**Computer Science project**

## **Idea:**

The game will be RPG with a map, different types of enemies, loot boxes etc. The main purpose of the game is to go through several waves of enemies and kill the boss. The player may choose to rush the game and go straight to the boss, but it will be almost impossible to kill him, as the player wouldn’t have strong weapons, armor and so on. The player can pick up the loot boxes (with common weapons, medicine kits, and light armor) or can kill the enemies to get the rarer and better ammunition.

## **Map:**

Map is generated from the presets in the beginning of each game. The map consists of square blocks 32x32 pixels. Moreover, there are some walls, some of them are destructible by the player, the others are not.

## **Enemies:**

There are several types of enemies:

* **Usual enemies**

1. close combat enemies (knifes, katanas)
2. middle distance combat enemies (pistols, bows, rifles)
3. long distance combat enemies – snipers (sniper rifles)

* **Bosses**

1. first boss with a bow (easy)
2. second boss with a sniper rifle (middle)
3. main boss with a rifle and missiles (hard)

## **Player:**

The player will be given 100 health points, 0 armor points, pistol and some bullets. Player can heal himself by using the medicine kits:

* Big medicine kit – heals 50% of the health (the heaviest in inventory)
* Medium medicine kit – heals 20% of the health
* Small medicine kit – heals 10% of the health (the lightest in the inventory)

The player can use the 3 types of the armor:

1. Heavy armor – the strongest armor, but makes the player’s movements much slower
2. Medium armor – the medium strength armor
3. Light armor – the lightest and the least protective type of armor, common item.

## **Controls:**

The player can move in only 4 directions – up, down, left, and right. It cannot go diagonally. The player is always aiming (or attacking) the directions which he is moving at the moment. Thus, the player can shoot in 4 directions as well. The camera will be following the player, so the player is always in the middle of it.

Key inputs:

* W – up
* S – down
* D – right
* A – left
* Left click – shoot or attack (use the weapon)
* E – pick up smth
* 1 – select the first weapon
* 2 – select the second weapon
* 3 – select the third weapon
* X – drop item