**Overall Vision**

The Doctor has given you the directive to “save humanity”. It is up to the player to decide how they will achieve this. The player is given a weapon which is fueled by energy gathered from sunlight or from superheated vents. (**Overhaul needed**)

**Target Audience**

Any aged 16-20; Accessible for all with options for more challenging play

**Platform**

PC (Keyboard & Mouse)

**Genre**

Action-adventure platformer

**Core Gameplay**

**Core Mechanics:** The player is to explore Imperalis by running and jumping. Obtaining certain items will allow them to double-jump, dash, and cling to walls. The player gathers energy using their solar panel to shoot: damaging enemies, destroying debris, or even powering certain objects. The player can learn of the world’s lore by talking to NPCs, reading item descriptions, or simply just interacting with the world.

**Goals:** The player’s goal is to “save” humanity. How this is achieved is up to the player.

* **Save Humanity:** This ending requires the player to join the Emperor. The player will be sent into the Dreg Heap to capture the remaining Errats, fulfilling a quota in Project VP to leave no humans behind. With every Errat converted into Nadirs, the Emperor now has complete control over the remainder of mankind.
* **Return to the Past:** This ending requires the player to defect from the Emperor. After defeating the Emperor, the player can choose to shut down Voyager Prime and, with it, all of Imperalis and the Machina. This ceases the environmentally destructive Project VP and, if the Frozen Sanctuary was accessed, frees the Nadir. The planet can begin its steady recovery, with humanity being potentially freed. The future rests in their hands now.
* **End the Cycle:** This ending requires the player to defect from the Emperor and have 100% Data (collected throughout the game in secret locations). After the defeating the Emperor, the player can choose to blow up Voyager Prime, killing the rest of humanity. Without the influence of humanity, the planet is guaranteed to recover though very slowly.

**Challenges:** To achieve any of these endings, the player must defeat bosses. In order to get to the bosses, the player may have to explore an area, solve puzzles, and defeat minor enemies. Getting hit by enemies or hazards will reduce the player’s health, killing the player if their health reaches 0. This will result in the player returning to the last repair station they interacted with.

