FINAL PROJECT REPORT

Course: CS427

Group member:

1. 20125058 - Nguyen Viet Hung

2. 20125027 - Phan Minh Duy

3. 20125033 - Le Minh Huan

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:
 - a. Gesture recognition: using Python with OpenCV and Mediapipe library.
 - b. Control keyboard: Using C# to code receive data from Python and simulate clicking the arrow keys.

Reference:

- 1. Unity 3D Endless Runner Game YouTube
- 2. Hand Tracking 30 FPS using CPU | OpenCV Python (2021) | Computer Vision YouTube
- 3. SendKeys.SendWait(String) Method (System.Windows.Forms) | Microsoft Learn