

SE Proposal

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Project Name : FitMe by RPS.co

What is the main idea : Our goal for this project is to create a new and easy to use platform to keep track and calculate how many steps a person takes in a day, how many calories they lose, how long they run for and their average speed of their run and many other interesting features. One unique feature of this program is that it will be personalized to the person using the program. Each person (up to 5) will have to input information such as height, weight, male/female, age, etc, so that the calories burned and other data will be unique and as precise as possible.

The major software components of the project : An LCD screen to use as the interface between the person and the hardware, something to calculate the number of steps (capturing movement).

The prototype plan : The display of the arduino will have many options such as start, stop, time, a display for calories burned, steps taken, average speed, how much in the total distance they have finished and have left to do, and so on. To ensure that the information such as calories burned are accurate, the FitMe will be personalized for the person using it. Before the person starts using the program, FitMe will ask for their name, to get their unique data. The program will be able to store 5 different people's information and data.

Challenges : Some challenges that we expect to face when programming is how to motion detect. This focuses more on hardware based rather than coding. This is an issue as it has more to do with the movement of the hardware and it needs the proper parts to pick up the movement. Another challenge we expect is moving complex objects. To change the movement of objects on the screen to be user friendly and easy to navigate. We expect this to occur when we are programming the project, and are trying to make the interface clean and organized but also contains enough information for the person to track their fitness and health.