ReHack

[**https://pursius.itch.io/rehack**](https://pursius.itch.io/rehack) **- Password: ReHack**

**1. Design History**

V.0.1- Physical Prototype- initial build testing a free-form movement vs grid-based movement  
V 0.2- Physical Prototype- puzzle design/testing  
V 0.3- Physical Prototype- menu design/ease of access

V 1.0- Initial Build- feat. Single map with placeholder enemies and art sprites  
V 1.1- Added Puzzle to the build  
V1.11-Removed all timers, made game turn-based instead  
V 1.2- Re-design puzzle to fit digital medium  
V 1.3- Re-design puzzle to fit design values  
V 1.4- Massive Scope Change  
V 1.5- Change puzzle to fit design values (after talking to Steve about it and realizing what I built isn’t even a puzzle)  
V 1.5- Added alpha-menu, instruction, and game over interface

**2. Design Values and Goals**

2.1 Design Values

Design Value 1: Narrative  
 -A well written story that hooks the player  
 -Linear story, there are no branching paths  
 -The in-game actions and levels are narratively cohesive

Design Value 2: Cohesive-ness  
 -The aesthetics of the game fit the world and player design  
 -Options are obvious without outright telling the player  
 -(ie. Scratched-up walls can be climbed)  
 -Everything fits into the world and narrative, everything makes sense within the world.

Design Value 3: Accessibility  
 -puzzles have many tries to complete  
 -puzzles are all easily completed no matter your skill level  
 -players get rewarded based on their skill level, but rarely punished for a low skill level  
 --difficulty changes based on enemy, each level’s difficulty scales based on how far the player reaches, but is never impossible for a low-skilled player.  
 -colour-based puzzles are accessible by players that are colour blind- symbols accompany all colour-based puzzles

2.2 Design Goals

-Narrative: The story has a compelling, relatable narrative that fits in well with the aesthetics and puzzles. The narrative revolves around the protagonist, who lives in a dystopic future where a company rules the city they live in. Based on this, I need to design a game based around revenge, and the ethics around stealing from a company who wronged you.

-Cohesive-ness- a futuristic world full of technology, where someone who works to support the way of life gets betrayed by it. Based on the narrative, I need to design a game in which the puzzles and overall design of the game fits in with the narrative of a dystopic future full of technology and is run by it.

Accessibility: The puzzles work together in any order, and the difficulty of each puzzle is chosen by the player. Based on the puzzle design, the game will be designed around player choice and skill, where none of the puzzles are easily failed, but have a reward for becoming more skilled. The puzzles will also feature accessibility features, such as colour-blind options.

**3. Identity**

3.1 One sentence pitch

Create, sneak, and hack your way around levels to get you and your cities personal, secret information back from the evil corporation and shut them down once and for all!

3.2 Demo gameplay synopsis

Welcome to Inner City- where everything is the future! Interacting with the game will be simple. It’s as easy as click to move, click to hack, and drag-n-drop to solve puzzles in a top-down isometric world. The entire game can be played with one hand, but you can make it more difficult if you so choose. Why would you? If everything is easy, you won’t have to worry anymore. Just live your simple life. Let the corps take care of everything for you.

Set in the future full of robots, metal, and everything cyber. Everything is automated- if it isn’t, you must be poor. Corporations own the world. In your city, 1 corp owns everything. You work for them- at least you did, until one day they betray you, steal all your tech and kick you out to suffer. You meet others like you and work with them to gain your tech back, and free the city from the company’s clutches.

In the demo, you’ll recognize an original story about a young girl getting revenge on an evil corporation by hacking your enemies and finding different, unique interactions with them. Uploading a virus to a robot takes much more than just plugging in a USB, especially when the corp takes away any all all tech you may have. Luckily, a secret stash you kept from your old self comes in handy when it comes to taking down security, new or old, bot or human. Get your tech back, take back your city, and maybe even discover a sinister plot lurking beneath the surface.

3.3 Gameplay Loop

The loop consists of Set Loadout, Infiltrate, Escape. Every level will follow this loop, where each phase is integral to the plan. The “Set Loadout” phase has you choosing your 3 loadouts- the 3 hacks you plan on hitting security with. In this demo, you’ll be introduced with the basic 3- disable, destroy, and befriend. You’ll get to use them in the infiltration phase, which consists of sneaking and hacking armed robot guards. Sneak up to a guard and click- you’ll be introduced to the hacking screen, in which you get a limited amount of attempts to crack the robots security protocols to upload your “payload”, or hack, into them. Depending on how many times you fail, you get less choices in which payload you upload. Once you’ve hacked every enemy and infiltrated the base, it’s time to escape. Escaping will be a modified version of infiltrating, where depending on your interactions during the infiltration phase, robots will help or hinder your escape. There are brand new enemies, and the building is on high alert, so you best get out quick, or getting caught is the least of your worries!

