NERINE

IAT 313 INTERACTIVE NARRATIVE
GROUP REPORT

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PROJECT OVERVIEW

When we first started this project, we designed using the top-down approach. Vivian had originally come up with the idea of the USSR and NASA sending probes and people to Mars after discovering a civilization, before finding out that the pathogens and viruses in the environment were deadly towards the non-immunized humans. Originally, the one astronaut who would survive would be sent back to Earth as a biological weapon, and would have had to prevent the spread of the virus, create a vaccine, and return to Mars to wage war. While we all thought this would have made for a great fabula, it was too much to hope to achieve for this project. We reworked the concept so that most of it would be focused on the player's actions on Mars, and still contain the virus as a major plot point.

We decided to make a roleplaying game, which ended with the use of a branching narrative. This way, there would be some replay value in going through and trying to get all the different endings, and being able to have a more explicit interaction. Following Zimmerman's concepts of cognitive participation, we created an atmosphere of suspense through the ambiguous beginning of the story. Throughout the game, few details are given about the circumstances Colin is in, which leaves it up to the user to explore and interpret the fabula on their own. The syuzhet works on a mixture of first and third person, along with a limited or objective narrator. While the player sees most of the game through the eyes and experiences of Colin O'Mallory, the endings are told from the perspective of either Stella Yang or another outsider.

From Murray, we aimed to take advantages of the affordances available through the game, specifically the spatial, procedural, and participatory aspects. To make the interactions between the player and Colin more meaningful, we initiated character identification through the dialogue in cutscenes, as well as introducing a player-controlled character. As an interactive narrative, we had conditional procedures that set off different events, and used the spatial affordance to create a visual space that the user could suspend their disbelief for. Overall, we feel that we were successful in creating a high level of agency, that allowed full immersion into the game. In terms of transformation, Colin develops throughout the game with the player, as the user decides whether or not to save an infected victim, or fix the communication systems to inform NASA of his circumstances.

TARGET AUDIENCE

Nerine's target audience is mainly comprised of young adults from age 16 - 25, who may remember or have experience with playing retro 32-bit role playing games, such as early Pokemon or Final Fantasy games. As there is currently a resurgence of popularity for games that combine retro styling with adult concepts, as could be seen with popular independent games such as Hotline Miami and To the Moon, it seemed a logical choice to apply 90s game aesthetics to Nerine. This way, Nerine could appeal to the nostalgic appetite of the young adults while creating a complex and dark environment that allows players the freedom to make choices without being overtly told to. In

addition, strong and well-rounded personalities are created so our target audience can identify and relate to the characters despite the science fiction setting of Nerine. The male and female characters in Nerine are both heroic but flawed in varied ways, allowing the audience of either sex to be represented in a game where negative gender roles are not reinforced, and characters are created to be people rather than stereotypes.

NARRATIVE SUMMARY

Nerine is a science fiction survival horror narrative that takes place in the early 2060s, in an alternate universe where NASA's Constellation Program was not cancelled. The Constellation Program is a human spaceflight program that had clearly laid out plans to send humans to populate the moon, Mars, and eventually other planets. In this reality, the lunar colony had already been well-established, and Mars has a decade old fledgling colony that has, up till the beginning of Nerine, been thriving.

When the Jet Propulsion Laboratory in Pasadena, California loses contact with the Martian colony, a communications system specialist team is quickly assembled and sent to Mars on the spaceship Nerine. After six months of interstellar travel, the team arrives at the red planet and the events of the game unfold. As the lunar colony and Martian colony are under Terran ownership (and thus not owned by singular countries such as the United States of America), missions in space at any level are now completely international. Thus, the communications system specialist team are representatives of many different space agencies. Nerine's protagonist, Colin O'Mallory, is an astronaut from the Canadian Space Agency. Inexperienced but resourceful, his determination allows him to survive in the events to follow.

Upon arrival, the team of the spaceship Nerine discovers that there is more problems to the colony than a simple communications failure. Other than Colin, all members of the team succumb to a strange ailment that causes mental instability, aggression, and eventually death. Colin soon realizes that it is due to a parasitic fungus originating from water retrieved from drilling deep into the Martian crust. The parasitic fungus has completely taken over the colony, causing the residents inside to become fearsome, deformed creatures.

