

Game Design Document

Archer Maynard

v 1.2

Change Log

30/1/23	V0.1	Title, overview, Elevator Pitch, Game Overview, mechanics (employees, shuffling, completion, suspicion, budget, months. Mistakes)
31/1/23	V0.2	Target audience, Project completion rework, employee pictures.
6/2/23	V0.3	Target audience rework, reworked game idea to be a mobile game.
9/2/23	V0.4	Employee mechanics rework, Coins, Moving employees, suspicion, project completion.
10/2/23	V0.5	Controls, loops, table of contents, employees added pictures, hiring.
14/2/23	V0.6	Changed moving employees (from connecting lines to a glow) based on feedback by Callum (connecting lines may be too cluttered for a mobile screen).
20/2/23	V0.5	Feedback received from Jason Koch (Need to further describe feedback loops and describe the why behind a lot of decisions. Add sections for sound and possibly other things).
20/2/23	V0.7	Added headings for sound, UI, look and feel, mood board, art influences. Added mood board picture.
21/2/23	V0.8	Updated table of contents, updated premium currency, added art influence, added feedback, added art style, added art influence.
24/2/23	V0.9	Setting overview -> narrative overview, redone feedback section, art upgrade, minor restructure, score, sound.
27/2/23	V0.9	Feedback received from James Bramble (General spelling and grammatical errors, target audience should include money/time availability, link stats to UI, give numbers for stats label diagrams) full feedback doc included with submission. In response, Fixed spelling mistakes and grammatical errors pointed in James' feedback.
8/3/23	V1.0	Added captions to images.

10/3/23	V1.1	Rearranged mechanics section, changes to formatting in many sections
		along with minor additions many sections. Added UI section, added
		References section. General grammar fixes.
17/3/23	V1.1	Feedback from Jason Koch (areas of improvement and suggestions for target
		market, and feedback loops.)
21/3/23	V1.2	Changes made to target market and feedback loops based on feedback from
		Jason Koch.

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Overview

Genre	Arcade / Management
Platform	Mobile (IOS, Android) Phone & Tablet
Point of View	2.5D Isometric
Theme / Mood	Humour

Elevator Pitch

You are a HR Manager in charge of a project that would make your job obsolete, maximise <u>In</u>efficiency by shuffling employees around to create the perfect stressful workplace without getting fired.

Game Overview

The player is a human resources manager in charge of a project to create an AI that would put them out of a job. They must impede the progress of the project as much as possible by putting people in jobs they don't know with people they hate. If the managers boss receives too many complaints, then the player will get sacked.

Gameplay

- Drag and drop to move employees from desk to desk.
- Reduce the efficiency of employees by giving them the wrong jobs and placing them with other co-workers that stress them out.
- Time is ticking down to the project completion deadline and inefficient employees will extend that time.
- Being in the wrong job causes anger, then complaints, too many complaints and its game over so shuffle angry employees around.
- A constant stream of new hires are coming in, make space by firing the stressed out employees when they make mistakes.
- Along the way pick up coins of budget that employees are misplacing in their inefficiency.
- Maintain the carefully constructed perfectly imperfect workplace for as long as possible.
- When the run is over get awarded coins and use them to get loot boxes containing cosmetics for the employees.



(mock-up of game view for iPhone 14, WIP)

Target Audience

- Somewhat experienced casual gamers.
- Ages 12 35.
- Mobile (IOS / Android)
- Sessions of around 5 minutes are optimal, though session lengths are quite variable due to the game being in an arcade-y last as long as possible style.

How Human Resources caters to its target market:

• The controls of Human Resources are specifically designed around mobile touch screens, utilizing motions common and familiar to mobile users, aiding in ease of entry.

(See Controls)

Human resources hones down its mechanics to be easy to pick up or return
to, as a sacrifice there is little in the way of new mechanics introduced
throughout gameplay. To keep players returning and enjoying the game over
multiple runs replayability is key, to achieve this each run is randomised by
having random employees.

(See Skills and Personality Traits)

- Each run ends with a score based on run time, this allows players to build high scores, which is a common feature among endless style games, allowing players to have a sense of achievement and something to show off. Human Resources also gives players an additional reward of coins based on their score, this helps mitigate the negative feelings of losing and focuses on the player performance being rewarded. (See Coins)
- Human Resources allows players to customize their employees though
 cosmetics gained via loot boxes, a mechanic that is proven very successful in
 mobile games. The loot boxes and cosmetics give an exciting goal for the
 players to work towards in gameplay, while the cosmetics provide a personal
 attachment and flair to their employees. The cosmetics are things like hats,
 glasses, and different styles of ties for the employees to wear.

