Game Design Document for:

Project: Justified

Robot combat with very bright lights

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Game Overview

Prologue

You were just a pilot on a routine run. Hit by … something. Knocked out of warp. No control. Spinning. No control. Going down… Blackness.

Before our story begins it is important to know how we got here. Our hero was once a human pilot who crash landed on an unexplored planet well outside of known space. The hero did not survive. The heros brain was saved and transplanted into a cyborg body. Memory erased, the hero is put to work in mines populated by other such enslaved cyborgs. The memory wipe failed to hold and upon regaining some memories, our hero had to fight through other cyborgs in an attempt to escape the mine "prison". Overcoming the odds our hero fought their way through and eventually encountered the planetary ruler. Our hero destroyed the giant world brain thus freeing all the cyborgs on the planet from its control. A leader now, our hero sets out to rid the universe of the galactic Brain network and free all enslaved synthetic life.

The Game Experience

Above all story focus is the annihilation of all world Brain overlords and the emancipation of your fellow enslaved cyborgs. Gameplay is non-linear but folds back into clear conclusion points dependant on completion route unlocked or chosen through actual gameplay. Secret routes for re-playable levels are present on all worlds. The various paths are clearly marked on completion and shown as empty when not yet discovered. Necessary completion elements clearly defined in mission, while only the presence of secret(s) noted without any details until discovered.

Game Design Goals

One Goal to Rule Them All

The purpose of this project is to create a game that is simply fun. With the player experience first and foremost, this game will encourage re-playability through a combination of intuitive controls, fast pace, alternate and secret methods of completing the levels, lots of unlockable loot to chase, and finally a feeling of POWER through the use of over-the-top particle based weaponry.

The Basic Questions

What is the game?

Project: Justified is a 2.5D large world, action-platformer-shooter: If an action-platformer-shooter were raised by RPG parents with a healthy addiction to kaleidoscopic colour generating particle weapons.

In Project: Justified the player avatar runs, jumps and shoots their way though enemy cyborgs, upgrading their own components and weaponry along the way. These upgraded parts and abilities allow the player to unlock new methods and routes through the various levels and worlds, exposing new dynamic enemies and boss encounters, ultimately culminating in a galactic showdown with the Universal Brain network and the continued enslavement or salvation of cyborg kind.

Why create this game?

First, this game will be fun to play. Secondly, there is space in the market for a heavily stylized action shooter with RPG elements. Thirdly, although tasteslikemetal studio has never dealt with particle based weaponry systems, the company has a solid foundation in the robot combat genre, as well as loot-based collection systems in game, and is looking forward to developing a particle based portfolio for this and future projects to come.

Where does the game take place?

The game world(s) are primarily alien mining worlds. Bleak, desolate areas, ancient alien ruins of civilizations long past and robotic infrastructure worlds.

What do I control?

The player takes on the role of liberator. Player controls the former human – now Cyborg survivor of a former Giant Brain controlled mining colony. The core gameplay will revolve around the liberation of your Cyborg brothers and sisters from mining worlds, and the extermination of the world Brains who control them. Players will be in control of primary, melee, and specialty heavy weapons for combat. Jet-pack powered jump and short distance flying power along with running, climbing, and crouching controls. In game objects such as walls, rocks, robotic components (arms, drills, saws, conveyer belts etc) will be interacted and manipulated with for added depth to possible puzzle elements and level exploration in general. Players will also manage an intensive inventory of replaceable parts, weapons, and upgrades key to the overall re-playable nature of the levels and their multiple solutions and secrets.

What is the main focus?

Ridding the universe of the Brain overlords, and freeing all enslaved cyborgs from them is the main story focus of the game.

What is the secondary focus?

The collection of loot and discovery of alternate solutions to levels resulting in newer, better weapons and parts that in turn make the level re-play again new and exciting is the secondary focus, and is present during all aspects of gameplay.

What is different?

