The Black Death – Final Executive Summary
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Game Overview

The Black Death is a historically accurate survival/adventure game that aims to educate the players about the Black Death plague which was one of the most devastating epidemics in human history. Owing to the catastrophic side effects of this event, it is imperative to spread awareness about this incident. This game achieves that by providing a fun and interactive way to learn. The player’s goal will be to survive as long as possible without contracting the plague or dying by any other means which will require the player to make complex strategic decisions, compete for resources and win over other AI components (computer player, other characters in the game etc..). In the process, the player will learn a lot about the European lifestyle in the middle ages as well as the causes and effects of the Black Death. The different levels of the game challenges the player to survive the growing severity of the plague in the subsequent years.

Requirements

Key Functional Requirements

- System should allow the user to choose from various options during a menu click which includes – start a new game, resume a saved game, change settings and exit the game.
- The System must provide the player a list of options to customize appearance, select starting city and purchase resources with the initially provided game points.
- The system must have a narrator who introduces the important ideas and events of that particular level at the start of the game.
- During the course of the game, system should allow the user to click at a particular location on the screen which would enable the user to walk closer to that point.
- System should allow the user to interact with the AI characters when the user clicks on any particular character.
- System should allow the users to choose the available resources during the course of the game which would enable them to add them to the user’s inventory.
- System should display the ‘Status’ button which would display information about the player which includes – current health status, hunger level, current game level, date/time the player is in.

Key Non-Functional Requirements

Performance Requirements – The application should provide accurate information about the Black Death events and must be responsive without much or no time delay.
Dependability Requirements – The application should not fail more than once in three months and in case of failure, it should fail safe.
Maintainability & Supportability Requirements- The product should be able to perform periodic database auto-updates and must allow further enhancements or modifications in case of bugs or errors.

**Design**

**Key Design Goals**

- **Efficiency**: The game application design should consume few resources while maintaining fast performance.
- **Understandability**: In-game controls and help menu on the game home screen should be simple so that it is easy for the users to understand and get started with game in less than 5 minutes.
- **Portability**: The game should be cross platform compatible and playable on various mobile devices such as Android/iOS phones, tablets.
- **Maintainability / Extensibility**: The game should have traceable requirements and well-defined interfaces. It should fail safe. The game should also have an object-oriented architecture that enables customizations for the subsequent level restricted versions of the game.
- **Security**: The game should provide protection for users’ information and follow various security guidelines and protocols to make users feel guarded while playing the game.
- **Availability**: Black Death game should be available for its players almost anytime. It should be made available on the play/app stores.
- **Reliability**: Black Death should be designed so that it has minimum bugs and glitches during gameplay. Hence, rigorous testing should be done to ensure that a solid first version of the game is released.

**Test Plans**

The major features to be tested would be:

- Product’s ability to interact with the players
- Product’s ability to display accurate information about the Black Death plague
- Product’s ability to be used in multi-lingual environments
- Products ability to recognize returning players.

Few of the test cases used will be:

- Choose a location – The expected result is that the selected location should be the plot for the player.
- Click an object on screen – The expected result is that if the clicked object is an AI character, it should interact with the player and if the chosen object is a resource like food, water etc., then it should be added to the user’s inventory
- Information from AI character – The expected result is that the information provided by the AI characters about the Black Death plague should be accurate.

All predetermined test cases must be met in order that the product may work to its full capacity and serve the intended purpose.