(See Coins)



(Examples of basic cosmetics)

Art style, Story, Characters, and Audio:

Simple clean graphics that are easily readable from a phone screen make the game easy to pick up.

(See Art style)

 An intentionally very basic story about how the player is doing it to ultimately keep their job, the short length gets players straight into the gameplay.

(See Narrative Overview)

Basic NPCs that are customisable through cosmetics, their character is shown through animations based on mood. This adds cosmetic meta progression to help with retention.

(See Employees and Feedback)

 Gamified audio with satisfying sounds for player actions, basic background music that can be optionally turned off.

(See Sound)



(Stressed employee with cosmetics)

Feedback loops:

Human resources utilises short feedback loops targeted at capturing the attention of our players during short sessions of play.

- Firing an employee can cause a rapid chain reaction positive feedback loop full of attention-grabbing visual bursts and exuberant sound effects. As the situation stresses out other employees causing them to be fired and pass on the effect further culminating in a whirlwind of excitement for the player. (See Stress)
- Another feedback loop focuses on rewarding long play time, by compounding the rewards gained by having long in game runs. Longer runs provide more score which in turn gives a higher amount of bonus coins, this has a run-on effect of providing the player more time and opportunities in which coin collection quick time event can occur.

(See Coins and Score)

See Feedback for more general feedback information.



(Stressed employee making a mistake)

Narrative Overview

The story of HR (Human Resources) is fairly simple, it's about a human resources manager (the player character) who is working on a project that is developing an AI which will do the job of a human resources manager. The perfect efficiency the AI creates would replace the player so they will mismanage the project as much as possible hoping to delay that future.

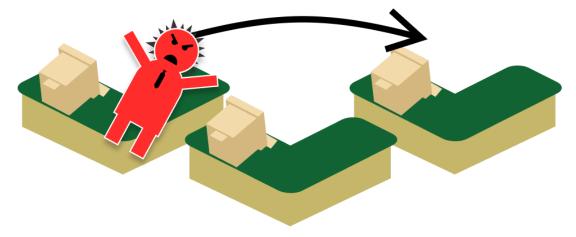
Gameplay and Mechanics

Mechanics

Moving Employees

Employees sit at desks around the office building, the player can drag employees around and place them at different desks.

- The colour of the desk determines what job is assigned to the employee.
- When the player is dragging an employee, already placed employees will glow showing the effect they will have on each other's <u>stress</u>.
- When the player releases their finger from the screen the employee will be dropped into the nearest seat.
 - If the player is moving the employee to a desk that is occupied the employees will switch positions.
 - o If the player is <u>hiring</u> an employee into an occupied seat then the action will not go through, and the jobless employee will be returned to the bench.



(Angry employee being moved, the arrow represents a player's finger dragging the employee to another desk)

(For more details see Employee Movement Loop)

Employees

Employees are the backbone of the project and are the main thing which the player interacts with throughout the game. Employees will work towards the end of the project (game over) and to continue playing the player must impede that process as much as possible.



(Angry employee with at desk with stat bubbles for, Anger, Stress, Efficiency)

Skills and Jobs

Employees have a job based on where they are placed by the player. Each employee also has a random skill in one of the 3 possible jobs. An employee in the wrong or right job for their skill has different effects.

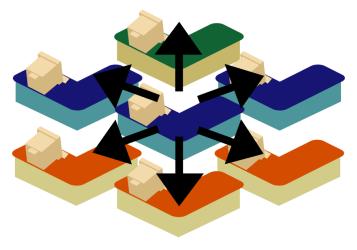
The right job:

- Adds Flat Efficiency.
- Passively Decreases Anger.

The wrong job:

- Flat decrease to Efficiency.
- Passively adds Anger.

Job types are distinguished by the colour of desk. Desks are placed in an isometric hexagonal grid and employees which are at adjacent desks will affect each other's stress.



(Diagram of adjacent desks)

Personality traits

Employees are randomly generated with a personality trait which will determine whether they will get stressed by the other nearby employees which they are working adjacent to.

