

# Nightmares – Survival Shooter Computer Game

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**Abstract**—The computer video game is proposed. It is designed at Survival Shooter genre. It gives a possibility to compete in a number of points. The playable character is a boy who was fighting in his sleep with plush toys.

## I. INTRODUCTION

We consider the area of IT-based entertainment with computer games. Concept of Survival Games is that the player has the main objective: to survive as long as possible, or score the most points. The player is in a three-dimensional space, and has a certain freedom of movement. The game has several levels. Each level is a bounded labyrinth in which there are enemies. The additional areas are a shooter games. The underlying factor in a shooter game is that the player must destroy enemies using a lethal weapon. .

In the Survival Shooter proposed game the player is at the scene in the style of the room with children's toys. He must destroy a most of opponents which are controlled by the computer.

## II. MAIN PART

Most Survival Shooter games are designed in perspective, but there are examples of games with the camera view on the first or third person. There are many games with isometric projection. They use isometric view. It means that the camera, through which the player monitors and controls your character, is at the top of scene. The most famous are “Do not Starve” (A), “Helldivers” (B), “Magicka” (C). The above games are similarities and differences (see Table). But all of them use isometric camera view with top view. The dynamic component is present in Magicka and Helldivers, but not in Do not Starve. Only “Do not Starve” has game points as the number of days that have gone through the main character. But it lacks a component of the story. Among these games only Magicka hasn't player's age limit and has a simple game interface. The Helldivers is a game developed with support of the publisher, and Magicka and Do not Starve are indie projects that developed without the financial support of the publisher company

The proposed game is a Survival Shooter game for the players above 10 years old. The main goal of the player is to destroy the greatest number of opponents and get a maximum score points. The game was developed on the Unity 3D game engine version 5.2.2 by use C # and standard Unity Assets.

TABLE I. COMPORISION OF GAMES

	Games		
	A	B	C
Dynamic part	Y	Y	N
Score	N	N	Y (days survived)
Plot	Y	Y	N
Restrictions of age	N	Y	Y
Simple interface	Y	N	N
Genre	Shooter, RPG	Shooter	Strategy
Indie	Y	N	Y
Pretty 3D-graphics	Y	Y	N

As we see on the “Fig. 1”, the gameplay is based on the Enemy's Spawn. The method Start() from EnemyManager class calls the method Spawn() with defined random SpawnPoint. Then the method Awake() from EnemyMovement class is called. It determines the player's position and moves the Enemy bot to the player. Then cyclically the method Update() is activated and activates methods Update() of EnemyHealth and EnemyAttack classes. If the player's collider and bot are faced, the method OnTriggerEnter() is activated. The Boolean variable playerInRange is set in “true” and the method Attack() from EnemyAttack class is activated. The player's collider get damage. If the enemy's collider and player's collider are not faced, the event OnTriggerExit() is occur. The variable playerInRange is set in “false” and attacks are stoped. At the same time the value of currentHealth variable is checked in the methods Update() from EnemyHealth classes. If the value is less or equal to 0, then colliders are not checked and the function Death() from EnemyHealth class is activated. It kills bot and then the method Destroy() from EnemyManager class destroys the current model of the bot.

## III. CONCLUSION

This application is an indie game. It is only freeware and is a good choice to spend time in friendly company

## REFERENCES

- [1] Magicka - <http://store.steampowered.com/app/42910/>
- [2] Don't starve - <http://store.steampowered.com/app/219740/>
- [3] Hellfivers - <http://store.steampowered.com/app/39451/>

