

### ### \*\*Game Documentation: StaySafe\*\*

#### #### \*\*Game Overview\*\*

- \*\*Game Name:\*\* StaySafe
- \*\*Theme/Concept:\*\* Inspired by the idea of tackling viral diseases.
- \*\*Objective:\*\* The player must tackle randomly appearing viruses using a syringe controlled by the character, while surviving as long as possible to achieve the highest score.

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#### #### \*\*Game Features\*\*

1. \*\*Player Character:\*\*
  - A man sitting on a syringe, controlled by the player.
2. \*\*Enemies:\*\*
  - Viruses that appear randomly in the scene.
3. \*\*Score System:\*\*
  - The score increases with every second the player survives.
4. \*\*Environment:\*\*
  - A clean, minimal 2D interface resembling a medical or health-themed setting.

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#### #### \*\*Gameplay Mechanics\*\*

1. \*\*Player Movement:\*\*
  - The player moves the syringe to avoid collisions with the viruses.
  - Movement is smooth and responsive, controlled by arrow keys or touch input.
2. \*\*Virus Behavior:\*\*
  - Viruses spawn randomly in different locations and move towards the player at varying speeds.
  - Difficulty increases over time as more viruses appear.
3. \*\*Scoring:\*\*
  - The score counter increments every second while the player survives.

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#### #### **\*\*Development Details\*\***

- **\*\*Engine Used:\*\*** Unity 2D
- **\*\*Programming Language:\*\*** C#
- **\*\*Assets:\*\***
  - Free sprites for the syringe, man, and viruses from the Unity Asset Store.
  - Background: Light, simple textures to enhance the theme.
- **\*\*Audio:\*\***
  - Background music and sound effects for virus appearances and collisions.

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#### #### **\*\*Challenges and Solutions\*\***

- **\*\*Challenge:\*\*** Random virus spawns making the game unfair.
  - **\*\*Solution:\*\*** Limited spawn areas to balance gameplay difficulty.
- **\*\*Challenge:\*\*** Controlling movement for better gameplay experience.
  - **\*\*Solution:\*\*** Adjusted rigid body physics for smoother player movement.

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#### #### **\*\*Future Improvements\*\***

1. Add power-ups like shields or temporary virus immunity.
2. Include a high-score leaderboard.
3. Introduce levels or waves with increasing difficulty.
4. Implement touch-screen support for mobile devices.

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#### #### **\*\*Conclusion\*\***

StaySafe provides a fun yet thought-provoking gameplay experience while raising awareness about staying vigilant during viral outbreaks. It's simple to play, engaging, and challenges players to survive for as long as possible.