Stress

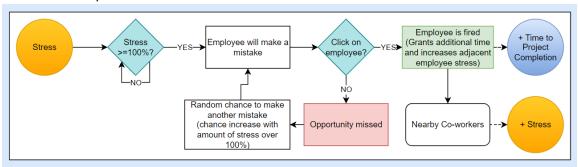
Employees gain stress through problems that they believe come from the other employees around them. Each Employee has a personality trait and likes / dislikes other employees based on their trait. It is advantageous to the player to have the employees stressed as they will be less efficient and have chances of making a mistake.

- If the adjacent Employees are a majority liked, then the Employees Stress will passively decrease, lower Stress will make an Employee more Efficient.
- If the adjacent employees are predominantly disliked then Stress will passively increase, highly Stressed Employees will be less Efficient.

Employees which reach 100% Stress will make a mistake, giving the player a window of opportunity to fire them, if the player misses the employee will randomly make mistakes again, with the likelihood scaling with how much extra stress the employee has.

(Stressed Employee)

Firing an Employee adds time to the Project Completion and causes adjacent employees to also gain stress (Stress given is decreased as the effect recurs in succession).



(Stress & mistakes flow / loop)

Project Completion

Project completion is game over in Human Resources, keeping it from happening is the main goal in the game. Project completion is a value that ticks down over time.

- Efficient employees make the project complete faster, ticking down the time to project completion.
- Inefficient employees add time, allowing the game to continue.
- As a game gets longer the natural time loss increases, adding progressive difficulty.

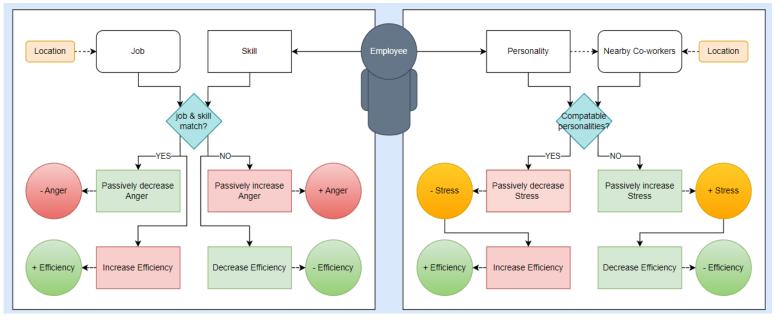


Project completion

(Project completion flow / loop)

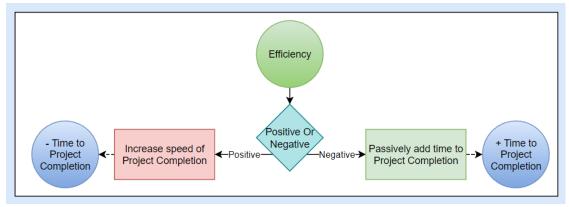
Efficiency

Employee Efficiency is a value that can be negative or positive, the amount of which determining how they will passively affect the time till <u>Project Completion</u>, something that should be drawn out as long as possible.



(Employee Flowchart)

- An Employee with a total positive Efficiency will make the Project Completion time tick down faster, depending on how efficient they are.
- An Employee with negative Efficiency (or positive In-efficiency depending on how you look at it) will add time to the Project Completion allowing the game to continue longer.
- Negative efficiency employees also have a chance to drop Coins.



(Efficiency to project completion flow)

Anger

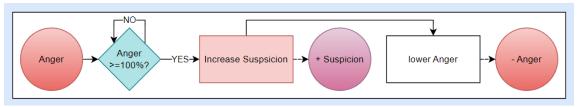
Anger is gained through negative experiences an Employee perceives as being directly caused by the player in this case being assigned the wrong job.

- Employees which are assigned correctly (job matches skill) will passively lose Anger.
- An Employee who is assigned to the wrong job for their skill will passively gain Anger.



(Angry employee)

Employees which reach 100% Anger will complain raising the players <u>Suspicion</u>, after complaining the Employee's Anger will go down.

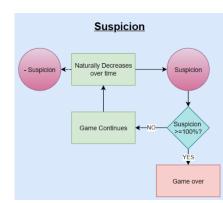


(Anger and complaint flow / loop)

Suspicion

Suspicion serves kind of as the players health, and its characterised as how much the company suspects the player's sabotage.

