NanoWar Game Report

Introduction

The game NanoWar is an innovative and educational game designed to align with the Sustainable Development Goals (SDGs) of Good Health and Well-being, and Quality Education. The game raises awareness about how viruses damage the human body internally while providing educational content about viruses and their harmful effects on humans.

Game Features

1. User Interface:

- The game features a visually appealing and intuitive UI.
- Backgrounds and music enhance the gaming experience.
- Options are provided to switch seamlessly between scenes within the game.

2. Interactive Visual Storyboard:

- The game includes a captivating interactive visual storyboard that justifies the core concept of the game.

3. Virus Information:

- Educational content about viruses is provided to inform players about their harmful effects on human health.
- The virus information section is designed to be engaging and easy to understand, making it
suitable for players of various age groups.

4. Game Instructions:

- Clear and concise instructions are included to guide players on how to play the game effectively.
- Instructions are presented in a step-by-step manner with visual aids for better comprehension.

5. Gameplay:

- The game is structured into four levels with increasing difficulty.
- Each level involves a battle between a nanobot and various viruses using projectiles.
- Colliding with a white blood cell ends the game, introducing an element of challenge and
strategy.
- Players can collect specific items to increase the nanobot's health, adding a survival aspect to the gameplay.
- Each level introduces new types of viruses with unique behaviors, keeping the gameplay
dynamic and engaging.

6. In-Game Features:

- A health bar and an energy bar to track the nanobot's condition.
- A score counter to keep track of the player's progress and motivate competitive gameplay.
- A time counter to measure gameplay duration and add a sense of urgency.
- Power-ups and bonuses are scattered throughout the levels, allowing players to enhance their nanobot's abilities temporarily.

7. Background Story:

- The game's narrative revolves around a futuristic setting where nanotechnology is used to
combat harmful viruses inside the human body.
- Players assume the role of a nanobot operator tasked with navigating through the bloodstream and eliminating threats to ensure the host's health.

Educational Value

- The game emphasizes the importance of good health by illustrating the damaging effects of viruses on the human body.
- The virus information section provides scientific knowledge in an engaging format, promoting awareness and understanding of microbiology.
- The combination of education and entertainment makes it a valuable tool for schools, health awareness campaigns, and individual learning.

Technical Details

- The game is developed using a cross-platform game engine to ensure compatibility with various devices, including PCs and mobile platforms.
- Optimized graphics and sound design provide a seamless and immersive gaming experience.
- The codebase follows modular programming principles, making it easy to add future updates and expansions.

Project Contributions

1. Pranay:

- Development of game levels and scripting functionalities.
- Integration of gameplay mechanics and ensuring level progression balance.

2. Neha:

- Creation of the interactive visual storyboard that supports the game's concept.
- Designing narrative elements and ensuring alignment with the SDG goals.

3. Mounika:

- Design and development of the game's UI and graphics.
- Implementation of visual elements to enhance player engagement.

4. Srivally:

- Research and inclusion of detailed information about viruses.
- Ensuring the accuracy and educational value of the content.

Conclusion

NanoWar combines entertainment and education to provide a meaningful gaming experience. By incorporating SDG goals of Good Health and Quality Education, the game not only raises awareness about viruses and their impact but also engages

players through interactive and challenging gameplay. The collaborative effort of the team has resulted in a game that is both informative and enjoyable. Future plans include introducing new levels, more virus types, and enhanced educational content to keep the game fresh and relevant.