**4. Demo Gameplay**

4.1 Overview

Phase 1- Loadout  
 -You code a few payloads during prep. This means you get to choose what hacks you plan on using on the security guards in the game! In the demo, you’ll have a preset payload which the game automatically applies for you: You can either Disable the enemy, Destroy it, or Befriend it. Each option has increasing “memory” costs- this is explained in the Hacking phase.

Phase 2- Infiltration.  
 -A timed phase in which you’re completely invincible. You’re sneaking around corners, maneuvering around armed guards (for the demo, all guards are robots) and hacking them to get to your destination. There are portions of the map marked to show you where you can move and what enemies you are able to interact with.

Phase 2a- Hacking  
 -Hacking will consist of the player clicking on a robot they choose to hack and completing a puzzle based on the enemy they are interacting with.  
 -Every enemy has a set amount of memory- the amount of space they have directly correlates to the number of turns the player has to hack the robot.  
 -Every turn they take will decrease the amount of memory available in the robot. If the player uses up all the memory, they will only be able to activate the payload in the 1st slot.  
 - Depending on how much memory they use, the payloads in the 2nd and 3rd slot become available to hack the enemy with.  
 -The more memory the robot has, the more you can use your more useful hacks. You can’t destroy or befriend a robot If there isn’t enough memory to do so.

Phase 3- Escape.  
 -After the Infiltration phase and a small story cutscene, the player must backtrack through the levels to escape the way that they came in. There will be extra robots on the premises, as the cutscene will explain that you have triggered an alarm that caused more enemies to take the old one’s places.  
 - All robots in this phase are un-hackable. The robots that were previously hacked will now act based on the hack you performed. In the demo, if the enemy was disabled, it re-enables and looks for the player. If the robot was destroyed, there will no longer be a robot there to block your path. If the robot was befriended, the same robot will now appeared marked, where they will help you with secret paths and extra pickups (things like new payload options, materials, etc)  
 -This isn’t in stealth, the player will be moving the character by clicking where they want them to move.

4.2 Gameplay description

When the player starts a level, they will be briefed based on a story cutscene. They will then open a laptop, in which they will set a loadout- in the demo, the loadout will be chosen for them, all the player has to do is learn how to interact with this menu to do it in the future.

The laptop closes, and a small cutscene of the player character sneaking into a building will commence. Once inside, the player will be able to click around the room to explore, but only in designated areas. They will also be able to click robots to proceed to a hacking minigame, in which they are matching a pattern of wires to correctly attack the robot, and then upload a hack depending on the amount of memory within the system is available. Your purpose for infiltrating is to grab your old tech- things that will upgrade your current abilities and unlock new hacking options. Within each level is a secret to unlock- other super strong payloads that you can only receive by being smart and skillful with your hacks.

Escaping will be the same as infiltrating, except you are free to move anywhere, not just within the designated spaces. This means any places you could not reach during infiltration will now be open- however, there are guards looking for you, and different outcomes based on the hacks you applied, so you’ll need to tread carefully, and reach the exit before getting caught.

4.3 Controls

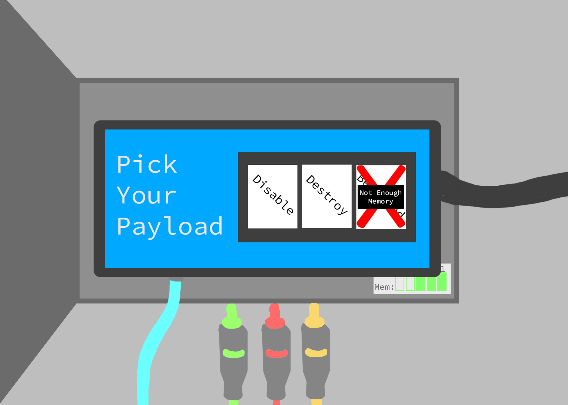
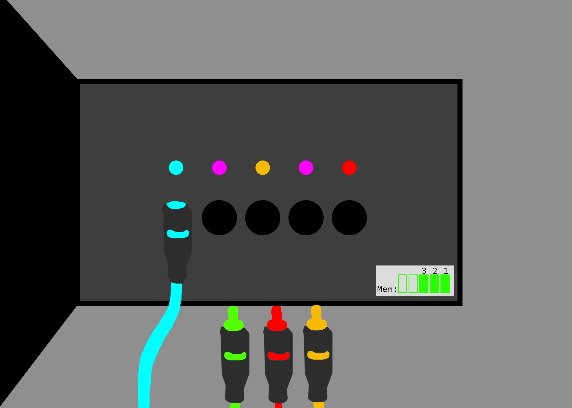
Mouse and keyboard:

Phase 1- loadout.  
 -Click to interact, click and drag to upload, type to code.