Colin's teammates succumb to the fungus, and their aggression causes them to break instruments within the spaceship, including the communication system on board. Then, when his teammates attack him, he is forced to kill them in self defense. Now truly alone and without aid, Colin realizes that he will have to venture into the colony if he is to return home, as fuel and tools to fix the communication systems are kept within the compound. He fights through the hordes of parasite hosts below ground, searching all the while for the tools he needs to fix the spaceship. As he travels through the colony, he experiences moral conundrums, learns about the fate of the residents, and collects samples to bring home to Earth. As he continues in his quest to survive, he has to defeat increasingly powerful enemies, such as lab mutants and fused monsters.

After fighting his way through the colony, his hopes of a quick escape is quickly dashed when the main fungus, having grown exponentially as it absorbed the dying hosts, crashes down from the horticultural pods down into the aircraft hangar, destroying spacecrafts and blocking the exit. He finds himself back in the colony, now having to return to Nerine through the way he came. Once he returns to the ship, he refuels it and fixes the parts, and begins his journey home. Depending on whether or not Colin fixes the communications system, there are three possible endings:
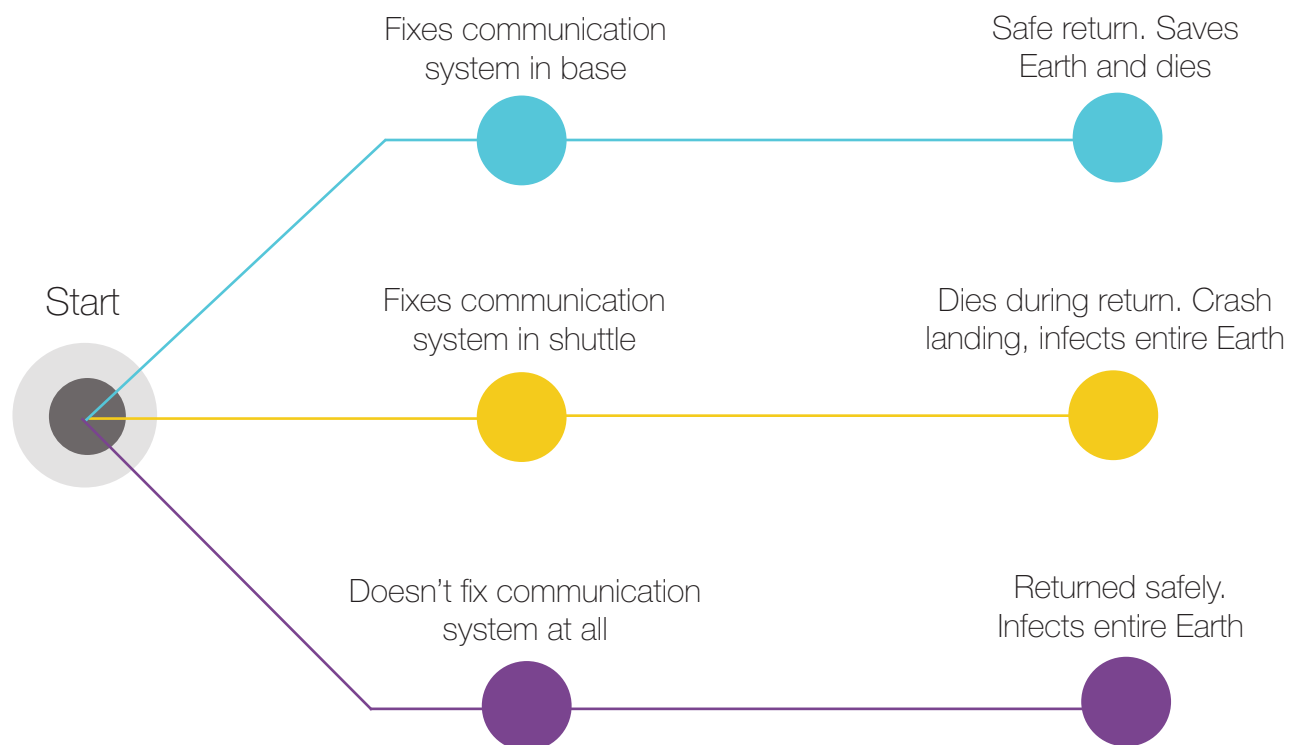
In the scenario where Colin was in touch with mission control the whole time, he fixes the spacecraft and returns to Earth safely. Upon arrival, he is quarantined to prevent the spread of the parasitic fungus. Although he does end up dying as the fungus takes over more and more of his body, a vaccination is created from his blood, and everyone else remains safe.

