Raspberry Pi Final Project Title

Project Team Members
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Project Summary
The project will test batteries to determine their life remaining and use this to determine how long it will last in a given device.

Goals and Objectives
The main goal of the project is to be able to accurately determine the percentage of power left in a battery and to determine the power absorption rate of a given device. Using these we will be able to determine how much time a battery can power the given device.

GPIO
4 GPIO's will be used. GPIO 1 will be an analog pin connected to the batteries output to measure voltage. GPIO 2 will also be an analog pin and will be connected to the batteries output with a resistor in-between the output. GPIO 1 = V_b , GPIO 2 = V_0 , Resistor = R, $\frac{V_b - V_0}{R} = I_b, P_b = V_b I_b$, this is the power supplied. GPIO 3 and GPIO 4 will be connected in the same manor except on one end of the device being tested. A test voltage will be sent through the device to determine Resistance and Current. GPIO 3 = V_L , GPIO 4 = V_0 , Resistor = R, Test Voltage = V_t , $\frac{V_L - V_0}{R} = I_L$, $\frac{V_t - V_L}{I_L} = R_L$

GUI
The GUI will be used to display the battery life percentage as well as the amount of time left the battery can power a given device. It will also be used to start/stop the device testing the power absorption and supplied power.

Github Repository
This project's Github repository is located at: <https://github.com/CSC132001/Gamerz.git>

Gantt Chart
Insert your project's Gantt chart here. Make sure to modify the spreadsheet provided. An easy way to insert the spreadsheet is to highlight the relevant cells in the spreadsheet, copy it to the clipboard via Ctrl+C, and paste it as a Bitmap (centered and using no wrap) via Shift+Ctrl+V. Feel free to briefly discuss the schedule.

	Week 1 M 9//30	T 10//1	W 10//2	TH 10//3	F 10//4	Week 2 M 10//7	T 10//8	W 10//9	TH 10//10	F 10//11
GUI										
Start/stop										
Display data										
Circuits	█	█	█	█	█	█	█	█	█	█
Battery	█	█	█	█	█	█	█	█	█	█
Load										
Battery Data										
create library										
In class project days										
Final Presentation										

Week 3 M 10//14	T 10//15	W 10//16	TH 10//17	F 10//18	Week 4 M 10//21	T 10//22	W 10//23	TH 10//24	F 10//25
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							█	█	█
█	█	█	█	█	█	█	█	█	█
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Week 5					Week 6
M	T	W	TH	F	M
10//28	10//29	10//30	10//31	11//01	11//04
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🟦	🟦	🟦			
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