

ECE 476/676 - Homework #11

BlueTooth - Due Monday, November 21st

Roulette!

Write a Python program to play a simplified game of Roulette on your Pico board from your cell phone with a Bluetooth interface

- On reset, you start with \$100 in your bank account.
- Your bank value is displayed on
 - The LCD display and
 - Your cell phone via a Bluetooth message
- You can then place bets on numbers 1..8 using
 - the keyboard or
 - your cell phone with a Bluetooth interface
- Once bets are placed a random number in the range of 50..80 is generated
 - The marble moves one position every 100ms
 - Where it stops is the winning number (position mod 8)
- Bets that win increase your bank balance by 8x that amount
- Bets that lose decrease your bank balance by that amount
- The game then repeats

Grading

- (10pt) Display your bank balance on the LCD display
- (10pt) Display your balance on your cell phone via Bluetooth
- (10pt) Display the numbers and amount bet on each number on the LCD display
- (10pt) Accept bets from your cell phone via Bluetooth
 - Use the keyboard if you can't get bluetooth to work (no points for this)
- (10pt) Can spin the wheel with a bluetooth message
 - Use a button if you can't get bluetooth to work (no points for this)
- (10pt) Display the changing numbers on the LCD display as the marble goes around the roulette wheel
- (10pt) Bank balance decreases on all losing bets
- (10pt) Bank balance increases 8x for all winning bets
- (10pt) Game then restarts (can play over and over)
- (10pt) Demonstrate your Roulette wheel