Attack the Virus Game Environmental Scenario

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The game "Attack the Virus" will be designed to be both educational and engaging, progressing through various levels that reflect real-world illnesses and the vaccines used to combat them. It is a multiple-choice game designed to teach players about the human immune system, the appropriate vaccines for various diseases, and the history of both illnesses and vaccinations. This scenario describes the step-by-step environment the user encounters when he starts a new game.

When the player first launches the game, an opening screen appears displaying the game's title and instructions on how to play. To begin, the player clicks the "Add Your Details" button. They then can enter their name and choose their age group from a list of predefined options. Each age group is associated with specific characters, and the appropriate character for the selected age group will be shown on the screen once the player clicks the START button.

The player starts at Level 1, facing their first illness. Each level presents a predefined illness where the player must identify the correct vaccine from a choice of three. If they choose correctly, they advance to the next level; if they choose incorrectly, their health bar decreases. After four incorrect answers, the player's character "dies," and they must restart the game from the beginning.

The game incorporates some dynamic feedback as well. After each selection, the player is presented with detailed informational cards, regardless of their answer. These cards provide information about the illness and all the vaccine options. This not only enhances the player's understanding of vaccines but also deepens their knowledge of how specific diseases affect the human body.

The game also introduces an aging mechanic. As the player progresses through levels, their character ages, as per their age group.

The difficulty of the game increases as the player advances. Early levels will focus on common childhood vaccines, like measles or chickenpox, while later levels introduce more complex vaccines, such as those for diseases like pneumonia, influenza, or even region-specific illnesses like yellow fever or malaria.

There are additional features to make the game more interactive:

- 5 correct answers in a row will grant the player an extra incorrect answer opportunity.
- The game will also include a bonus round after every 10 rounds, where players must match vaccines to multiple diseases within a time limit, adding an extra layer of excitement.
- We may also add pictures of the illness the player encounters at each level.

Given below is a rough flowchart of the basic process of the game -

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                        ┌─────────────────────────────┐
                        │          Start game         │
                        └─────────────────────────────┘
                                      │
                                      ▼
                        ┌─────────────────────────────┐
                        │ Enter name and select age group │
                        └─────────────────────────────┘
                                      │
                                      ▼
                        ┌─────────────────────────────┐
            ┌──────────▶│   Choose the correct vaccine │
            │           └─────────────────────────────┘
            │              Correct ╱        ╲ Incorrect
            │                     ▼           ▼
            │      ┌──────────────────┐    ┌─────────────────────┐
            │      │    Next level    │    │      Health –1      │
            │      └──────────────────┘    └─────────────────────┘
            │               │                        │
            │               │                        ▼
            │               │          ┌─────────────────────────────┐
            │               │          │ Restart after 4 wrong answers │
            │               │          └─────────────────────────────┘
            │               ▼                        │
            │      ┌─────────────────────────────────┐
            └──────│ Information Card (Illness + Vaccines) │◀──────┘
                   └─────────────────────────────────┘
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