Quantum Survival: Zombie Quantum Realm Game

Made by the Qubit Warriors team:

Hamidreza Oliaei-Moghadam

Najmeh TabeBordbar

Zahra FamilFirouzian

Idea formation:

Why did we use zombies?

In the world of cinema, zombies are referred to as creatures that are neither dead nor alive. They are the walking dead that can exhibit an example of superposition in the quantum world.

What quantum concepts are used in the game?

• Superposition

• Gate X

• Gate Z

• Gate H

•Measurement

Game Story:

Zombies attacked the city and you are the last survivor of the city and you have to save the city. The only thing you have is a gun that provides you with different bullets to destroy all kinds of zombies. Try to use the bullets you have optimally and be careful not to bump into zombies and take care of your health.

Game Rules:

- The goal of the game is to save the city from the zombies and we have to destroy all the zombies.
- At the beginning of the game, the player has three lives.
- At the beginning of the game, the player has a gun.
- Players can move around the game screen using the W, A, S, D keys on the keyboard.
- The player can change the display mode from text to vector by pressing the P key.
- By right-clicking on the mouse, players can move their guns to the mode of selecting the types of bullets and the final shot.
- According to the type of enemy facing the player (zombie |1>. zombie |0> and ...), the player should be able to choose the right shot and finally make the final shot.
- To destroy each of the zombies, the player just clicks on the desired zombie and destroys it using the measuring bullets.
- If you want to destroy a certain zombie, just click on it.
- The R key is used to "Restart" the game.
- The Q key is used to "Quit" the game.

Enemy types:

- Zombie |1>
- Zombie |0>
- Zombie superpositions of |0> and |1> such as |+> or |-1>

Bullets types:

- X bullets
- Z bullets
- H bullets
- M bullets (final shot)

Win and lose conditions:

Win: If all the zombies are destroyed in the game before all the lives of the player are lost, the player wins.

Lose: In case of encountering zombies and running out of three lives, the player loses.

What age group is the game for?

People over 10 years old can play this game.