If Colin doesn't fix the communication system in the colony, but decides to repair the communication system in the shuttle, he dies shortly after take-off. He fills the spacecraft full of dangerous spores that eventually infects and kills everyone on Earth once they inspect his crash-landed vehicle.

If Colin fixes the spacecraft but does not repair the communication systems in the colony and the spaceship, he still safely returns home, and gets to see all his friends and family. However, he dies soon after, again infecting and killing everyone.

STORY MAP

BRANCHING NARRATIVE STRUCTURE

Fixes communication system in base — Safe return. Saves Earth and dies

Start

Fixes communication system in shuttle — Dies during return. Crash landing, infects entire Earth

Doesn't fix communication system at all — Returned safely. Infects entire Earth

TECHNOLOGY AND MEDIA

Many different programs were used to make Nerine. For the game itself, RPGMaker 2003 was chosen, as it provides a simple template as a foundation to build off of. The retro aesthetics, along with the built in battle system, made it a natural choice for our purposes. RPGMaker 2003 was chosen over more recent derivatives, such as RPGMaker VX, as the pixel art is much more complex in those programs, unnecessarily complicating the customization of sprites. With the simpler 8-bit style sprites in RPGMaker 2003, a larger variety of custom sprites could be made within a shorter period of time. In addition, RPGMaker 2003 allows for the upload of short cutscenes, which can be triggered in game.

The cutscenes were made predominantly in Adobe Photoshop and Adobe Illustrator. Small clips are animated in Adobe Flash from the images created in Photoshop and Illustrator, then these are all aggregated in Adobe Premiere Pro to create the final products. Adobe Photoshop was used for concept imagery, backgrounds, and for in-game sprites. The sprites include custom character, monster, item, and weapon images in 8-bit format. Custom sprites are made by altering or colouring pixels one by one on the canvas, which are then animated by the RPGMaker 2003 for use in-game. In the cutscenes, Illustrator was used for all of the foreground objects. This allows the cutscene videos to remain clear despite the small size requirement for videos in RPGMaker 2003, which is restricted to 320x240 pixels. The flexibility of vectorized images allows for easy transfer and use in all the Adobe programs, as well as CrazyTalk 6.

CrazyTalk 6 and Adobe Flash allowed for simple but effective animations to be used in the cutscenes. While Adobe Flash is suited for animating objects moving across space (motion tween), CrazyTalk allowed for more elaborate scenes where characters are animated speaking. Though lipsyncing animation to voice is usually very difficult, CrazyTalk simplified the process significantly, as it only requires an image or face of a character, and a voice track. The program itself is able to "read" the voice track, resulting in a speaking animation. This animated face is then superimposed onto bodies drawn in Adobe Illustrator. Both CrazyTalk and Adobe Flash can then be exported into avi format, to be assembled in Adobe Premiere Pro.

Within Adobe Premiere Pro, transitions and videos were layered to create the final product. Still images were also added to the timeline to further accentuate the imagery created by the animated clips. Then, sound effects, background music, and voice tracks are added to flesh out the sound environment of Nerine.

The voice overs were recorded with Audacity, a free audio editor and recorder. Using this program, background noises were removed, and the audio could be amplified or attenuated. Afterwards, alterations to the voices were made in Adobe Audition, with combinations of preset effects to create radio or echo effects. Also, soundtracks and sound effects were created in Garageband. A total of 21 tracks were made for specific aspects of the game (cutscenes, hallways, rooms, battle scenes,

and endings). Because of this, soundtracks are customized and varied. Most of the tracks layered pre-made loops and effects, which were provided by Garageband. Synths and fast-paced beats are used to reflect the nature of the game. Layered effects (such as electric waves, ambience waves, and thunder) were cut and repeated at various parts of the tracks for enhancement. Volume levels are manually adjusted for each layered track to maintain clarity and tone in the melody and beats without being overwhelmed by the additional effects. Once a track is completed, it is then exported as an MP3 format, which is then implemented into the game, or further processed for cutscenes.

