

Heel

Technical Design Document

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Overview:

“While the actions of a particular being may be portrayed as having an independent source, they are in fact often parallel to the motivations found within its respective social environment.

This is where we should begin”

Heel is an isometric RPG game in which the player experiences gameplay primarily focused on puzzle, exploration, and minimal combat. For the majority of the gameplay, the player has control over two entities in order to progress through the game. For exploration, movement, and basic interactions; the player controls the main character. However, following the main character and responsive to certain player actions, the player also controls a dog. The dog character can be moved and interacted with independently of the player’s movement, but it will default to following the player. With regards to puzzle solutions, the player will experience both conceptual and hands-on puzzles, such as riddles and visual-based challenges. These puzzles may sometimes require the movement and interaction of both the main character and allied canine in separate circumstances. With regards to combat, the dog will primarily be responsible for interacting with enemy units, and therefore a series of buttons will gradually become available over the duration of the game to extend the dog’s combat capabilities, as well as to allow the main character to have some influence on combat.

Once again, the game would be isometric 2D, and would primarily be based on narrative, puzzles, and visuals. Therefore, some amount of simple art would be required to craft the world, characters, and animations. Subtle music could also be designed for sound effects as the project progresses. Narrative and dialogue itself would likely take a large amount of time, not only due to the amount, but also due to the fact that the story and portrayal of the twists and turns in the plot would have to be planned and properly designed. On the programming end, it is likely that the game would need to be designed in a flexible manner in order to be able to tackle certain properties through repetition. As such, a level editor to properly construct worlds would be one of the basic aspects expected for development. Other aspects, such as in-game cutscenes (characters move around as dialogue progresses), action-based objects (such as notes that display text when interacted with), and basic AI-based enemies would be required for the overall project. However, the programming content should be relatively familiar, and the flexible design should be somewhat simple, and in that case more focus could be given to the design of the story and art.

Story:

The story itself will need a substantial amount of development if this project is chosen, and therefore the following brief summary should be simply viewed as a basic framework and collection of ideas.

The game will begin with the player character waking / starting in the basement of a pet store. Little information is known about the environment, but upon reaching the ground floor of the store after going through basic gameplay introduction, the player will encounter the dog character. The dog character, being the only other current 'active' being in the environment, will be released by the player and begin bonding to the player character. From there, the player and dog will eventually exit the store, finding a desolate town surrounding them with no obvious signs of life.

After some amount of exploration through the surrounding areas, it becomes apparent that the lack of population is somehow intended, as a number of gates and intentional notes have been left behind to guide the player character and dog through the town. Eventually, these notes will lead the player character and dog to a run-down school, where they will interact with the first threatening entity.

Within the school, the player character and dog will encounter a few robots that will proceed to attack the player character and dog on sight, thus forcing the player to fight for survival until they are able to escape the school (Perhaps they may be forced to search for a key to a gate in the town within the school, or the school itself may be locked after entry). Story will continue to progress through notes and other forms of presentation, and eventually the player character and dog will escape the setting and return to exploring the town.

Once in the town again, the player character and dog will proceed to a parking building, where the first encounter with another faction will begin. This faction will take the form of a number of mercenary soldiers who will also attack the player character and dog on sight. As the player character and dog proceed to attempt to flee the entities by heading downwards into the parking building, eventually they'll find themselves surrounded and caught by the faction of soldiers.

At this point both the player character and the dog will be rescued by an unknown human NPC, who will assist in fending off the soldiers. From that point, the player character and dog will move through a tunnel system beneath the parking lot, eventually surfacing in the adjacent office building, where they will need to explore and move through until they are able to unlock and move through an interior bridge to the next building.

Perhaps it is while in the office building that a number of plot elements are revealed. First, it should gradually become evident that the player character and dog are not simply there by accident, but instead, the number of bots and notes left around to guide them are in fact a part of some vague testing process for soldiers. Therefore, it might be conveyed that the testing procedure is to harness traits for survival and obedience, and therefore the player character is being tested by some unknown source to this extent, as found by the number of bots that exist in related areas.

However, only little pieces of information will relate directly to the mercenary soldiers and unknown NPC, although it is evident that the three factions are not allied. Upon crossing the bridge, the player character and dog will enter into the next area, as represented by an elaborate Hotel. It is in the Hotel that the story will continue to unravel through notes and scenes, thus indicating the reality that the mercenary soldiers are part of an external source that intend to essentially harvest the valuables being researched and tested. Therefore, the town itself can be viewed as a mere testing ground, and the mercenary soldiers are under the impression that the laboratory / factory is actually hidden within, and therefore they can acquire weapons and technology within its structure. The third faction, the unknown human NPC, will also occasionally make an appearance and assist the player character and dog.

After traversing the Hotel, eventually it will become evident that the factory / laboratory is secured in the basement of the Hotel. At this point, it should also be noted that the notes relating to the testing will also draw to a close, as perhaps the player is deviating from the testing procedure. Also, perhaps on entry to the factory / laboratory, the player character and dog will become separated, but the game will continue and the player will control the dog primarily through the first part of the factory area.

