

Unity Testaufgabe:

Unity test exercise:

The task is to develop a small dexterity game: the player navigates his avatar (3d model) in a limited area (no open world) and has to activate switches. After some time enemies are spawning and shoot with projectiles at the player to hinder him to complete the level.

Please use C# as coding language.

1.)

Main menu:

When the player starts the game, he enters the main menu. A start button starts the level for him.

2.)

Level UI:

The player should see his live energy all the time and can see his avatar in the top down perspective.

3.)

Level:

The level itself consists of a great plane which is larger than the normal viewport. The player shouldn't fall through the levels surface.

Throughout the level area are blocks distributed which the player has to touch to activate them. On activation the block changes its color (plain colors may be used). As soon as all blocks are activated by the player, the level is completed.

4.)

Enemies:

While the player is in the level, enemies are spawning in random intervals. The enemies can not move, but they are shooting projectiles into the players direction.

The player has 5 hit points and each hit of a projectile reduces them by one. When the player reaches zero hit points he is redirected to the main menu.

Others:

Implementation should focus on code style, performance and memory usage. Comments may be used to hint to improvements.

All objects can be created from primitives. Textures, with the exception of the plain colors for the activation blocks, and 3d models may be used, but primitives will be sufficient. Different objects should be at least differentiated by their (diffuse) color to figure out which type of object it is.