**Overall Vision**

The player controls a robot who is assigned the task of reforming Neotopia’s energy industry by its creator. In order to defend themself, the player is equipped with a gun powered by a solar panel. The player can side with the **Rebellion** (pro-environment), the **Empire** (anti-environment), or **Kin** (anti-human) to achieve different kinds of reformation.

**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 Neotopia 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 “reform” Neotopia’s energy industry. How this is achieved is up to the player.

* **Destroy the Throne:** The intended route for the first playthrough. Join the **Rebellion**, destroy the Empire’s three big energy sectors, and confront the Emperor. After defeating the Emperor, the player can destroy the Throne and with it, the Empire. The game ends with the Rebellion rebuilding Neotopia, establishing renewable energy resources.
* **Obey the Throne:** The quickest way to end a playthrough but will be difficult for new players. Early in the playthrough, the player may join the **Empire**. Now equipped with the Eradicator, defeat the Rebellion in a multi-enemy boss fight. The game ends with **The** **Hideout** burning and the Empire flag flapping in the background.
* **Ascend the Throne:** The secret ending which will probably be missed on the first playthrough. The route is nearly identical to **Destroy the Throne**. Members of **Kin** are scattered throughout Neotopia and harvesting their data storage yields **Data**. Having max Data will open up a new option when approaching the Throne. Choosing this option, the player will become Neotopia’s new ruler. The Empire’s entire nuclear arsenal will be launched, killing all humans on the planet.

**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 [D][O][A]:** 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 [D][O][A]:** Determines how much energy the player can have at any given moment. Obtained from **Home**. Upgradeable (but not in **Obey** **the** **Throne**)
    - **Geothermal Extractor [D][A]:** Positioned directly beneath the player. Quickly gathers energy when above an open heat vent. Obtained from **Deep Water** **Horizon.**
    - **Heartless Generator [D][A]:** 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 [D][A]:** 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 [D][A]:** 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 [D][A]:** 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 [D][O][A]:** *A means to an end*. Used to shoot. Obtained from **Home**.
    - **Navigational Module [D][A]:** Shows the map of Neotopia 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 [D][O][A]:** 1 (+1 per boss defeated) damage. 1 energy/shot Obtained from **Home**.
  + **Imperial Standard Reactor [O]:** 5 damage. 2 energy/shot. Obtained from **Grey Palace**.
  + **Familiar Reactor [D][A]:** 0 (+1 per 10% Data) damage. 2 energy/shot. Obtained from **The Junkyard**.
  + **Unstable Reactor [D][O][A]:** 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:** Takes player to another area when interacted with. Usually located in the background.
  + **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]
  + **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]:**
      * **The Engineer [B]:**
  + **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 world map
* [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 obtained. A fairly detailed map of the world can be pulled up using the [tab] button. 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 usually follow the player, centering on them, with the exception of area edges where the camera will “hit” the edge making the player seem to exit the screen when going through an opening. These openings and the connecters will take the player to a new area.

**Visual Style**

2D, simplistic (similar to Candy Box 2) pixel art (similar to VVVVVV), steampunk-esque world

**Characters and Story**

**Characters:**

* **The Institute:**
  + **Ludex:** The robot that the player controls. They are The Doctor’sfinal creation, tasked with the reformation of Neotopia’s energy industry. Its name being Latin for “The Judge” to reflect the player being the one who decides the fate of humanity.
    -  
  + **The Doctor:** Former affiliate of the Empire and founder of The Institute. Responsible for much of the technological progress during the Empire’s rule. After his death to The Emperor, his body remains in The Junkyard.
* **The Rebellion:**
  + **The Revolutionary:** Leader of the Rebellion. Able to join the player in boss fights.
  + **The Engineer:** Used to work in The Institute. Works for the Rebellion. Admires The Doctorfor his inventions.
* **The Empire:**
  + **The Emperor:** Supreme ruler of Neotopia and the final boss. The world that previous generations left was already in terrible shape. He believed that it was too late to fix and the only way to save humanity was to find a new home among the stars. Uniting the planet under one flag, he plans to use what’s left of the planet to send humanity into space. He only cares about the survival of the human species even if countless individuals must be sacrificed.
* **Other:**