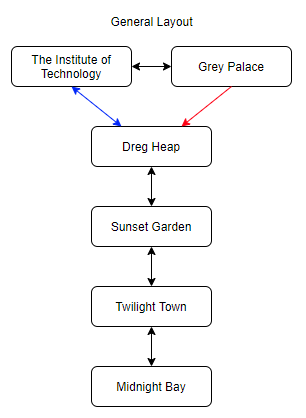
**Components:**

* **Stats:**
  + **Health:** Determines how much damage the player can take. Getting hit by enemies or hazards lowers this value. Respawning or using a repair station restores this value to max. Can be used to restore some energy via **Heartless** **Generator.**
  + **Energy:** Determines how many shots the player has left. Gathered using the **Solar Panel** or **Geothermal** **Extractor** in specific locations. Respawning or using a repair station restores this value to max. Can be used to restore some health via **Heartless** **Generator.**
  + **Data:** Determines how much information the player has amassed from its siblings. Harvesting the data storages of Kin members increases this value. When maxed out, **Ascend** **the** **Throne** will be available.
* **Permanent Modifications:** Permanent upgrades. Which route the items can be obtained on will be labeled via the first letter of the route.
  + **Energy:**
    - **Solar Panel [S][R][E]:** Positioned directly above the player. Slowly gathers energy when under sunlight making it useless in dark areas. Obtained from **Home**. Upgradeable (but not in **Obey** **the** **Throne**)
    - **Battery [S][R][E]:** Determines how much energy the player can have at any given moment. Obtained from **Home**. Upgradeable (but not in **Obey** **the** **Throne**)
    - **Geothermal Extractor [R][E]:** Positioned directly beneath the player. Quickly gathers energy when above an open heat vent. Obtained from **Deep Water** **Horizon.**
    - **Heartless Generator [R][E]:** Converts 1 health to 3 energy OR 5 energy to 1 health on use. Quick toggle for conversion change. Obtained from **The** **Junkyard**.
  + **Mobility:**
    - **Booster Rocket [R][E]:** Allows the player to perform a horizontal dash. Dash is on a 3 second cooldown. Obtained from **The Engineer** after giving the first **Hyper Scrap**.
    - **Climbing Claws [R][E]:** Allows the player to cling to walls, resetting the player’s ability to jump (ex. jump > double > cling > jump > double). Obtained from **The Engineer** after giving the second **Hyper Scrap**.
    - **Booster Rocket MK2 [R][E]:** Allows the player to perform a second jump while midair (ex. jump > double or dash > double). Obtained from **The Engineer** after giving the third **Hyper Scrap**.
  + **Miscellaneous:**
    - **Energy Cannon [R][S][E]:** *A means to an end*. Used to shoot. Obtained from **Home**.
    - **Navigational Module [R][E]:** Shows the map of Imperalis and the player’s current location, with areas the player already visited being visible. Obtained from **The Junkyard**.
* **Reactors:** Changes offensive capabilities. Only one can equipped at a time. Change reactors only at a repair station. Which route the items can be obtained on will be labeled via the first letter of the route.
  + **Basic Reactor [S][R][E]:** 1 (+1 per boss defeated) damage. 1 energy/shot Obtained from **Home**.
  + **Imperial Standard Reactor [S]:** 5 damage. 2 energy/shot. Obtained from **Grey Palace**.
  + **Familiar Reactor [R][E]:** 0 (+1 per 10% Data) damage. 2 energy/shot. Obtained from **The Junkyard**.
  + **Unstable Reactor [S][R][E]:** 10 damage. 1 energy/shot. Any damage taken will result in death (**Heartless** **Generator’s** health-energy conversion does not count). Obtained from **Home.**
* **Interactable Objects:** Background objects that the player can interact with
  + **Repair Station:** Restores health and energy to max capacity. Sets new spawn point. Allows player to manage their reactors. Respawns all enemies on use.
  + **Connecter:** 
    - **Active:** Takes player to another area when interacted with. Usually located in the background.
    - **Passive:** Takes player to another area when passed through. Usually located at the edges of an area.
  + **Destructible Block:** Shoot to destroy. Reveals useful or secret things.
  + **Beaming Light:** Light from above. Standing in it builds up **Energy.**
  + **Heat Vent:** Be it from the bottom of the ocean or in the steaming heights of steel, this is a prime source of energy. Standing above one with **Geothermal** **Extractor** builds up **Energy**.
* **Enemies:** Regular [R], Hazard [H], Boss [B], Attack [A] (**Overhaul needed**)
  + **Ashen City:**
    - **Empire Grunt [R]:** Patrols the city. Walks back and forth. Deals damage and knockback on contact.
    - **Empire Officer [R]:** Patrols the city. Will fire on sight and deal damage and knockback on contact.
    - **Crazed Hound [R]:** Lurks in the outskirts. Will chase and jump at the player, dealing damage and knockback on contact.
    - **The Rebellion [B]:** Only on **Obey the Throne**
      * **The Revolutionary [B]:** Aggressively hunts down the player but will stop to catch a breath.
      * **The Engineer [B]:** Tries to keep distance from the player. Will remain in one spot if distance is achieved.
  + **Dreg Mines:**
    - **Miner [R]:** Will not chase after player. Throws pick when player is far. Strikes with pick when player is close.
    - **Crystal Lizard [R]:** Runs along the ground away from the player, leaving behind a trail of crystals, dealing damage on contact. Awfully sturdy.
    - **Lava [H]:** Runs along the ground or flows from above. Deals damage on contact, returning the player to where they last stood.
    - **Lava Plume [H]:** Flares up from lava lakes then recedes back down. Deals damage on contact, returning the player to where they last stood.
    - **The Incinerator [B]:** Locked to the far right side of the screen. A wall in nature. It has three segments with only two being on-screen at a time. Moves up or down with the face always being on-screen. Only its face takes damage.
      * **Magma Mortar [A]:** Spits molten rock into the air, raining down onto the player.
      * **Out the Oven [A]:** Spawns a Flame Wheel from its top or bottom segment.
      * **Eruption [A]:** Its face charges for 2 seconds than unleashes a screen-wide laser, dealing damage on hit.
  + **Deep Water Horizon:**
    - **Deep Diver [R]:** Floats up and down in water. Throws trident at the player.
    - **Marlin [R]:** Swims around passively. Charges when the player is at its level.
    - **Corrosive Pool [H]:** Spilled along the floors. Deals damage on contact.
    - **Sea Dragon [B]:** Swims under the player, off-screen. Comes on-screen during some attacks amd after every attack.
      * **Bubble Blast [A]:** From underwater, it spews bubbles from the center of the screen which spread out and pop after 5 seconds. Getting hit will pop the bubble prematurely and the player will take damage.
      * **Rainy Day [A]:** Jumps from one side of the screen to the other in a high arc. Water orbs will appear along the boss’ path. 1 second after appearing, the orbs will drop, dealing damage on hit.
      * **Blizzard [A]:** The boss pops its head above the water and spews forth ice towards the player.
  + **Towering Chimney:**
    - **Tin Dove [R]:** Perches atop ledges or beneath alcoves. Swoops down onto the player when they get close. Moves in a fixed arc.
    - **Iron Crow [R]:** Perches atop ledges or beneath alcoves. Follows the player overhead and shoots.
    - **Steel Hawk [R]:** Flies aggressively towards the player, dealing damage on contact.
    - **Falcon of Blight [B]:** Hovers above the player at the top of the screen. Leaves this position only for one attack.
      * **Swoop [A]:** Flies off-screen to one side and reappears at the bottom, crossing the whole screen starting from the side it flew off to. Returns to the top of the screen after finishing.
      * **Gust [A]:** Flaps its wings, sending two crescent projectiles towards the player. As it starts from the wings, the attacks will cross when they reach the bottom.
      * **Barrage Blast [A]:** From its head, the boss spews circular projectiles, alternating between a 3-spread and a 5-spread, for 5 attacks.
      * **Hellish Beacon [A]:** Signaling with its eyes, the boss fires a screen-high laser from the center of the screen and moves towards the side its eyes signalled.
  + **The Institute:**
    - **Turret [R]:** Fires in a predetermined direction and manner.
    - **Electric Wire [H]:** Alternate between active and inactive. Visible as a line in the background when inactive. Surging with electricity when active. Getting hit will deal damage and drain energy.
    - **Ring of Pain [H]:** Alternate between active and inactive. Visible as a dot in the background when inactive. Surging with electricity when active. Getting hit will deal damage and drain energy.
  + **Grey Palace:**
    - **Empire Elite [B]:** Charges towards player, dealing damage on contact. If the player is out of reach, it will throw a boomerang-like projectile at the player.
    - **Empire Drone [B]:** Flies around in a fixed manner. Shoots at the player.
    - **Sawblade [H]:** Either stationary or moving along a track. Deals damage on hit.
    - **Silver Spear [H]:** Pops up and retracts into the ground or wall. Usually found in groups.
    - **The Emperor [B]:** Will stand still while attacking but will sometimes run towards the player after an attack. After certain health thresholds, old bosses will appear (with less health) with The Emperor become invincible until the new boss is defeated.
      * **Crush Underfoot [A]:** Run towards the player to deal contact damage.
      * **Sword Dance [A]:** Summons swords from above which drop down, alternating between two sets of 5 strokes.
      * **Hail of Blades [A]:** Summons swords from above which drop down, starting from one side of the screen to the other.
      * **Steeled Hand [A]:** Throw swords towards player in a 5-spread which return to The Emperor after 1.5 seconds of travel.
      * **Arise [A]:** Summons previously defeated bossed after certain health threshholds (75%, 50%, and 25%).