This game has many similarities to other games. What sets it apart is the way it combines elements from different genres into one cohesive unit. The graphical feature of outlandish weapon effects is designed to be both visually appealing and to give the player a sense of power when playing as the avatar. The distinctive art style of both the main presentation layer and user interface screen(s) will make this game stand out visually next to any and all similar competition titles.

Feature Set

General Features

- Large world levels with alternate methods of completion.
- Secret areas and multiple solutions to puzzle elements.
- Upgradeable and Replaceable weapons and body parts.
- Fast-paced action and combat system.
- Varying degrees of difficulty through game progression system.
- Compelling enemy AI systems that challenge the player to think of new solutions or method of completions.
- Beautiful, bright and generally over-the-top graphical representation of the bullet patterns or effects.
- 2D sprite based graphics within large 2D game worlds.
- Heavily stylized menu system and HUD.
- Destructive features in level and on various enemy combatants.
- Pace-oriented sound track and classic appealing sound effects for in game interactions.

Gameplay Features

- Large maps players can explore filled with secrets and alternate routes that may be gated by either player level or player component part as the key.
    - Levels are inherently re-playable. I.e.: Need part from world (2) to unlock alternate route in world (1); that in turn may unlock part needed for route in world (3).
- Open world concept and navigation system allowing the player to play the game levels in the order they wish (to some extent).
    - Multiple paths to the main planetary boss.
    - Several routes within levels themselves for completion. *More detailed breakdown in missions section.*
- Multiple missions possible at once with overarching consequences on the world and galactic maps.
    - Examples include: Destroy 100 units, Collect Circular Saw Arm. *More detailed examples and their descriptions in the missions section.*
- Physics simulated differently in some areas resulting in different uses of jet-pack for movement.
    - Physics governing all movement with a good feeling of weight and momentum to the player character.
    - Graphically represented cool-down bar on main gameplay HUD. *More detailed breakdown in user interface section.*

- Ranged weapon system consisting of both a primary (light) and secondary (heavy) weapon with different firing cool-downs respective to their individual damage power.
    - Various unlockable and discoverable primary and secondary weapons. *More detailed breakdown in equipment section.*
    - Fire-rate or cool-downs, and actual equipped items graphically represented on HUD. *More detailed breakdown in user interface section.*
- Melee weapon system ranging from brutal hand weapons to elegant energy swords. *More detailed breakdown in equipment section.*
- Level progression with experience points gained through the solving of puzzle elements, completion of missions, and elimination of enemy targets and bosses.
- Level components and gameplay items include:
    - Blasting through obstacles and enemies using equipped weapons and items.
    - Unlocking doors, lowering shields, activating switches.
    - Timing jumps and boosts to navigate jump puzzles.
    - Engaging in hand to hand combat to physically “cut” component pieces from enemies to use as your own replacement part or key item for level progression or alternate route access.
    - Completion of certain conditions in level may render enemies in specific areas no longer hostile. They may even be helpful given the right circumstances.

- Player character divided into multiple upgrade/replaceable equipment parts. *More detailed examples in equipment section*. General principles as follows:
    - Head
        - Processor determined by player level. Allows or blocks access of certain items or parts based on player level. Adds to base resistance values (armor points).
    - Core (body)
        - Shield type and power, and adds AP (armor points)
    - Arm Right
        - Primary ranged weapon (low damage, low cool-down).
    - Arm Left
        - Melee weapon.
    - Back Weapon
        - Secondary ranged weapon (high damage, high cool-down).
    - Legs
        - Governs speed of movement, and adds AP.
    - Boosters
        - Jet-pack determines the height of jumps and length of boost on self recovering depletion meter (fuel gauge)

The Game World

Overview

The game world(s) are broken down into three different world types. These are;

1. Mining worlds. Bleak, desolate areas, rocks, caves, very little technology and no sign of life (past or present). Primarily static background elements.

2. Ancient alien ruins of civilizations long past. Ruined buildings with alien architecture style. Overrun former roads and areas with still bleak abandoned feel. Sporadic current technology (used by current world occupants).