**Factions:**

* **The Rebellion:** Small military force who oppose the Empire and their destructive usage of the planet’s resources. They want to tear down the current regime and rebuild Neotopia as a democratic state with an emphasis in the usage of renewable energy resources and green practices (green spaces, drip irrigation, etc.). Though few in numbers, they will help the player in their journey to defeat the Empire. All are pure humans since cybernetic implants brainwash people into supporting the Empire. **Obey** **the** **Throne** requires their destruction.
* **The Empire:** Governing party of Neotopia for the past several decades, led by TheEmperor. Its members have unwavering loyalty to the supreme ruler, forced or not. The military, the media, the market, the schools, and even the culture of Neotopia are under their total control. All opposition is to be crushed or converted, however they can’t seem to locate the Rebellion’s hideout. Comprised of humans, cyborgs, and robots. Must be toppled to **Destroy the Throne** or **Ascend** **the** **Throne**.
* **Kin:** Like the player, they are robots who were tasked by The Doctor to reform Neotopia’s energy industry. Plagued by information about the human nature, they have ceased their operations. Harvesting their data storage will allow the player to piece together their end goal: end humanity. In short, it is human nature to exploit their environment; as long as they exist, there will be no hope for salvation for this or any other planet. Members can be found all over Neotopia, usually hidden away in difficult to reach areas. Harvesting all members unlocks **Ascend** **the** **Throne**.

**Locations:**

* **Neotopia:** A totalitarian state run by the Empire. Contains the Empire’s big three energy sectors (coal, oil, natural gas) and its base of operations. The entire game takes place here.
  + **The Institute:** The Doctor’s former base of operations. After removing The Doctor, The Emperor closed off the Institute and, as a result, the Grey Palace from the rest of Neotopia. There is still a hidden entrance but the Empire does not know. Still open to the Grey Palace, The Emperor awaits The Doctor’s final creation.
    - **Home:** The birthplace of The Doctor’s robots. The player will emerge from here. The Doctor has left some tools and some secrets for the player to use on their journey.
    - **The Great Bridge:** The bridge that connects The Institute to Grey Palace. Traversable on the first visit but is replaced with open-air obstacles on later visits. The Emperor was hopeful of the player’s collaboration however, he now has no use for The Institute.
    - **The Lab:** Where members of The Institute used to conduct research. Though it has been long abandoned, it still draws energy from deep underground to power itself. From a secret entrance, the player will traverse through here to return home.
  + **Ashen City:** The capital of Neotopia and overlooked by the Grey Palace. Acts as the hub area of this game since almost every other main area is connected to this area.
    - **The Junkyard:** Where all of the Ashen City’s waste ends up. The player may find some useful items in this dump. Though some rocks should be left unturned.
    - **City Outskirts:** The edges of the Ashen City where the population and security is thin. Those hiding from the Empire can be found lurking in the shadows here.
    - **City Central:** The main area of the Ashen City, where most people reside. Provides easy access to the three big energy sectors. There are police everywhere.
    - **The Hideout:** Under the city, the Rebellion hides here. The entrance is invisible except to the most discerning of “eyes”. The Empire will burn it down but they just don’t know where.
  + **Dreg Mines:** Neotopia’s state-owned coal mines. Massive in size and maze-like in design, the mines scour the rocky depths for energy. The largest site is located above a great chasm.
    - **Dark Crater:** The bottom of a great chasm. The Incinerator resides here, refining the coal into a more energy-dense form. The heat is unbearable here.
  + **Deep Water Horizon:** An oil extraction facility that stretches over the horizon. The water is murky from ancient spills but The Emperor will not tolerate such a waste of energy. All of it must be collected.
    - **The Abyss:** At the bottom of the world lies a drill into the center of the world. The Sea Dragon resides here, protecting the drill from environmental disruptions and intruders.
  + **Towering Chimney:** Neotopia’s one and only natural gas refinery. So large that it even towers above the Grey Palace, spewing dark clouds into the sky. Can only be accessed after completing the other two sectors.
    - **Grand Summit:** At the top of the Towering Chimney, the Falcon of Blight lies in wait. The sun does not reach the surface as the sky is forever covered in smoke. Instead, the Falcon acts as a beacon for those living beneath its gaze.
  + **Grey Palace:** The grand bastion of the Empire. Its looming presence helps instill “loyalty” in the citizens of Neotopia. Filled to the brim with Empire soldiers. Climb to the top and face The Emperor.
    - **Audience Room:** Where the player will first encounter **The** **Emperor** to choose their allegiance. The Emperor rarely grants audience to the citizens of Neotopia instead having soldiers convey the Empire’s message to its people. But he has one last appointment to make.
    - **Throne Room:** Where the player will fight **The** **Emperor**. Houses the Throne which allows the player to end the game. The Throne is an important symbol of the Empire, an ancient relic from a time of old. Assume your place atop the Throne as the new Emperor or destroy it along with the current regime.