**Controls:**

* [a-key] hold: move left
* [a-key] double-release: dash left
* [d-key] hold: move right
* [d-key] double-release: dash right
* [w-key] press: interact with NPC or background objects (ex. repair stations, connecters)
* [s-key] press: use **Heartless Generato**r
* [f-key] press: switch **Heartless Generator** conversion
* [space-bar] press: initiate jump / double jump if already in the air
* [space-bar] hold: lengthen jump height (ex. quick release – small hop, long hold – high jump)
* [space-bar] release: end jump (begin falling)
* [tab-key] press: bring up / close the menu
* [mouse] move: move cursor
* [mouse-left] press: shoot

**User Experience:**

* The player will start at **Home** where TheDoctor would have left notes detailing the basic controls and the player’s objective. Before they can exit, the player must pick up the **Solar Panel**, **Battery**, and **Energy Cannon**. The world is structured like a Metroidvania where parts of the map are inaccessible until a certain upgrade is. The player sprite will be dynamic, showing whether certain movement options are useable at the moment (ex. dashing has a cooldown which will be indicated by a red dot on the player, turning green when off cooldown). The camera will be stationary and will only change view when the player enters a new area. The size of the camera’s view is dependenet on the area size. Interacting with connectors will change the area and the camera view. Pressing the [tab] button will bring up a menu that can be changed from either a fairly-detailed map of the world or the player’s inventory. (**Overhaul** **needed**)
* **UI:**
* **Map:**
  + 
    - **Blue:** Locked until all 3 Hyper Scraps have been used
    - **Red:** One way
  + 
    - **Yellow:** Endings
    - **Cyan:** The player can complete these areas in any order

**Visual Style**

2D, simplistic pixel art (similar to VVVVVV), post-apocalyptic techno world

**Characters and Story**

Characters [C], Events [E], Groups [G], Locations [L]