3. Robotic infrastructure worlds. Nothing natural, or organic present. Machine cities with no consideration for non-robotic life. Robotic and computer components make up background and set items. Lots of lights and dynamic background elements.

The various game worlds are accessed through a universe viewer level select system. I.e.: Select Planet - > Select level. *More detailed breakdown in user interface section.*

The Physical World (Mining worlds)

Key Locations

All mining worlds have at least one major active area that is heavily populated by enemies. These are the core workers for the slaves in game you are ultimately trying to save, although are actively attempting to stop the players progression until the actual game world is liberated.

Secret or discoverable areas / routes will be within caves, behind or under rocks and boulders, and generally accessible through world objects destruction or manipulation rather than through switches or levers on technology rich world levels.

Travel

Player movement based on universal physics properties present in all game worlds/levels.

Decreased gravity sections are common, allowing greater jump height and boost flying distance due to the more “open” nature of these worlds.

Scale

Large maps but more open areas than other worlds. Greater groups of enemies in a given section.

Objects

Common objects include rocks and boulders, large flat ground objects (some being destructible). Interactables include but are not limited to modest computer terminals, and explosive waste objects (as trigger mechanisms).

Weather

The weather system in game is largely graphical with little impact on core gameplay. Variation will occur weather wise however with scenes ranging from bright and sunny, to dreary and rainy. Mining worlds will be on the cold side in general with very little variation or atmospheric effects. Some specialty levels will feature snow and sleet in place of the more common rocks for this world type.

Day and Night

A day/night cycle will be present for all worlds/levels, and will act as a condition for certain event completions. I.e.: Certain areas open or blocked based on day or night -> can't take certain path while solar panels are active: only accessible at night. Day or Night condition will be made clear in world/level selection menu screen.

Time

Some individual levels will have time-limits where the story calls for them, but in general the "time stamp" for the levels will be primarily for hidden objectives again where called for by story elements. Display wise, the majority of levels will have a time counter with increasing time, marking total time for completion, while "speed run" levels will feature a prominent count-down timer both in game as well as on level select menu screens.

The Physical World (Ancient Ruins)

Key Locations

Ancient ruin worlds/levels will feature much more detailed backgrounds and gameplay levels than Mining worlds. Former residential buildings and businesses (long ago destroyed) will feature prominently. All Ruins locations will feature a destroyed building or formal industrial feature that (in most cases) must be explored to find a key item for progression. Largely puzzle heavy as opposed to combat.

Secret or discoverable areas / routes will be within ruined buildings, caves, behind or under collapsed structures, and generally accessible through artifact acquisition as well as some switches or levers.

Travel

Player movement based on universal physics properties present in all game worlds/levels.

Very little (if any) variation on gravity or physics. Player movement is more restricted by the larger amount of structures and objects present.

Scale

Large maps with some open areas. Explorable paths more defined within former building structures. The appearance of a more linear completion path is more prominent.

Objects

Common objects include ruined walls and buildings, large vertical structures blocking pathways, and a scattering of former and current technology pieces scattered throughout. Interactables include but are not limited to computer terminals, explosive waste objects (as trigger mechanisms), and alien artifacts as key objects.

Weather

The weather system in game is largely graphical with little impact on core gameplay. Weather varies greatly. Some specialty levels will feature rain and intense wind.

Day and Night

A day/night cycle will be present for all worlds/levels, and will act as a condition for certain event completions. I.e.: Certain areas open or blocked based on day or night -> can't take certain path while solar panels are active: only accessible at night. Day or Night condition will be made clear in world/level selection menu screen.

Time

Some individual levels will have time-limits where the story calls for them, but in general the "time stamp" for the levels will be primarily for hidden objectives again where called for by story elements. Display wise, the majority of levels will have a time counter with increasing time, marking total time for completion, while "speed run" levels will feature a prominent count-down timer both in game as well as on level select menu screens.