Phase 2- infiltrate  
 -Click to move freely.  
 -Click and drag to hack.

Phase 3- Escape  
 -Click to move freely.

4.3.1 Interfaces



The 2 hacking screens mocked-up. The picture on the left is what it looks like during the initial hack phase- you’re trying to get access to the robots by plugging your device into it. The lights on top show you if you have the correct wire inserted, and the memory bar tells you how many tries you have until you can no longer input one of your loadouts.

The one on the right is the phase right after, which shows you what it would look like (more or less) when you finish the hack. You would then pick your payload, choosing what you’d do to the robot in question. Certain choices will be locked out depending on how much memory is left.

4.3.2 Rules

On hacking- you have a set number of turns to hack into an enemy. If you take too many turns, you’re stuck in a difficult position of only having 1 hack to upload into the enemy, which usually makes things harder when escaping.

The player only has 1 life- if they get caught for whatever reason during the escape phase, they will have to go back to the infiltration phase to try again. If they so choose, they can go back to the Set Loadout phase to pick a different set of hacks to change their outcome, or they can try again with their current hacks.

It is impossible to be caught during the infiltration phase. The only time the player can “game over” is during the escape phase.

4.3.3 Scoring/winning conditions

To win, escape without getting caught while stealing as much tech as you can. At the minimum in every level, you will get a piece of tech that upgrades your current set-up, however you can get more if you play the game skillfully.

**5. Game Characters**

5.1. PCs (player characters)

The player character works for the company CorTech- until one day you mess up and get fired. The kicker? CorTech controls the city- you have nowhere to hide, and they’ve taken everything from you.

Your motivation? Get your stuff back.

5.2. NPCs (nonplayer characters)

Robot Guards

The big bad (CEO of CorTech)

At the end, you meet others in the same situation as you.

5.2.1 Behavior

Robot Guards- move freely around a map according to a grid. If they see you, it’s immediate game over. They de-activate when you hack them.

All other NPC’s are only visited in cutscenes.

**6. Story**

6.1 Synopsis

The player character works for a massive corp called CorTech, an information tech company that specializes in the world’s economy- one run on how willing people are to spend credits, a currency that isn’t used anywhere else in the world. You find out CorTech is doin bad stuff, and get fired for your discovery, and all your stuff gets stolen. You decide to steal your stuff back, and in the process meet others in your situation.

6.2 Backstory

If you meet normal people, you’ll notice they’re all high and mighty- people can’t live without their technology, nor do they want to. Nobody has anything bad to say about CorTech, and if they do, they disappear. Nobody questions CorTech. The city is completely built out of future metals, except for a small area that leads to a bustling underground city filled with people who have been shunned by CorTech and the city and survive.

6.3 Narrative devices

Cutscenes, dialogue between characters.

**7. Appendix**

7.1- Updated Scope

As of November 25th 2020, The scope has changed drastically. For the Pre-Alpha, the initial plan was to have a complete payload and infiltration phase playable, with some narrative beats to follow. No art (everything will be temporary or placeholder art, or borrowed from previous projects), so it wouldn’t have been pretty, however it would’ve been at least 5 enemies that were affected by the hacks, and an escape phase would’ve shown the outcome, even if it was just for show.

Due to setbacks and unforeseen circumstances (computer broke, catch-up with other classes, work, and just in general the stress of COVID that I didn’t realize affected me until it was too late), a lot has changed within this pre-alpha build.

The project currently has the following:  
1 enemy, fully interactable. You are able to hack them, apply the loadout, and your loadouts are limited by the amount of times you’ve tried. The hack is completely randomized. There are no narrative sections, no set-loadout phase, and no escape phase, and the enemy in question isn’t affected by the hack .This means you can hack them multiple times and experience the randomization, but you’ll never be able to see how the hack has affected the upcoming phases of the game. The character movement is currently worked with WASD instead of point-to-click, but you have to click enemies to interact with them.

I wish I had more time to focus on just this and have no other distractions- it would have been time working through bugs, errors and tutorials, as well as time to interact with others to get opinions and help on different aspects of the design. This would be much farther along.

In the state that it’s in, I can implement multiple enemies easily, with the enemy having a prefab. It’s just a matter of drag and drop. The only downside to this is that they aren’t affected by the hack in any way, so it would be as if I had multiple instances of 1 enemy, so it wouldn’t really add anything to the game.

I would also be able to implement a “2nd Hall”, a room with a different type of enemy, which would in theory have the same prefab as the previous enemy, but the hacking puzzle would be slightly different (with 5 circles to fill instead of 4). The same issue would arise, however, where you wouldn’t see how the hack affects the enemy in any way.

The future of this game is concrete, however. I know what I have to do and I have the plan in place to get the demo where it needs to be in the timeframe given.