FINAL PROJECT REPORT

Course: CS427

Group member:

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Game title: Endless Runner Game – 3D Version

Ideas: Based on the idea of Subway Surfers, we make this game to make people relax after working and practicing his/her patient, his/her reaction.

Feature:

1. Endless run like Subway Surfers with 3 lanes to run and avoid obstacles.
2. Points
3. Money
4. Control by gesture

Technique

1. For the game’s core: Using Unity.
2. For the gesture control:
   1. Gesture recognition: using Python with OpenCV and Mediapipe library.
   2. Control keyboard: Using C# to code receive data from Python and simulate clicking the arrow keys.

Reference:

1. [Unity 3D Endless Runner Game - YouTube](https://www.youtube.com/playlist?list=PL0WgRP7BtOez8O7UAQiW0qAp-XfKZXA9W)
2. [Hand Tracking 30 FPS using CPU | OpenCV Python (2021) | Computer Vision - YouTube](https://www.youtube.com/watch?v=NZde8Xt78Iw)
3. [SendKeys.SendWait(String) Method (System.Windows.Forms) | Microsoft Learn](https://learn.microsoft.com/en-us/dotnet/api/system.windows.forms.sendkeys.sendwait?view=windowsdesktop-7.0)