- Suspicion is increased by complaints made by employees when they are at 100% <u>Anger</u>.
- When suspicion reaches 100%, it's game over.
- Suspicion naturally decreases over time allowing a player to recover if they don't get many complaints.



(Suspicion flow / loop)

Anger and suspicion encourage the player to move their employees more often. Without the interaction caused by anger, gameplay could stagnate after the player finds the perfect position for all their employees.



(Suspicion meter UI)

Score

At the end of each run the player will be shown their score, the main factor of score is run length but various actions throughout the game add additional score. Things like collecting coins add score, and recursive firings can combo for extra score. The player also sees their high score on the game over screen.



(Score display at game over)

Coins

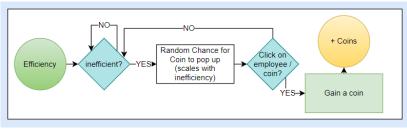
Coins are a resource that is used outside of gameplay to buy loot boxes which contain different cosmetics for players to equip on their employees.

Coins are earned via:

- Inefficient employees randomly popping up with them, if the player taps on them quick enough, they get a coin.
- coins are awarded based on player score at the end of each run.
- After awarding coins at the end of the game, a bonus number of coins can be earned via watching an ad, the size of the bonus is a percentage of the already awarded coins.



(Coin display at game over)

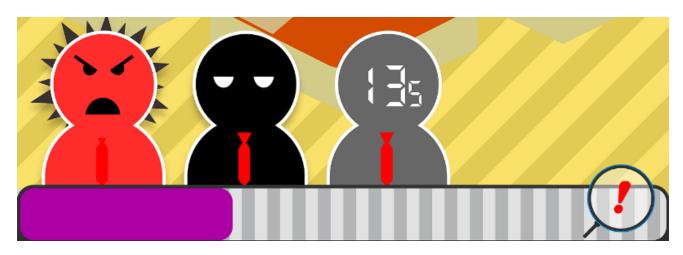


(Coin flow / loop)

Hiring

Throughout the game the player must hire new **Employees**.

- At the start of the game there are some employees already waiting to be hired.
- As the game progresses more employees will arrive and must be hired.
- Hiring is done by <u>Moving</u> an employee from their place at bottom of the screen a dropping them at a desk.
- Employees who have been waiting to be hired for a long time will begin to get <u>Angry</u> and eventually complain raising <u>Suspicion</u>.
 - o Because of this the player must be Firing employees to make space.



Controls

As a mobile game the controls are touch screen based. There are only two common motions used for Human Resources:

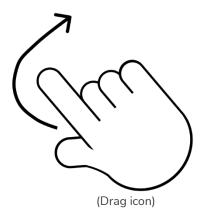
Tapping

To navigate menus, <u>Fire Employees</u>, and <u>Collect Coins</u>.

Dragging

To Move Employees.





In-app-purchases / Monetization

Ad monetization.

- After awarding coins at the end of the game, a bonus number of coins can be earned via watching an ad, the size of the bonus is a percentage of the already awarded coins.
- Banner ads on menus, and death screen. (No popups, no ads in gameplay.)

Players can buy a premium currency called Cash, in bundled amounts. They can also directly buy no ads.



(Premium Currency Icon)

Other ways the player can get premium currency:

If the player gets a very good score (very hard to get), along with the bonus
ad coins they get a very small amount of premium currency. The player still
needs to watch the ads for this even with no ads purchased. The UI will
make the player aware of how close they were to a "free" premium currency
when showing bonus coins. The amount of free premium currency is time
locked.

Or

The player has progression milestones that along with coins, award small amounts of premium currency.

The players can spend their premium currency on:

- Buying a specific employee cosmetic for 100 "Cash", (note that these cosmetics are also possible to be <u>earned randomly via loot boxes</u> for free players).
- Buying office skins, (not possible to be earned by loot box)

Importantly, loot boxes cannot be bought directly with microtransactions or premium currency.

Premium currency will be bundled like this:

- The cheapest bundle costs \$2.50 (AUD) and gives 100 cash plus 25 "bonus" cash. <u>Total of 125 cash.</u>
- The middle range bundle costs \$4.99 (AUD) and gives 200 cash plus 75 "bonus" cash. <u>Total of 275 cash.</u>
- The highest cost bundle is \$9.99 (AUD) and gives 450 Cash plus 125 "bonus" cash. <u>Total of 575 cash</u>.



