High Level Design Document: The Pine Barrens

Game Concept Development & Production 09/29/14

Team Antique Christ

William Manning Michael-Vincent Español William Herbert Stuart Ramgolam Nolan Manning

Task Delegation

William Herbert

Producer

- 1. Team Management
- 2. Narrative Design
- 3. Documentation

Available Mon-Thurs 9a-11a, 3p-5p

Michael-Vincent Español

UI Designer

- 1. User Interface Assets
- 2. Phone Apps/Design
- 3. Minor Illustration

Available Mon, Tues, Fri, Sat, 1p-5p

Nolan Manning

Art Director

- 1. Environmental Assets
- 2. Character Design/Animation
- 3. Minor UI Design

Available Mon, Wed, Sat, Sun, 6p-11p

Stuart Ramgolam

Programmer

- 1. Scene/Room Code
- 2. Core Game Mechanics
- 3. Quality Assurance

Available Tues-Fri, 11a-2p, etc.

William Manning

Development Lead

- 1. Basic Game Infrastructure
- 2. GUI Programming
- 3. Phone/App Code

Available Mon, Sat, Sun, 11a-7p

Vision Statement

The Pine Barrens is currently in development as a single-player point-and-click adventure game slated for release on the PC. Gameplay is derived from pixel-art precedents including the slew of genre staples created by LucasArts & Telltale, with added mechanics included for the sake of cohesion and innovation. The game's art direction, then, is inspired by SNES and GBC-era screen resolution and color palettes. This aesthetic has been uniquely styled with horror tropes in mind—mostly as an attempt to imbue the game's atmosphere with a sense of mystery and dread. To this extent, the art direction is meant to amplify and accentuate the intended narrative, which follows the plight of a man stranded amidst the fabled trees of the titular New Jersey forest.

The Pine Barrens should exist as a modern reinterpretation of an aging genre. Our goal is to provide players with an engaging, thoughtful game experience that comes across as simultaneously fresh and nostalgic. We also want to create a game that puts narrative at the forefront—a unique storytelling experience that can't be paralleled elsewhere. Overall, we're shooting to create the *Monkey Island - Blair Witch* fusion project you never knew you wanted so badly.

Game Features

- 1. Side-Scrolling Exploration
- 2. Item Collection / Inventory
- 3. Dialogue with NPCs
- 4. Rudimentary Logic Puzzles
- 5. Innovative Smartphone Interface
 - a. Text Messaging App
 - b. Camera & Photo Utility
 - c. Flashlight Utility
 - d. Dating App
 - e. Game Settings App
- 6. Additional Smartphone Functionality
 - a. Phone App
 - b. Contacts App
 - c. Internet Browser App
 - d. Maps App
 - e. Weather App

Core Mechanics

Our title's main innovations revolve around the utilization of a modern setting—thereby imbuing the older and traditionally more rigid genre of point-and-click adventure games with a unique narrative and novel mechanics. In the past, these types of games would restrict player behavior to environmental interaction—essentially selecting from a few options in any given scene. *The Pine Barrens*, in contrast, provides an innovative GUI in the form of a contemporary smartphone. This device, while incorporating narrative function, will primarily be used as a way to differentiate gameplay through its various apps and utilities.

As an example of this, the protagonist utilizes a flashlight application on his phone in order to shed light on darker areas of the environment. In a similar vein, main characters will use SMS in order to communicate with the hero. Ultimately, our goal is to employ renewed context as a way to freshen up a maturing genre. Our smartphone, then, stands at the center of that—a piece of contemporary technology that facilitates new possibilities within our chosen ludic environment.

In terms of the nuances of the mechanics themselves, side-scrolling exploration stands at the forefront of our intended experience. Our game makes use of a 2D plane, with player movement restricted to a singular axis. Essentially, this means users can move left and right within a specific scene or room, and can also traverse between rooms in a similar fashion. However, they are not afforded the freedom of exploration typical of some genre precedents. Within the scope of this claustrophobic world, players may then investigate strange phenomena and curious objects by way of simple mouse controls.

