

Heart rate monitoring device

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Problem Definition

- **Statement:** Many people workout without knowing what the healthy workout truly is and can damage their health if done improperly.
 - **Scope :** We will build a heart rate monitoring device
 - **Schedule:** All of the parts would arrive within 2 weeks. We would get schematics done before then and once parts arrive we would get it combined and ready by 11/10/2012
- Resources:** Materials required to assemble heart rate monitoring device
- Student hours spent in the lab
 - Cost estimated to be \$74.02

Research/Analysis

- Most common heart rate monitoring device in the market currently is designed to be used as a chest strap
- Current Heart rate monitoring devices in the market have been proven to be inaccurate due to human heart rate being affected by medical, physical or specific external conditions which would skew the results of hear rate monitoring device.

Proposed Solution

- Our goal is to implement such heart rate monitoring device that it could work attached only to your wrist, providing more convenience
- In order to counter inaccuracy of heart rate monitor, we will implement preconfigured settings with different min/max limits for the heart rate based on person's health condition, physical condition and external factors that can cause adrenaline rush

Potential Applications

- Interactive software prompting end-user to enter their physical and medical condition based on options provided