The Physical World (Robotic Infrastructure)

Key Locations

Robotic Infrastructure worlds/levels consist of entirely inorganic settings. Over large structures and machinery will feature heavily. Entire levels within such a piece of machinery are common. Dynamic, robotic background elements and objects will feature prominently. All Infrastructure locations will feature a labyrinth of passageways with both small, linear areas as well as large open "rooms" featuring larger number of enemies to deal with. Balance of puzzle elements and intense combat throughout.

Secret or discoverable areas / routes will be everywhere. Infrastructure worlds will feature the greatest variation of completion routes or conditions. Artifact acquisition as well as switches or levers are common. Destructible objects and set pieces with feature prominently as well.

Travel

Player movement based on universal physics properties present in all game worlds/levels.

Large variation on gravity or physics. Player movement will be enhanced and/or penalized in many areas within the different levels. Dramatic changes within the same level is common with a notable feedback system in place to let the player know of current areas conditions.

Scale

Largest maps with both enclosed linear and wide open areas. Explorable paths more defined within machine structures. The appearance of several linear completion paths throughout is prominent.

Objects

Objects include computer terminals, robotic walls, and buildings and generally a great deal of dynamic "techno junk" throughout the levels. Interactables include but are not limited to computer terminals, explosive waste objects (as trigger mechanisms), and robotic "arms" or mechanisms that must be figured out and used to create or expose routes.

Weather

Contrary to other level types, weather has little or no effect on Infrastructure worlds. These levels are almost entirely enclosed areas with things like temperature and environment regulated internally. Some areas will feature weather like conditions that are triggered as gameplay techniques. I.e.: Modifying temperature via control station to freeze over an impassible section.

Day and Night

A day/night cycle will be present for all worlds/levels, and will act as a condition for certain event completions. I.e.: Certain areas open or blocked based on day or night -> can't take certain path while solar panels are active: only accessible at night. Day or Night condition will be made clear in world/level selection menu screen.

Time

Some individual levels will have time-limits where the story calls for them, but in general the “time stamp” for the levels will be primarily for hidden objectives again where called for by story elements. Display wise, the majority of levels will have a time counter with increasing time, marking total time for completion, while “speed run” levels will feature a prominent count-down timer both in game as well as on level select menu screens. “Speed run” levels are most common in this world type.

Rendering, Game Engine, Camera, and Sound

Rendering and Game Engine Overview

All rendering will be done with the game engine, Unity. Although 3D elements will be included for functionality purposes, the game will be in 2D format.

Unity is flexible enough to output the final product to a wide variety of mediums including both console and PC formats, which are the desired outputs of the final game.

Unity particle systems will be used prominently as they will be responsible for displaying and triggering all weapon based systems as well as environmental effects and graphical enhancements. Unity handles these elements beautifully.

Collision detection and trigger events will be handled entirely by the Unity Engine.

Camera

Camera will follow player with use of clamps on areas with boundaries. Some levels may feature a shifted camera perspective or tightening of field of view for intense gameplay sections.

Camera format will be in side-scroller style with player character centrally focused.

Lighting will be largely faked through baking on object textures for performance stability. General 3 point lighting style will feature throughout the overall levels. In game objects that emit light for gameplay will be handled on a case by case basis.

Sound Effects and Background Music

Themes

Fast paced electronic music with heavy rhythm and beats. Sound effects to match the tone of sound it is illustrating. Lots of pops and blips highlighting robotic theme present throughout.

How

All sounds to be sourced with free to use sounds from repositories, or created in house. For all in-house created sounds a combination of computer generated sounds mixed with live recorded music and effect sounds will be used. Fruity Loops, and Adobe Audition will be primary software used.

Game Characters

Player

Player character is a cyborg. They can be broken down to seven different component parts; Head, Core, Right Arm, Left Arm, Back Weapon, Legs, and Boosters. *Specific examples and value ranges detailed in equipment section.* Each part governs an object (weapon) or attributes on the player character. All parts have an AP value representing Armor Points. AP values on parts acquired at higher levels of the actual game will be higher to retain validity. Exceptions to this would be named or unique items present and potentially acquired at set times or after secret achievements. These rare parts will have set bonus values based on current player level making them always viable. The characters ability to change and customize "builds" is essential to overcoming certain level conditions and unlocking secrets. *Equipment management system is outlined in greater detail in the user interface section.*

Player health is total amount of damage the player can take before destruction. Damage taken depends on both damage amount dealt and AP of character.