Just as in a classic point-and-click, items can be examined, and in some cases, picked up and added to an inventory. However, in contrast to classical style, our game utilizes a notification system to update the player when they are near an examinable object. This decision was made with three specific considerations in mind. First, that our game's pixel art direction wouldn't allow for a great deal of subtle detail on a scene-by-scene basis. Secondly, that it would be difficult to justify the amount of energy and time spent on minor assets if the player might overlook them. And finally, that a notification system might have the effect of emulating the notifications on the player's phone in strange and interesting ways. So, in the end, our approach was premeditated to favor minimalism and a unified user experience—two components we believe are necessary of a game created within the short span of a month.

Being that our game is somewhat narrative-centric (although the mechanics did come first), it seemed necessary to include some NPC dialogue in order to facilitate the progression of the plot. To a large degree, we squeezed major conversations into the text-messaging app present on the smartphone. It was our thought that doing so would simplify development by cutting down on the number of character assets, behaviors, and dialogue trees necessary to convey the same information. However, given that our tale explores a world of ghosts and demons, it wasn't possible to shoehorn the entirety of the work's dialogue into the context of the phone.

When conversations were necessary outside of the SMS interface, we tried valiantly to maintain the level of relative simplicity and restraint present within the phone. As we discussed at our last team meeting, we aren't looking to make the next *Mass Effect*, so dialogue has been designed to keep branching as limited as possible. Text appears on screen with no aural parallel, and player responses are generally constricted to one or two short prompts. One possible exception exists in scenarios where the player has collected a plot-specific item, in which case more dialogue can potentially be unlocked. That being said, the vast majority of scenes were planned to minimize exposition and other non-interactive storytelling elements.

Following this trajectory, the staple mechanics of a point-and-click adventure allow for rudimentary puzzle solving, usually within the constraints or context of the narrative at hand. To that extent, *The Pine Barrens* follows suit—with plenty of environmental or smartphone based challenges packed into its short runtime. None of these puzzles are designed to be exceptionally difficult, as most can be solved using elementary logic and/or deductive reasoning—yet the desire for a modicum of novelty and challenge is certainly there. At this point in time, many of our intended riddles have yet to be composed, but the basic structure has already been discussed. In general, finding and then utilizing a specific narrative McGuffin will tend to solve a given problem, with a few intended deviations present for the sake of variety. These include, but may not be limited to: combining two

found objects into a new one, or using a smartphone utility in a resourceful way.

On the topic of smartphone mechanics, we've come to the conclusion that five of our twelve included apps are essential to the completion of the game. These crucial features are required to either progress the narrative or otherwise influence the sequential progression of gameplay. The flashlight, text messenger, camera, dating app, and game settings all fall into this category, and are currently at the front of our development queue. So while the contacts, Internet browser, weather, maps, and phone utilities are all interesting additions that add immensely to the quality and depth of the envisioned narrative, they aren't vital to the player's enjoyment of the experience.

Starting with the former, the flashlight, players can use their phone's bright screen to light up some of the darker secrets hidden in the barrens. When the flashlight is on, the area directly in front of the player becomes significantly brighter. However, this comes at the cost of the screen real estate on all other sides of the sprite, which are darkened to mimic the effects of the genuine device. Additionally, users are restricted from accessing other apps while the flashlight is on—which essentially ensures that the utility is not abused.

The text messenger, then, retrieves mysterious messages from the golden-haired girl, Sienna, who helps lead the protagonist through the winding woods of southern New Jersey. Somewhat enigmatically, our hero doesn't seem to have good enough reception to send many outgoing messages, but that doesn't stop the incoming texts from making it back through. So besides providing a key mechanical functionality, the text-messaging app also provides the player with elective backstory if he or she chooses to indulge in it.

Moving onward, photos, and by association the camera, also play a small role in the game's core puzzle and narrative elements. Functionality is currently included to allow players to "take" photos—a mechanic that essentially boils down to opening the app in the correct location and clicking the shutter. Photos are then present in a gallery setting, where they can be viewed and referred to for the rest of the game. An early challenge tasks the player with shooting an image that includes an identifying landmark, and deeper into the experience, it's our prerogative to exploit this app in bizarre and novel ways. Old photos might change; new ones may appear... anything can happen in the New Jersey Pine Barrens.

