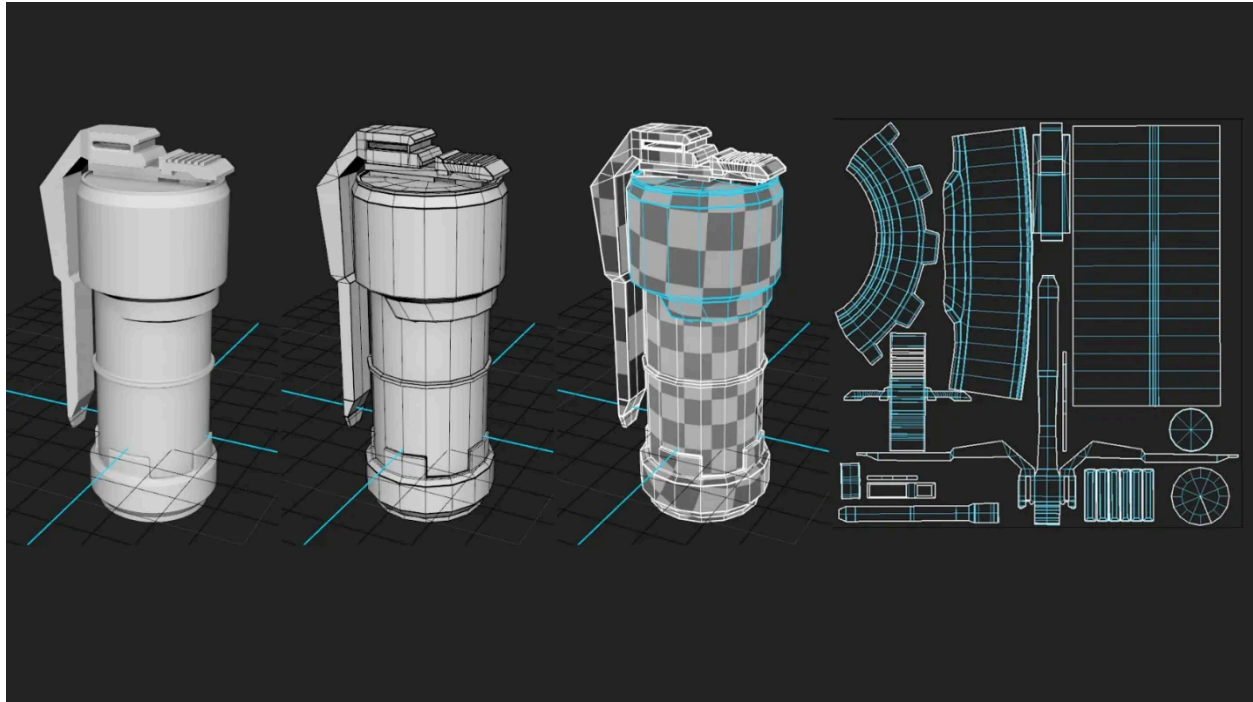
Zbrush.



(Not personal Screenshots)

Assets Workflow:

The assets will be modeled in maya and blender UV'd in the same and exported to zbrush for additional detailing(If required) or else sent to substance painter or designer for texturing.



(Images are not personal screenshots)

Character Mesh:

Character meshes will be shaped in Daz Studio. In which they will receive basic shapes and characteristics for faces and bodies. From Daz Studios they will be exported to marvelous designer where their clothes will be modeled, and the CLOTHING

WORKFLOW will be followed, after retopologizing and UV them in marvelous designer they will be exported to maya for vertex welding. From there the model will be sent to substance painter for texturing. The human body will then be optimized by cutting off the parts that are not visible by the cloth, and UV d and sending it to zbrush for detailing. Once detailed, low poly mesh will be sent to the substance painter for texturing. After texturing they will be greeted by hair cards. Hair Cards will be generated in fibershop3 where we will receive atlases of the hair card and model hair according to character design. Once hair card is placed, the complete mesh will be sent to Accurig for quick rigging and brought back to maya for retargeting animations which later will be sent all the way to unreal.

Effects:

The game will have sprite based VFX where the texture sheets will be rendered into houdini and brought into unreal for niagara particles.