(Medium sized premium currency bundle icon)

First time purchases have an additional reward:

- The cheapest bundle costs \$2.50 (AUD) and gives 100 cash plus 75 "bonus" cash as well as a 7-day (real time) boost to the number of coins received. Total of 175 cash.
- The middle range bundle costs \$4.99 (AUD) and gives 200 cash plus 125 "bonus" cash, this bundle also includes a 14-day (real time) boost to coins. Total of 325 cash.
- The highest cost bundle is \$9.99 (AUD) and gives 450 Cash plus 175 "bonus" cash, this bundle also includes a 1-month (real time) boost to coins. Total of 625 cash.





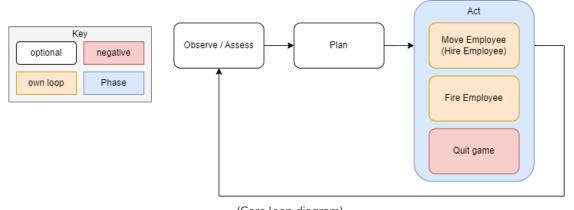


(Icons for small, medium, and large premium currency bundles)

Game Loops & Flows

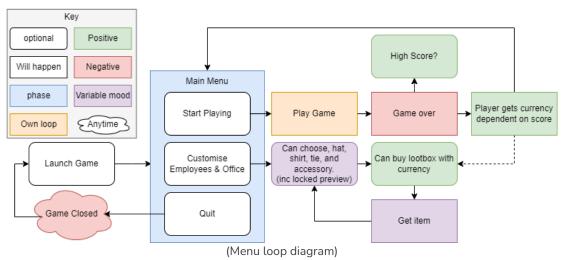
Core Loop

Like most real time games, the core loop is, observe, plan, act.

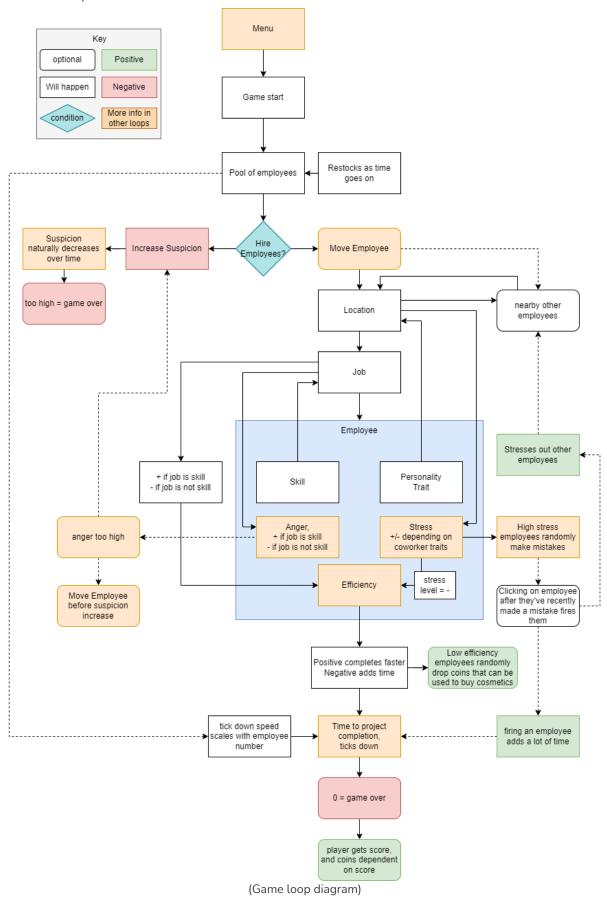


(Core loop diagram)