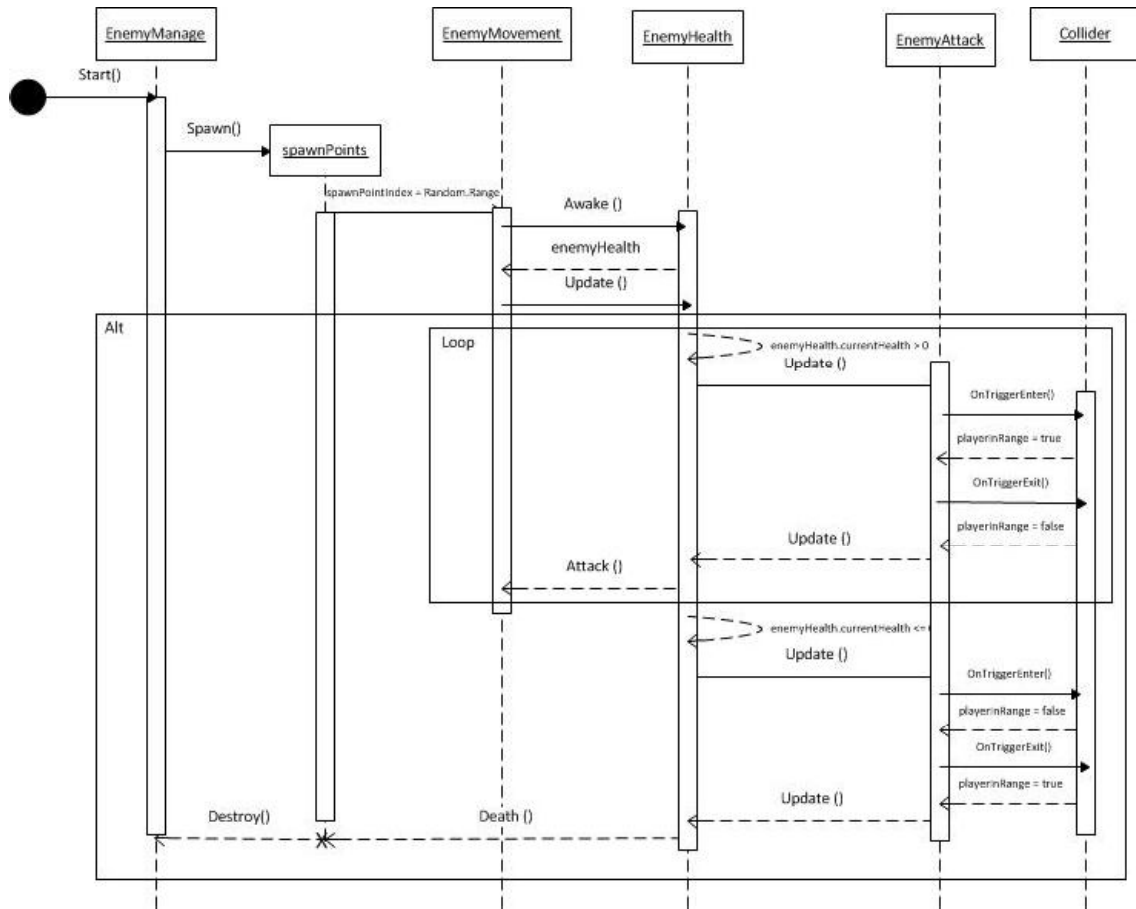


Fig. 1. Sequence diagram of spawn and destroy the enemy

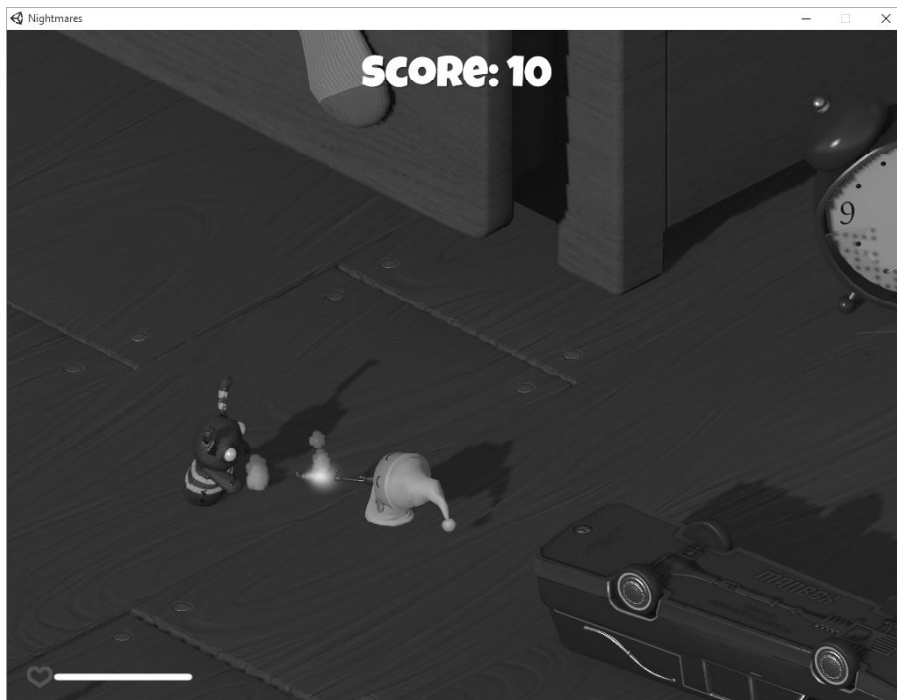


Fig. 2. Screenshot of the game's scene