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Escape House Requirements Collections and Analysis

The following document will contain an outline of the necessary requirements for developing a game on a variety of systems. The goal of any game is to create an immersive experience for users through game mechanics, environment design, and compelling storytelling. Ultimately, games design focuses on entertaining the most users with a product, making the first and most important requirement that of user investment and emotional response. Player interest can be defined by levels of investment they derive from aspects of the game, which can vary from player to player. Appealing to each level of player interest will result in an immersive experience for most types of players.

Player interest can be derived from –

* Emotions (Story events, challenges, rewards)
* Aesthetic (Environments, atmosphere)
* Mechanics (Player abilities, AI design)

Eliciting the emotions of a user is key in compelling them to continue playing. This can be achieved in a variety of ways such as through mechanics or storytelling, the goal is to balance all aspects of the game in order to impose a challenging but rewarding experience for the user. Defining players emotional responses and expectations to aspects of a game is particularly challenging as there is a huge variety of games available. Aspects of a game should be unique to that title, but not detract from the experience by being too confusing or foreign to the genre. Contextualization is important in this regard as it provides the framework for player experience. Goals should be clearly outlined and make a significant impact on the outcome of any action that a player makes. Essentially players should consider their reasoning for any action they take by visualizing themselves in the same situation. Appealing to user emotions is one of the most effective ways to ensure they remain immersed in subsequent attempts.

Aesthetic is an integral part of games design, and one of the main reasons many will download and play a game in general. Unique and interesting graphics can retain the user’s attention; however, it is important to maintain visual clarity as well. By designing simple, but interesting household environments we can create a sense of familiarity for a player without overloading them with visuals. Simple, “low-poly” renderings of environments can be utilized to intrigue players without detracting from visual clarity. By keeping environments simple we confirm a player’s understanding of their surroundings, allowing them to focus on their options for completing objectives. Clarity is important in this aspect as the environment should give clues to the player on how they might tackle a certain obstacle. The goal is to provide players with the opportunity to imagine how they might solve an objective by visualizing how they can use their environment to their advantage. This can be achieved through visual or textual ques given from interacting with objects (i.e. A wooden puzzle box with several cracks in it, implying that it can be solved or possibly broken in order to progress). The ultimate purpose of creating a simple, cohesive environment is to appeal to the players sense of imagination and allow them to make choices based on how they perceive objects and puzzles around them.

Game mechanics are a system of rules implemented by developers in order to heighten user interaction and interest with the game. They play a crucial role in the games design process as they are a determining factor on whether the game is “fun”. Unintuitive or useless mechanics will detract from the user experience or simply be disregarded completely. Thus, a significant amount of time and testing is required for determining what mechanics will or will not be implemented. Players should feel as though their inputs are making are making a significant impact on their own progression.

A player’s main set of mechanics in “Escape House” revolves around traversing their surrounding environment. By giving the user multiple options for moving around we can accommodate for the different play styles of users. Players can decide how they want to tackle each scenario providing a sense of accomplishment when successfully completing tasks. Additionally, the purpose for providing the player with these options is to allow a user to directly affect their progression throughout each run. This requires players to understand their capabilities before attempting to complete various objectives and use their abilities accordingly. Players will be able to move at varying speeds (crawl, walk, and run) which will affect overall play time, as well as generating different levels of “noise” which the AI character can sense. Understanding when to use each of these mechanics will be the first task new players will have to complete, and mastery of the game will revolve around a player’s ability to use all these mechanics to receive the highest score. Players will also possess the ability to “dive” which can used a means of escaping the AI, or simply navigating their environment. The goal of this ability to give the player the means to avoid the AI character but only in dire circumstances. When a dive is initiated, it gives players a small window in order to avoid being grabbed by the AI (resulting in a “game over”), however this must be properly timed as diving to early/late can result in the player still being grabbed. The goal of this to dissuade players from abusing this mechanic in order to win, but still provide them with the opportunity to avoid losing altogether. The goal of these mechanics is to provide users with as many options as possible in order to bolster inclusiveness and player choice. By allowing players to play the way they want, we can ensure that most users will be entertained throughout their progression.

Implementation of the aforementioned mechanics will take up most of the implementation and testing phases of this project. The idea is to give players as much technical freedom as possible for their inputs, so several tweaks will need to be done to the initial implementation. Additional adjustments to the AI implementation will also be required as much of what the player does will affect its behavior. The reason for spending some much time on mechanics is to ensure that gameplay is technically sound and appealing to control. Player abilities and actions will have a degree of “weight” to them, such that a player can feel as though their inputs are making a significant difference. We can achieve this by altering aspects of player abilities, such as their speed, sound generated, and their window for completing dives. These aspects will drive gameplay so its important to focus time on making them fair and balanced. Additionally, the AI design will include the ability sense player actions to a degree which will allow it to track and impede the player. Implementation of the AI will require as much, if not more consideration during these phases as it will be necessary to adjust its behavior. Its important that the AI posses a significant threat to the player during gameplay, however a player should feel as though they can always find a way around it. In this regard an agile model can be utilized to plan for release, this would involve incremental reevaluation of the game state and testing of its components. Since most aspects of player and AI abilities are subject to adjustments, multiple iterations will be required before a stable game build is available.

Iterations:

1. Conceptualization
2. Environment Building

* Puzzle design
* Interactable entities
* House design
* Random Generation

1. Player Abilities

* Movement
* Interacting
  + Puzzles
  + Entities
  + Inventory objects
  + Sound generated
* Diving

1. AI Abilities
2. Finishing Touches

