Pyramid Games Academy

Recruitment Task

General info

This task will help us to better assess your current abilities and knowledge.

Completed task send on our e-mail anna.nowacka@pyramidlab.pl. We will wait for your answer until 06.06.2021.

We will let you know whether your application is successful by 09.06.2021.

Task description

Overview

The task is to create a 3D game in Unity that will be based on camera movement and interactions. The player has to open the chest, take the key, and using the key open the door. Then the game ends and the game over screen shows how much time the gameplay lasted.

Launching the game

At the start of the game, there is a main menu visible showing best time and a “Start” button that starts the game.

Gameplay

Gameplay start resets the timer. The timer starts at this point and counts time till the player finishes the game.

The player starts the game at the center of the map. The level consists of a room with randomly placed doors, and a chest randomly placed on the floor. The goal of the game is to open the door as fast as possible.

The Player can move and rotate the camera. Mouse-hovering over an object causes the object to change its color slightly.

Clicking on the chest when it is closed opens a window with a question “Open?” and two options “Yes” and “No”. Choosing “Yes” opens the chest, and a key is shown inside. Choosing “No” closes the window.

After clicking on the key there is another window showing a question “Take?” and options “Yes” and “No”. Choosing “Yes” adds the key to inventory. Choosing “No” closes the window.

Clicking on the door without a key opens a window with the message “You need a key!” and an “OK” button. The button closes the window. If the player has the key in his inventory then

the window shows a question “Open?” with options “Yes” and “No”. Option “Yes” opens the door and ends the game. Option “No” closes the window.

Game Over

When the player ends the game, the Game Over screen is shown with the current score, highscore, and “Try again” button. Highscore is the best time for passing the game.

UI

Main menu:
- Start button

Game over:
- Current score
- High score
- Try again button

In-game:
- A timer showing current time passed since game start
- Window with message and options for the player to choose.

Controls

- Moving and rotating camera: W, S, A, D (movement), Q, E (rotation)
- LPM: interaction with object under the mouse pointer

Nice to have

- Sound effects, background music
- Particles
- Animations
- Screen shakes

Task requirements

- The task has to be created with an LTS version of Unity
- The task should be created on one scene
- Task needs to be shared through a public repo (GitHub or GitLab)
- Code should be optimal and easy to read. Remember to use proper encapsulation.
- You can only use free assets
- You have to create a list of all the assets that you used

Optional challenges

- Zenject
- New Unity Input System
- LFS and .gitignore