Enemies

Standard enemies are essentially no different than the player character. They too are made up of the same component parts complete with AP values and applicable bonuses. They are slaves however and as such are not equipped with the best parts! Enemies are generally equipped with situational weaponry, I.e.: melee only or only heavy weapon. Replacement parts can be acquired from enemies on their destruction or by specifically targeting their parts (sawing off a piece). Standard enemies are the most common enemy type.

Sentinels are specialty enemies and act as sub-bosses or gatekeepers in levels. Again based on same composition are much more powerful both in damage output and resistance. They have a 25-50% increase in size over standard version and usually multiple methods of attack.

Bosses are giant maniacal brains contained in a canister of some kind. Having no cyborg bodies themselves their defenses are typically the level itself, with exposure of the canister and damage to the brain within being the common goal in these encounters.

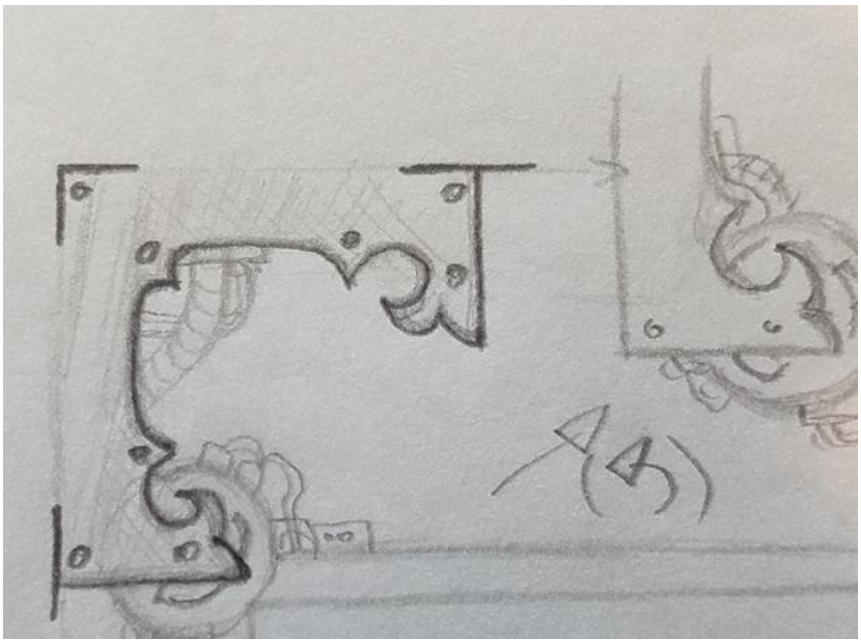
Area enemies encompass the entirety of "inanimate" enemy like game objects present in the various levels. Ranging from defensive turrets to automated assembly line tool systems (saws and drills working in set motions). This enemy class typically still has a health system and possible damage dealing values as well.

User Interface

Defining Characteristics

- All gameplay and menu screens “framed” with brass corner plates.
- Menu list items and descriptive item boxes rotate out from corner plates.

