Software Project Management
Survival Game Development Report

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Tittle of the project and Team member

Tittle: ≪*For the survivor* ≫
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Introduction

The Survivor game which was developed by us is a unique and extremely challenging rogue-like survival game that is appealing for its clean controls and automatic combat system. Each playthrough is a brand new adventure, full of unpredictable challenges and surprises. Survivor is definitely worth a try. Bring excitement to your boring life, download it now and join this extreme survival challenge, and see how long you can last!

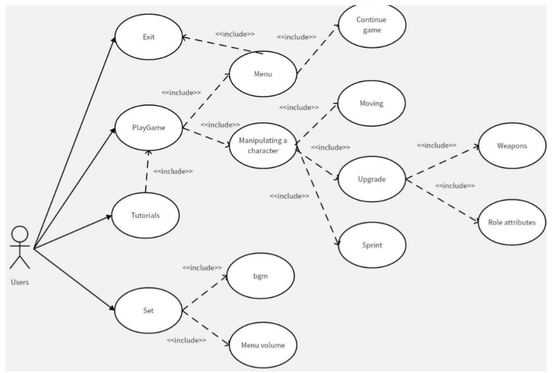
- *Objective*
  Our goal is to create an immersive survival adventure game that helps people experience relaxation and fun in our games after work and college!
- *Background*
  Most survival games on the current market focus on how to quickly attract players, while often ignoring the depth of the story and the development of the characters, and do not think about the subsequent operation, resulting in the inability to retain users at a later stage.
- *Motivation*
  - Good market for this type of game will have profitability possibilities
    Survival games have a relatively short and easy development cycle.
  - Many survival games are just copying templates which makes it easy for us to stand out.
- *Contribution*
  Develop innovative interactive narrative techniques and highly free-form gameplay to redefine what players can expect from a survival game.

Testing Highlights

Performance Testing:
Ensures smooth gameplay under varying resolutions and high enemy counts (tested up to 2500 enemies).
User Feedback: Difficulty levels were adjusted based on player feedback to enhance engagement.
Stress Tests: Verified stability under extreme ingame scenarios.
Error Handling: Minimal commands ensure stable gameplay without unexpected behaviors.

Key Functionalities

- 1. Combat System:
  Players use WASD keys for movement and Spacebar for attacks. Multiple enemy types with distinct behaviors (melee, ranged, and advanced). Character upgrades include weapon improvements and attribute enhancements.
- 2. Game Mechanics:
  Players collect dropped items (experience points, health) from defeated enemies. Upgrades are presented via an ingame interface after leveling up.
- 3. User Interface (UI):
  Simplistic pixel art style with intuitive buttons for starting, pausing, and upgrading. Includes tutorial screens and options for audio control.
- 4. AudioVisual Design:
  Pixel art visuals combined with themed background music and sound effects.
- 5. Platforms:
  Runs on Windows OS; future compatibility with macOS/Linux under consideration.



Error Handling

Command Simplicity:

Game controls are limited to: Movement: W, A, S, D keys.
Attacks: Spacebar.
Menu interactions: ESC and UI buttons.
Minimal commands reduce the likelihood of user input errors.

Fault Tolerance:
Invalid key presses (e.g., Q or E) produce no effect,preventing crashes or unexpected behavior.

Boundary Testing:
Valid input keys were rigorously tested, ensuring correct responses under edge conditions, such as rapid key presses or simultaneous commands.

Results

- *Market Impact:*
  - *Based on Steam data*:number of downloads, sales figures and rankings
  - *Development value:high value* According to Figures 6 and 7 and other games on steam about the survivor category have high positive reviews and daily activity rates
- Development Achievements:
  - *Sprint Milestones:* with the Sprint report, it can be shown that we can basically complete each sprint cycle
  - *Tools Used*:Using Scrum methodology and using Jira for task management to facilitate teamwork and timely project progress.
- *Internal Testing:*
  - *Game performance:* player retention, average play length, and number of subsequent active users, comparing these numbers to competing games (daily activity rate).
  - *Gather highlights of user* feedback:emphasizing positive comments, especially about unique aspects of the game, such as narrative techniques and combat systems.

Conclusion

- *Project Review:*
  - *Review of the project:* the goal of creating an immersive survival adventure game, culminating in the development of a game that will stand out in a competitive marketplace through its innovative gameplay mechanics and storytelling.
  - *Experience:* Project development process: mastery of agile development methodologies and project management tools. Proficiency in the scrum collaborative development model using the Jira tool and proficiency in the Unity engine. Reflect on the challenges encountered during the project and suggest possible improvements for future projects.

Summarize

- Finally, we finished the development of our survival game, and made a good game in line with the original intention, and also carried out internal testing to harvest some good suggestions and praise, the following is our game UI interface

Future Work

We will continue to internally test and discuss solutions on how to maintain and increase player engagement and loyalty based on player feedback and market analysis. Predicting the future course of the project, fixing bugs and going live on the platform.

References

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