



### **ZOMBIELAND**

Project Synopsis on "ZOMBIELAND GAME"

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In

**Computer Engineering** 

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#### **ABSTRACT**

The Zombie Shooter Game project aims to deliver an interactive and entertaining gaming experience using HTML, CSS, and JavaScript. In this minimalist game, players are tasked with shooting approaching zombies to survive. The game environment consists of a player character, a zombie adversary, and a "Shoot" button to initiate attacks.

The development follows a simplistic yet engaging approach. The player is static initially, positioned at the bottom center of the screen, while a zombie starts its approach from the top. Upon clicking the "Shoot" button, the zombie's position is randomized, creating a dynamic challenge for the player. The HTML structure defines the game elements, while the CSS styles enhance the visual appeal and positioning of the player, zombie, and other components. The JavaScript functionality handles the shooting mechanics, currently manifested as the zombie's randomized movement. Future iterations can include enhanced shooting mechanisms, scoring, multiple zombies, and additional features to elevate the gaming experience.

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### Introduction

The Zombie Shooter Game Project embarks on the creation of an interactive and captivating gaming experience, utilizing the fundamental trio of web technologies: HTML, CSS, and JavaScript. In response to the ever-growing interest in browser-based gaming, this project endeavors to offer a simplistic yet engaging game where players face the relentless threat of approaching zombies.

The essence of the game lies in its minimalistic design, featuring a player character, a formidable zombie adversary, and a "Shoot" button as the primary means of defense. The player, initially stationed at the bottom center of the screen, must strategically time their shots to fend off the encroaching zombie, which unpredictably repositions upon each attack.

The HTML structure establishes the groundwork for the game's elements, while CSS stylings enhance the visual appeal and positioning, creating an immersive environment. The dynamic functionality, powered by JavaScript, orchestrates the shooting mechanics, currently represented by the randomized movement of the zombie.

## **Purpose of The Project**

The primary purpose of the Zombie Shooter Game project is to provide an immersive and accessible entry point into web-based game development for enthusiasts and beginners. This project serves several key purposes:

#### EDUCATIONAL ENDEAVOR:

Acts as a practical learning opportunity for individuals looking to understand the basics of game development using HTML, CSS, and JavaScript. Provides insights into fundamental concepts such as user interface design, interactivity, and dynamic content manipulation.

#### SKILL ENHANCEMENT:

Fosters skill development in front-end web technologies by implementing a simple yet engaging game environment. Encourages participants to refine their HTML, CSS, and JavaScript skills in a creative and interactive context.

#### CREATIVITY AND CUSTOMIZATION:

Encourages creativity by providing a canvas for participants to customize and expand upon the basic game structure. Allows for the addition of new features, improvements to gameplay, and personalization to suit individual preferences.

#### ACCESSIBLE GAME DEVELOPMENT:

Demonstrates that game development is not exclusive to specialized platforms and can be undertaken using widely accessible web technologies. Promotes inclusivity by making the development process open and understandable for a diverse audience.

#### FOUNDATIONAL EXPERIENCE:

Lays the foundation for future game development by instilling a basic understanding of how game elements interact within a web environment. Serves as a stepping stone for individuals interested in pursuing more complex game projects in the future.

In essence, the Zombie Shooter Game project aims to bridge the gap between theoretical knowledge and practical application, offering a purposeful and engaging journey into the realm of web-based game development. Through hands-on experience, participants can acquire and hone skills that are transferable to broader web development contexts while fostering a sense of creativity and curiosity within the gaming domain

### Research Approach/Methodology

The research approach and methodology for the Zombieland Game project involve a structured process aimed at gathering insights, understanding existing practices, and implementing effective game development strategies. The methodology encompasses the following key steps:

**<u>Literature Review</u>**: Objective: To understand established game development principles and mechanics. Activities: Review existing literature on game development using HTML, CSS, and JavaScript. Explore resources that focus on the creation of browser-based games. Identify successful examples of simple game mechanics and user interfaces.

**Skill Development Research**: Objective: To identify key skills required for front-end web development and game design. Activities: Explore resources and tutorials focused on HTML, CSS, and JavaScript for game development. Identify best practices for creating interactive and visually appealing web content. Investigate methods for incorporating dynamic elements into web-based games.

<u>Community Engagement</u>: Objective: To stay updated on industry trends and community discussions. Activities: Participate in game development forums and communities. Seek advice and feedback from experienced developers in web-based gaming. Monitor discussions on emerging technologies and best practices in game development. This research approach ensures a comprehensive understanding of both theoretical and practical aspects of game development using web technologies. It combines insights from existing literature, hands-on analysis of successful games, skill development strategies, community engagement, and iterative prototyping to create a well-informed foundation for the development of the Zombie Shooter Game.

### **Source of information**

Information for the project will be gathered from various sources, including:

LITERATURE REVIEW: Explore academic journals and articles on game development, HTML5 game design, and user engagement in browser-based games. Review books on HTML5 game development, game design principles, and best practices in creating interactive web content.

**CASE STUDIES:** Investigate case studies of successful zombie-themed games implemented as browser-based games. Analyze case studies on game mechanics, user interfaces, and player engagement in similar web-based gaming projects.

INTERVIEWS AND SURVEYS: Conduct interviews and surveys with potential players to understand preferences in zombie-themed games. Gather insights from stakeholders, including gamers, to refine game mechanics and improve user experience.

# SYSTEM REQUIREMENTS

## **Hardware Requirements:**

- 1- RAM /memory required: 4GB
- 2- Operating System: Windows
- 3- Good Internet Connection
- 4- Processor i5

## **Software Requirements:**

- 1- HTML,CSS,JAVASCRIPT in frontend
- 2- Vs code

**Hosting platform:** 000webhost

