

# ECE385 Final Project README

## Pico Park

yuntong7 & ziyueg3

### 1. How to run the program

The first step is to open the file named final.qpf. After compiling the hardware part of the program. Connect the lap top with the FPGA board and press "Programmer" to start. Then open the NIOS II software build tools for Eclipse. Generate BSP for the files folder named final\_app\_bsp on the Project Explorer showed on the left. Finally press run configuration to run the software part of the program.

### 2. How to run the game

The first step is compiling the codes for both the hardware and the software. After doing this, a starting page will appear on the screen.

The second step is to press "Enter" button on the keyboard to start the game. The blue and red character will fall down to the ground.

The third step is to control the movement of the characters. For the blue one, "H", "K", "U" can control it to go left, right and jump. Similarly, for the red one, "Left", "Right", "Jump" can control it to go left, right and jump.

The forth step is to go through the obstacles. The characters are supposed to jump over the trap where they might falls down. They can also jump on the another one's head and then jump for the wider trap. They can also stand on the red button to control the platform to move left. Finally, they can also trigger the lift by both standing on it.

The last step is go through the door and end the game. If anyone of them reach the area of the door and press "J" for the blue one and "Down" for the red one, the game will end and return to the starting page.