While the player's main objective is to rescue the player character as the dog, eventually the player will encounter the human NPC, who will then ally with the dog in the search, resuming gameplay to normal. Throughout the factory, the player will combat a combination of drones and soldiers, but eventually the number of drones will dissolve in favor of soldiers, thus indicating the mercenary group has managed to secure the facility over the originally creators.

As the dog and human NPC progress, eventually the resistance of the mercenary soldiers will become more desperate as their numbers and potential to meet their goal become more restricted. Still, the player will encounter a number of 'reformed' bots and weapons controlled by the soldiers. Eventually, as the player approaches the finale, they will likely encounter the leader or main villain of the soldiers, who will be located in one of the highest priority experiment rooms.

In this room, the dog and human NPC will have to combat the leader, along with a number of other dogs he will release from their kennels and order to attack the dog and human NPC. After defeating him and the dogs, the human NPC and dog will be left victorious. Over the course of the final area, the final aspects of the story will gradually be conveyed, but the actual conclusion won't occur until the point where the human NPC fulfills his promise to assist the dog in returning him to his former ally.

In the following scenario, the human NPC will bring the dog to his former ally, now a deactivated human-like bot placed in an adjacent room. Furthermore, notes and information are scattered around the area depicting the information surrounding the testing procedures at the facility. The player character was not the thing being tested throughout the game, and instead, all of the testing information, puzzles, and riddles were all meant to test and train the dog throughout the game. This is simply due to the fact that the facilities goal was to create and train dogs to obey their owners without question, as found in the scenario where the mercenary leader was able to utilize the facilities dogs against them. However, in order to harness these traits, they needed to give the dogs some form of reason to acquire trust and obedience, and therefore the player character was created and utilized in order to bond with the dog. After each test, the player character was deactivated and reset, and the dog's memory was also wiped, leaving only the acquired traits of trust and obedience left, making them readily available for use by the military. Therefore, the same bonds that were harnessed between the player dog and the player character were also acquired between the player character and all the other dogs in the facility, as the player character was continuously deactivated and reused for the process.

The human NPC perhaps could embody a number of different aspects relating to the story, Initially, he was supposed to represent an external force, and also the dog's original owner. Therefore, he remains knowledgeable of the situation throughout the story, and his full identity is only revealed at the end of the story. However, perhaps he could also be a previous human-like robot that existed before the player character, one that managed to reactivate on its own after being discarded, therefore returning to the facility after gaining self-awareness. Or, for a more tragic ending, the human NPC could represent a member of the facility staff, who was simply deployed to deal with the mercenary threat, and therefore at the end of the story, the reveal is given and the dog is left to be brainwashed, thus allowing all procedures to resume as normal.

Gameplay:

As noted beforehand, the game will likely be isometric 2D, and therefore the basic forms of gameplay will be relatively simple. The player will move around with the user of the WASD keys. The spacebar may be used as a universal interaction for most objects, allowing the player to pick-up, read, or push various objects. Other buttons may be present to allow for pausing, note logs, or inventory.

However, another more complex system will have to be designed for the dog character. The dog will default to following the player. By left clicking an appropriate space, the dog will move to that location, attacking any enemies on that spot. Right-click may allow the dog to return to its default following position. Along with these simple actions on the mouse, the dog may also have access to four other actions depending on the number keys from 1-4.

- **Bark (1)**
 - Acts as a taunt, and causes enemies in the area to focus on attacking the dog over the player character.
- **Tackle (2)**
 - Damages an enemy and causes the dog to dash toward a targeted space. This acts as a toggle, where left-clicking after activation utilizes the ability.
- **Taser (3)**
 - This acts as a toggle, where left-clicking after activation allows the dog to attempt to move within a certain range, damaging and stunning an enemy.
- **Smoke Bomb (4)**
 - The area around the dog instantly becomes engulfed in smoke, thus limiting enemies from attacking the dog, or attacking through the smoke.

Likely, for the various abilities, they'll likely become available as the game progresses, as the dog may eventually acquire a tech-collar that allows for the use of the Taser and Smoke Bomb. The player character may also have some abilities to interact with combat, although, since the story primarily focuses on the actions of the dog character, these interactions may be subtle. Therefore, it could be a possibility that the player may be able to pick up some items, such as basic weapons or a device, in order to cooperate with the dog. However, these should be examined over the course of the development of the game to avoid the combat form becoming too complex.

Other than combat, some puzzle system will be present, which may be in the form of providing riddles, item-searches, or other mind-based interactions. These should not require much more than simple interactions with objects, or small cut-scenes to show resolutions.

Technical Challenges

Evidently, the development of the game itself would be rather simple. The programming components should be relatively familiar and simple, and most of the complexity will exist in terms of creating the different enemies, AI, and dog movements / abilities.

There will also be a considerable amount of work required for designing the story, narrative, dialogue, and art pieces. Therefore, work will likely be more split for a designer and programmer. Also, the length of the game must also be brought into perspective, as while the game itself is manageable in terms of ability, creating everything will no doubt take a considerable amount of time.