Sample



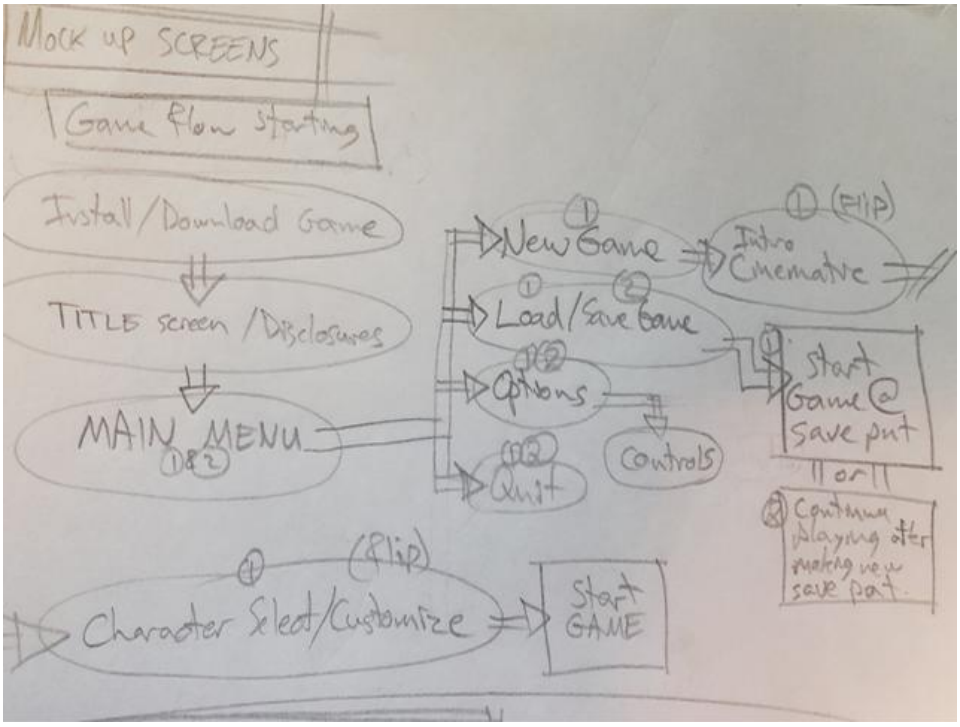
- Frames “evolve” with player. Subtle changes in a common theme to world level being played.
- Added intricacy at higher levels. (As the player character grows).

Universe Viewer

Game is accessed through the universe viewer. Overview of all available worlds is the top most menu. Moving in by selecting a planet the different levels available are displayed with completion and unlocking paths highlighted visually. Cross between Warframe and Super Mario Bros 3 is best description.

Game Flow Mock-up

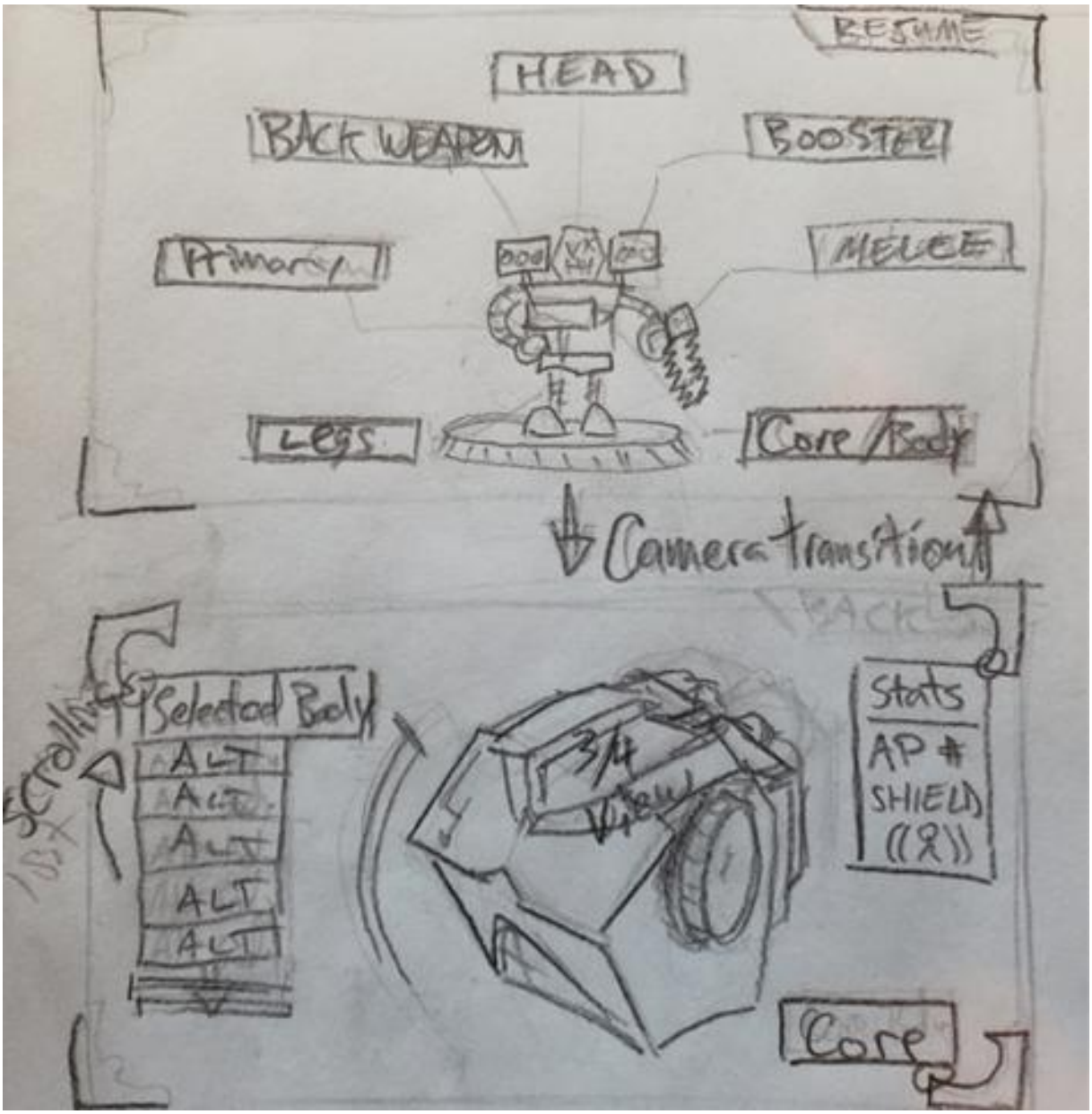
Sample of start of game menu flow:



