<p style="text-align:center; color:red;">TOWER-DEFENCE-LIKE VIDEO GAME</p>

<p style="text-align:center; color:red;">SAVE EDWARDS</p>

<p style="text-align:center;">CSEE4840 Final Project Proposal</p>

WEI WEI WW2313

ZEYANG YANG ZY2171

ZHE CAO ZC2237

GE ZHAO GZ2196

## 1. Description

In this project, we intend to implement a tower defense game. Basically, the player need to set up the defense facilities beside the path, in order to kill the attacker before they get through the path to the destination. We got a lot of facilities with different characteristics which need to be select each time, and of course it has different price. We have a unique money earn and pay system which could better control the speed and the difficulty of this game. What's more, the defense facilities could be upgraded to a better performance.

## 2. Implementation features

- PS2 mouse action control, capable of fast position change and key response at the same time.

- VGA graphic display using RGB color. Simple 2D graphic effects for actions and scenes.

- Sound effects for shooting\moving\attacking\died actions and background music.

- Multiple large scenes with interactive environmental objects.

- A simple algorithm for attackers routing plan.

- A simple algorithm for selecting the enemy targets by each defense facility automatically.

- Multiple defense facilities and attackers characters with unique properties and actions.

- Multiple selection of game modes, including endurance and survival mode. (optional)

### 3.  Hardware

Build PS2 mouse driver
Build VGA driver
Build sound chip driver
Using SRAM to load\store game data


### 4.  Software

Facilities defensing modeling
Attackers' action modeling
Game scenes build
Actions sound effects and background music implementation