Menu Loop

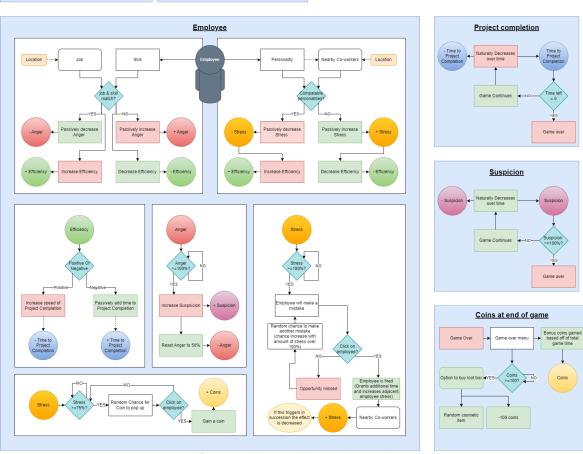


Game Loop



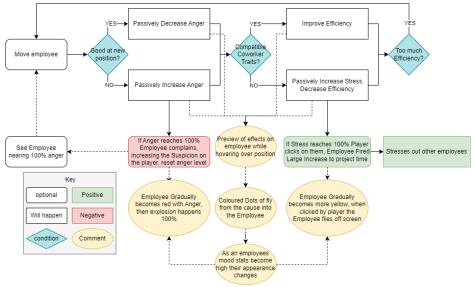
Resource Flowchart





(Resource flows and loops diagrams)

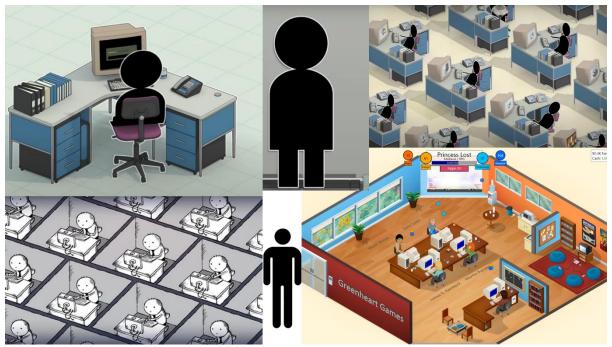
Employee Movement Loop



(Employee movement mechanic diagrams)

Look & Feel

Mood Board



(Left to right reading order, 1. & 2. "Portal is free", 3. "Portal 2 Perpetual Testing Initiative", 4. "Shutterstock Stock Video ID: 10204073810", 5. "Clipartmax male toilet sign", 6. "Game dev tycoon")

Art style

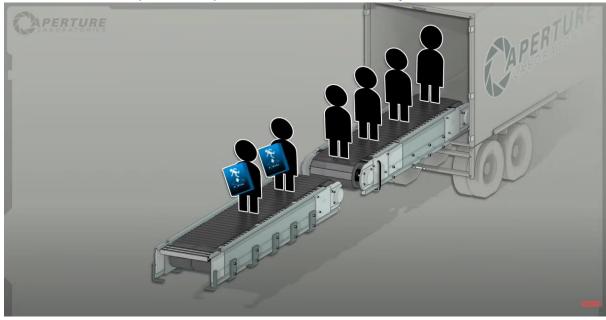
The art style of Human Resources is simple, with the goal of being charming and readable. The character design plays off the cliché of cookie cutter corporate workers and has similarities to common human icons seen on signs.

Human Resources is very cartoony, and example images of many different things in the style have been spread throughout the document.



Art Influences

Portal 2 shorts: https://www.youtube.com/watch?v=BDj1fYlwR00



(10. Screenshot from Valve YouTube video "Portal is Free (Well, it was - now it's just a good deal).")

Valve's shorts have inspired the design of employees, they are charming and display lots of character through their animations despite being so simple.

User Interface

The user interface for HR is bright, colourful, and clean. Various aspects of the UI would be animated to provide more satisfaction to the player.

- Numbers would tick up rather than instantly change.
- The display for gaining coins is a percentage bar that overflows and loops around counting up the coins gained.
- Aspects would slightly move animatedly to add life to the UI (e.g., the employees next to the score moving, and the loot box glowing).
- The size of certain elements is changed to draw attention to specific things, (e.g., the game over and home elements are small, while the play again button is larger).



(Game Over screen)

Feedback

Dynamic employee looks:

Employees will change looks and animations depending on their stat levels.

- <u>Stress</u> will make an employee yellow, changing their face to be more nervous looking and sad. Stress would cause animations like sweat drops.
- Anger will make an employee red, and their face angrier. As they get closer max anger, they will have spikes undulating behind their head and will begin to have animations of jumping up and down and waving their arms around.
- <u>Efficient</u> employees will look normal and plain black, while their face looks a bit tired and slightly bored. Their animations are of dutifully working on their computer.