USER EXPERIENCE

In Nerine, the user plays as Colin O'Mallory, a first time astronaut on a mission to Mars. We hope that anyone experiencing the narrative through the game identifies with Colin, and feels the same horrors as he does as the plot develops. This is achieved through the creation of suspense to deliver the syuzhet, where the user learns along with Colin what happened to the colony, and struggles to return home. Firstly, we try to lower any dissonance by having the user identify with the character by introducing a cutscene where Colin narrates his thoughts before jumping straight into a battle. This invites cognitive participation, as not much has been explained about the fabula, leaving the user to interpret what they must do. Then, as Colin is a representation of the player in this world, there is also a greater sense of immersion as all the endings rely on which choices are made throughout the branching paths of the narrative. Aside from the agency in the fabula of the different events affecting different ending outcomes, the player is also afforded a more physical agency in being in charge of the navigation of the environment directly through the arrow keys. The dialogue and menu movement is also accessed and utilized in this way. During certain events, the player will be prompted to select a piece of dialogue that will then dictate the next branching action. By involving the player in a way that adds to Colin's characteristics there is a more solid sense of character identification, which will hopefully cause the player to become much more invested in the outcome. Specifically, Colin's survival will become important, so the player will try that much harder to find the extra items and weapons hidden throughout the game.

NARRATIVE FORMAT

As our narrative falls under the science fiction category, we felt that it would be difficult to adequately portray using real world images, in the way a video might. Although we use animated images in our cutscenes, they are rather brief, and because they are not realistic, we can still adequately portray something that is close to our imagination of what a space colony on Mars might be like. We added as much realistic detail to the game as we could. These details are based on careful research on current space agencies, programs, and technologies, such as currently existing speculative plans for Martian colonies, spaceships and space suits that are still in development, and timelines calculated according to planned schedules (as in the cancelled NASA Constellation Program). The opening dialogue was also parsed from previous NASA transcripts, such as those from Apollo 11 and 13.

This way, there may be a greater sense of immersion and players will be able to suspend their disbelief on the more science fiction aspects. We decided on the format of a retro 2D RPG game, as it affords lots of interaction within the map and scope of the game to create agency, yet can still be made terrifying through scenery and music. In creating the map of Mars we chose tilesets with darker colour schemes that fit with the horror aspect of Colin's experience, but also worked well with the perception of spacecrafts (and thus potential colonies) being made of metal and of Mars being quite rusted. In using RPGMaker 2003 specifically, we were allowed to use less detailed sprites which also helped create more grotesque monsters, where the player could fill in additional features on their own.

INTERACTION DESIGN

Because Nerine is a roleplaying game, this affords the user experiencing the narrative more options that will affect which ending is displayed, and a greater sense of agency overall as they can explore the map as they please. Rather than having limited options like in flash games or interactive videos where the choices are all predetermined, it is up to the user how far in depth they explore.
Of course, there are elements of level design in place that will encourage the player to explore the maps and go into more rooms, as well as bosses that will limit the player's progress through the narrative if they don't find specific items. But it is truly up to them if they want to take the extra step in finding all the items which will determine how much they get out of the narrative. If they refuse to go hunting in all the rooms, they will have a harder time fighting the enemies and bosses because they will have a very basic weapon. If they choose not to participate in the side quests, they may be less inclined to find documents which contain more details on how the colony became infected.
This all affects how the fabula will be experienced, as many of the details are to be found in the game notes and not explicitly revealed.

TEAM MEMBERS

Vivian Lau
    Director, art director, concept artist, animator, screenwriter, sound effects

Theresa Chong
    Concept artist, animator, music, sound effects, graphic designer

Amy Truong
    Concept artist (custom sprites), screenwriter, sound engineer (voice acting management)

Chris Truong
    Head programmer, animator, screenwriter (side quests)