Tertiary Mechanics

"Mechanics" may be too strong a word for the tertiary features intended for inclusion in our final product, as these additions may never amount to anything more than a static screen present on the smartphone's pixelated interface. As previously mentioned, the remaining utilities of the contacts, Internet browser, weather, maps, and phone are not crucial to the completion of the game, but would allow for some fantastic plot delivery and additional development of character and setting. So in our current iteration, these apps have been simplified down to a single static page—in most cases a screen displaying lack of network connectivity (those damn pine trees), or at the very most, a low-res delineation of the intended content. Assuming everything goes according to plan and the skies are blue, our vision for the smartphone includes a scrollable contacts list and a foreboding forecast,

among others, but we aren't entirely confident that these additions will make the October $30^{\rm th}$ cutoff.

Tools

GitHub

- 1. Communication
- 2. Project Management
- 3. File Storage

Unity

- 1. Programming
- 2. Debugging
- 3. Playtesting

Photoshop

- 1. Asset Creation
- 2. Interface Design
- 3. Animation & Sprite Sheets

Facebook

- 1. Communication
- 2. Project Management

Implementation Plan

We are currently slated to follow a modified version of Steam's reputable Cabal process, which led to the creation of the critically acclaimed shooter *Half-Life*. This includes for our team, as it did for Valve, a myriad of design exercises including group brainstorming and the development of a prototype level to address usability concerns. To this extent, we are heavily focused on producing and perfecting an initial and complete game scene before moving on to other aspects of the project. It's our belief that this mentality, while slowing us at the upstart, will eventually expedite development in the long term—as this template will make successive scenes much easier to create.

Milestones

Deliverable Completion Dates

- 09/30: High Level Design Document
- 10/02: First Scene Playable
- 10/09: First Scene Finalized
- 10/16: Second Scene Playable
- 10/23: Third & Fourth Scene Playable
- 10/30: Fifth Scene Playable & Finalization

Risk Analysis

Our team has pinpointed a few minor risks associated with the production of this game. For the artists, the main development hurdle seems to be the timely completion of necessary assets. Because our development schedule hinges upon scene-by-scene assembly and construction, it's absolutely essential that programmers are not blocked from completing game areas due to missing visual assets. This is a very different issue than those faced by

the programmers, who seem to be most worried about implementing two key features: the smartphone interface (very important mechanically) and the pixel doubling function (which helps us upscale to larger displays without antialiasing). Overall, the main concern seems to be that the game won't be finished in time—a somewhat unsurprising mentality given how little experience the majority of our team has in game development.

Risk Management Plan

While the hurdles listed above are somewhat common in a typical game development pipeline, we've isolated a few issues that might actually be resolvable during the course of our implementation. For one, we are holding group meetings three times a week in order to facilitate team unity and cohesion. Secondly, we have designed and executed a -1 development plan that includes an optional game scene that can be relinquished if time cannot be properly allotted. Thirdly, we have stripped the game's smartphone mechanics down to the absolute essentials, meaning that anything superfluous has been rendered as tertiary (or been cut completely). Finally, and potentially the most importantly, we have optimized our programmer's schedules to account for the disparity between Unity Pro (which is available in the classroom), and the standard license (which can be used remotely, for free). In the end, our goal has not been to eliminate risk—as we believe this is impossible—but instead to alleviate it in spaces we deem judicious.

Testing Plan

As of our last meeting, we intend to schedule playtesting with friends, peers, and classmates via online communication channels. Our focus, then, will be on observation and interview processes, with the goal of creating game scenes that are dually challenging and engaging. Testing can be completed during class hours, assuming other groups are willing, or off-campus by means of network tools including Facebook, Skype, and Google Surveys. As our producer has experience in user interface and user experience design, it's likely that we will follow a similar heuristic approach. Ultimately, it's our prerogative to complete the initial prototype level before beginning extensive testing—allowing us to apply feedback and standards garnered in these sessions to the design of subsequent scenes.