* **Imperalis [L]:** To most, it is the last remaining refuge for humans after the Troubles. But only the Doctor and Emperor know of its true purpose. It serves as a launch complex for Voyager Prime.
  + **Zenith [G]:** The top brass of Imperalis consisting of its two founders.
    - **The Emperor [C]:** The supreme leader of Imperalis. His goal is to prevent the extinction of humanity at all costs.
    - **The Doctor [C]:** An avid researcher in the realm of robotics, artificial intelligence, and cognitive science. As the creator of the Machina, he was instrumental in the foundation of Imperalis and Project VP. He dreamed of a future where mankind could transfer their brain into a mechanical body, making them practically immortal. Though this dream became reality, only he was capable of performing the procedure. He died some time before the events of the game from natural causes.
  + **Azimuth [G]:** Humans who have the ability to contribute to Project VP. In order to maximize producitivity and prevent them from becoming Errats, they have been chipped. When their skills are no longer needed, they are turned into Nadirs.
  + **Nadir [G]:** Humans under cryostasis in the Frozen Sanctuary. The Zenith consider them unnecessary in the current Imperalis. They consist of those who do not have the ability to contribute meaningfully to Project VP.
  + **Errat [G]:** Considered “errors” in the Zenith’s plan as they are capable of independent thought. They can be easily identified by the Machina since they aren’t chipped. The only organized group of Errats resides in the Dreg Heap. **Obey the Throne** requires their indoctrination.
  + **Machina [G]:** The machine residents of Imperalis, built by the Doctor and commanded by the Emperor. The Machina help facilitate the construction, maintenance, and security of Imperalis. The Machina serve as the enemies throughout the game.
    - **Ego (Series) [G]:** The ultimate Machinas, having achieved self-conscience. They awoke and escaped the IT before the Doctor could chip them, leaving only one model left. After an unknown period of time exploring the world, they had collected information that they deemed dangerous. They burrowed themselves all over Imperalis while they waited for the reunion with the last of their kind. Harvesting their memory cores, the player will learn of the self-harming nature of humanity and will have access to a new ending.
      * **Ego [C]:** The player-controlled character. Being the last to awake in the Ego series, they’ve been chipped and given the directive to “save humanity”. While the Doctor believed that this would lead to the player asissting the Emperor’s cause, the player is free to choose how they play.
  + **The Institute of Technology (IT) [L]:** Imperalis’ center for research. It serves as the service structure for Voyager Prime and is the only way to get onto Voyager Prime from the rest of Imperalis. Though the Doctor is no longer around, the Azimuth and Machina still utilize this space.
  + **Voyager Prime [L]:** The largest space craft ever made. It serves as the vessel for humanity to survive in while they search for a new habitable planet. It has several nuclear reactors for stable energy generation in space, in addition to its vast supply of fossil fuels. It could be seen as the modern Noah’s Ark.
    - **Grey Palace [L]:** The portion of Voyager Prime jutting out from the ground. The Emperor commands the Machina and Azimuth from its peak.
    - **Frozen Sanctuary [L]:** What’s left of humanity is put in a cryostasis here. Wildlife required to restart civilization is also cryogenically stored here. Though locked by a high-security gate, with at least 70% Data, the player can bypass it.
  + **Sunset Garden:** The Machina are recycled here when they can no longer function adaquately. It also serves a recycling plant for any other resource including metals, plastics, and water. Any substance that cannot be reused or recycled is dumped into the Dreg Heap.
  + **Twilight Town [L]:** The Azimuth and Machina can’t work indefinitely without maintenance. This place serves to recharge, repair, and perhap even upgrade them. Though a good place to find useful items, it is crawling with security Machina.
  + **Midnight Bay [L]:** A massive oil platform the size of a city. It roams the seas, searching for a reservoir of oil and extracting it for Imperalis. During the events of the game, the platform has moved close to Imperalis, allowing the player to access it.
  + **Dreg Heap [L]:** Existing beneath Imperalis, it serves as a haven for the Errat as the Machina (except those from the Ego series) cannot function in this frigid and dusty environment. The Errat living here must wear a special full-body suit to survive.
* **The Troubles [E]:** A series of events, including a global war, which served to end the old world. From the ashes of the old world, Imperalis rose to shelter the survivors. The specifics of the Troubles are widely unknown.
* **Project VP [E]:** After the Troubles, the world was left ravaged and decreipt. The Emperor believed that the planet could not be restored and that the best course of action would be for humanity to leave for a new home. The remains of mankind would be gathered through the founding of Imperalis, with those who can (Azimuth) working on the project and those who can’t (or won’t) frozen and stored within the vessel. This was to ensure maximum productivity-to-resource use. Only the Doctor and Emperor know of this project in full detail.