(Stressed employee, angry employee, neutral employee)

Moving employees:

When being <u>dragged around</u> by the players finger it is like they are picked up by it, they might protest a bit by lifting their arms and waving them around. As the player moves them the employee will swing with varying intensity dependent on the speed of movement. When the employee is released, they will drop and be plopped into their seat.

Mistakes & Complaints:

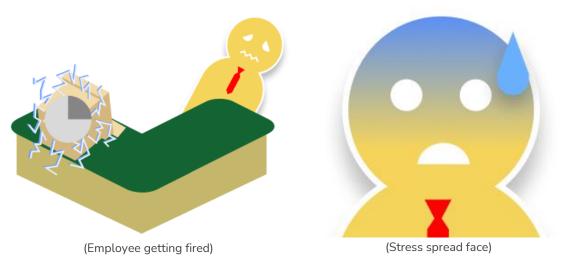
- <u>Mistakes</u> will cause the employees computer to break and start sparking electrically for the duration of the mistake, potentially randomly hitting the employee, and causing them to flash showing their skeleton.
- <u>Complaints</u> will make the angry employee explode with the suspicion symbol before they have a short animation of sending an envelope.



(Left - a stressed employee making a mistake. Right- an angry employee making a complaint)

Firing employees:

Firing an employee will fling them off the screen. A small shockwave will originate from the fired employee's desk that will hit the adjacent desks. The adjacent employees will briefly have a face of fear as their stress goes up from seeing the co-worker fired.



Loot boxes:

A loot box is shaped like a brief case and glows purple with locked potential. When the player taps it, the briefcase will begin to shake, beams of purple light growing in intensity will begin to shoot out of the cracks until the loot box reaches a crescendo where the buckles will pop, and the light will flash before receding and revealing the item contained.



Sound

As the style of Human Resources is cartoony humour, the sounds will reflect that by being cartoony and gamified. There won't be sounds for every action an employee makes because when reaching up to 18 employees sound would be overwhelming. Sounds will be tied to specific actions made by the player or states that an employee is in e.g. when a player collects a coin a cartoony cha-ching of a register will play, or when an employee blows up with anger an explosion can be heard.

Reference

All of the images within this document (with exception to those within Mood Board, Art Style, and art influences) were created by myself specifically for use in this document.

External images:

- Valve YouTube "Portal is Free (Well, it was now it's just a good deal)." https://youtu.be/BDj1fYlwR00?t=46
- 2. Valve YouTube "Portal is Free (Well, it was now it's just a good deal)." https://youtu.be/BDj1fYlwR00?t=18
- Valve YouTube "Portal 2 Perpetual Testing Initiative" https://youtu.be/b7rZO2ACP3A?t=73
- 4. Shutterstock "Stock Video ID: 1024073810" https://www.shutterstock.com/video/clip-1024073810-office-employees-cubicles-cartoon-workers-big-they
- 5. Clipartmax "Sign, Silhouette, Male, Toilet, Public, Bathroom Public, Male Toilet Sign Png" https://www.clipartmax.com/middle/m2H7G6d3N4G6K9A0_sign-silhouette-male-toilet-public-bathroom-public-male-toilet-sign-png/
- 6. Polygon "Game Dev Tycoon reminds its creators that success is fickle, and failure is always on the table"

 https://www.polygon.com/2019/2/21/17771449/game.dov.tycoon.pirate.mode.undate.
 - $\underline{\text{https://www.polygon.com/2018/3/31/17171448/game-dev-tycoon-pirate-mode-update-patrick-klug-interview}}$
- 7. Australian safety signs "Exit Symbol Right Arrow" https://www.australiansafetysigns.net.au/products/exit-landscape-exit-symbol-right-arrow?variant=1033194844
- 8. Vecteezy "Men and women toilet sign icon. Symbol of gender for restroom vector. Silhouette male and female illustration Free Vector"

 https://www.vecteezy.com/vector-art/3988568-men-and-women-toilet-sign-icon-symbol-of-gender-for-restroom-vector-silhouette-male-and-female-illustration
- 9. Australian safety signs "Strictly No Entry" https://www.australiansafetysigns.net.au/products/prohibition-strictly-no-entry?variant=652670269
- Valve YouTube "Portal is Free (Well, it was now it's just a good deal)." https://youtu.be/BDj1fYlwR00?t=22