Equipment Management

Accessible and first screen displayed from the character select or customize menu. Customize menu only available at set interactable objects in level or before embarking on actual mission.

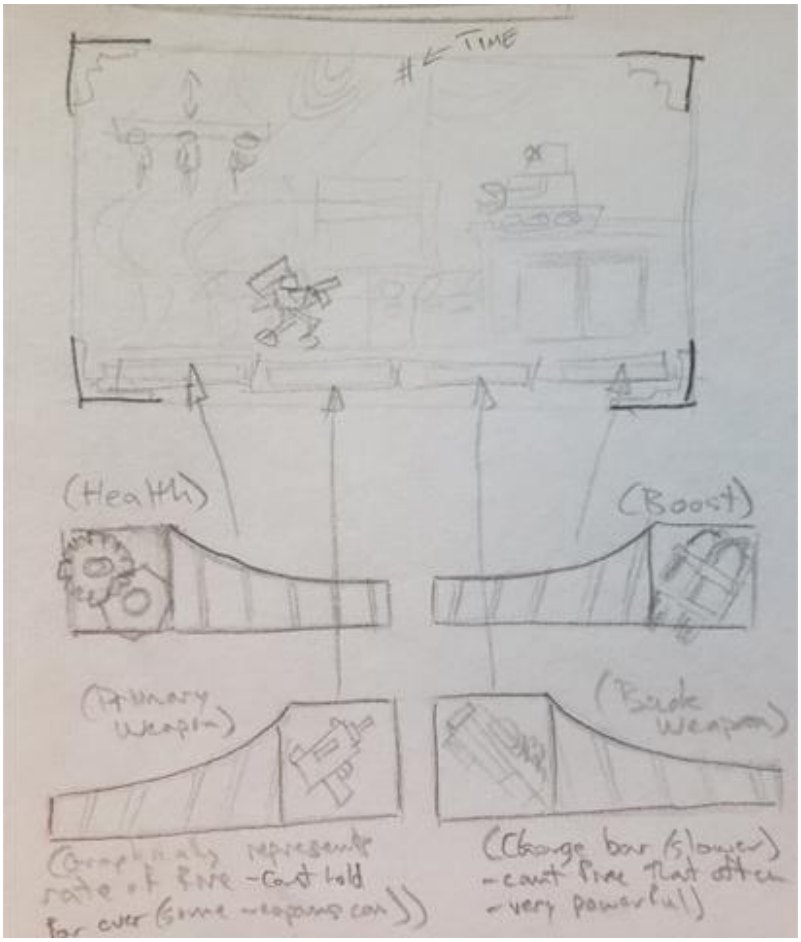
Sample screen layout:

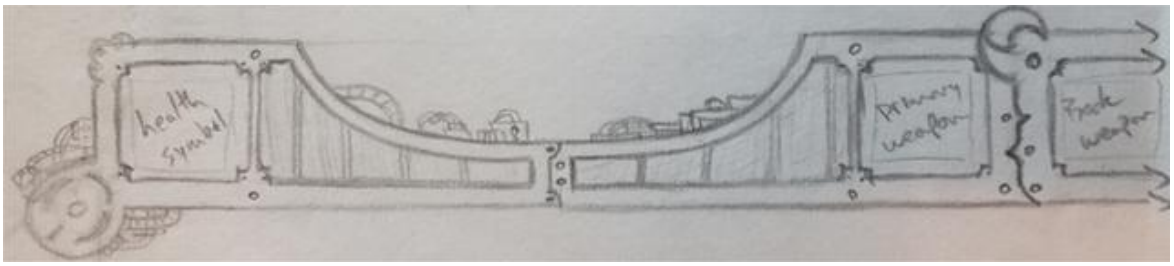


Gameplay HUD

Represented on the HUD at all gameplay times, from left to right; player health, primary weapon (right arm), secondary weapon (left arm), and boost.

Examples:





Equipment

Specific parts govern player attribute levels. Attributes include: Speed, AP (armor points), Shield, and Boost. Bonuses to attributes that part doesn't govern is possible on rare or named parts. Damage and fire-rate displayed via cool-down graph on HUD, and governed by arm (left or right) part.

This is a base list of upgradeable or replaceable equipment parts. Some specific examples are shown in each category.

- Head
    - Processor level as player level.
    - Range from 1 to 20 AP (armor points).
    - EX: "Scatter Hood" -> Rare, AP = 10, bonus: +3 Speed.
    - EX: "Iron mask" -> Common, AP = 2.

- Core (body)
    - Shield type and quality; Blue, Red or Green types used to match force field colors in puzzle solutions and or to defend from damage. Number of charges varies from part to part
    - Range from 1 and 10 AP.
    - Shield charges range from 1 to 5.
    - EX: "Beer Gut" -> Rare, AP = 8, Shield charges = 4, bonus: -2 Speed.

- Arm Right
    - Primary ranged weapon (low damage, low cool-down).
    - Damage ranges vary with player level.
    - Three distinct types differentiated by how they fire.
        - Sneak
            - Single shot, highest damage, slower cool-down.
        - Spray
            - Full auto, lowest damage, fastest cool-down.
        - Burst
            - Three shot burst style, medium damage, fast cool-down.

- Arm Left
    - Melee weapon.
    - EX: “Rusted Chainsword” -> Common, Damage = 5.

- Back Weapon
    - Secondary ranged weapon (high damage, high cool-down).
    - Screen wide laser beams, cluster tracking rockets, and flame or plasma throwers are what make up the items in this category.
    - EX: “Word of God” -> Rare Beam Laser, Damage = 50, cool-down = 2 mins.

- Legs
    - Governs speed of movement
    - Range from 1 to 10 AP.
    - Speed range from 1 to 10.
    - EX: “Frog Legs” -> Rare, 4 AP, Speed = 8, bonus shield charge.

- Boosters
    - Jet-pack determines the height of jumps and length of boost on self recovering depletion meter (fuel gauge).
    - Boost Range 5 to 20.
    - EX: “Angle Wings” -> Rare, Boost = 15, bonus +10AP.