

LightWatch



A wearable light display for body stress.

Agenda

1. Task
2. Approach
3. Implementation
4. Prototype

Task

Task

- extend a watch to an interactive light display
- derive stress level from sensor data
- correct stress level via user input
- visualize stress level using RGB LED ring

Interaction Concept

- output: system measures pulse, displays guessed stress
- interaction: user corrects to felt stress using potentiometer

Approach

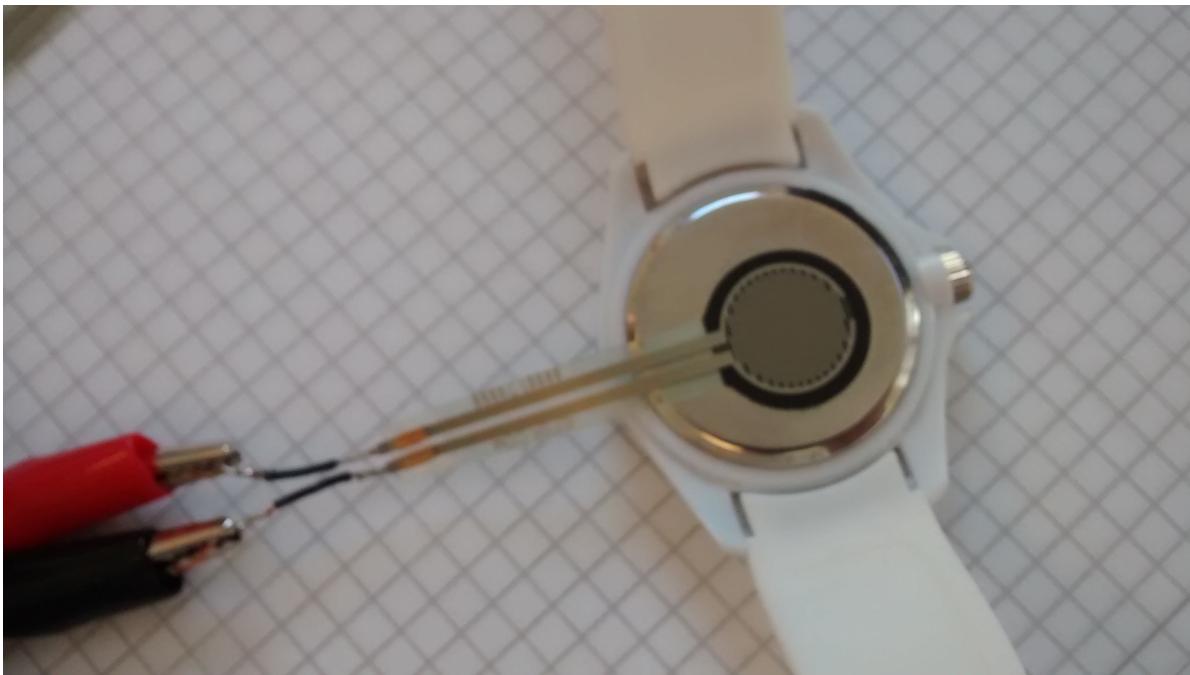
Approach

- explore feasibility
- evaluate user input modalities
- explore sensor input modalities
- build prototype

Feasibility Exploration

- Task: Watch is very small
- Problem: Arduino variants won't fit
- Solution: Use ATtiny

User Input Modalities



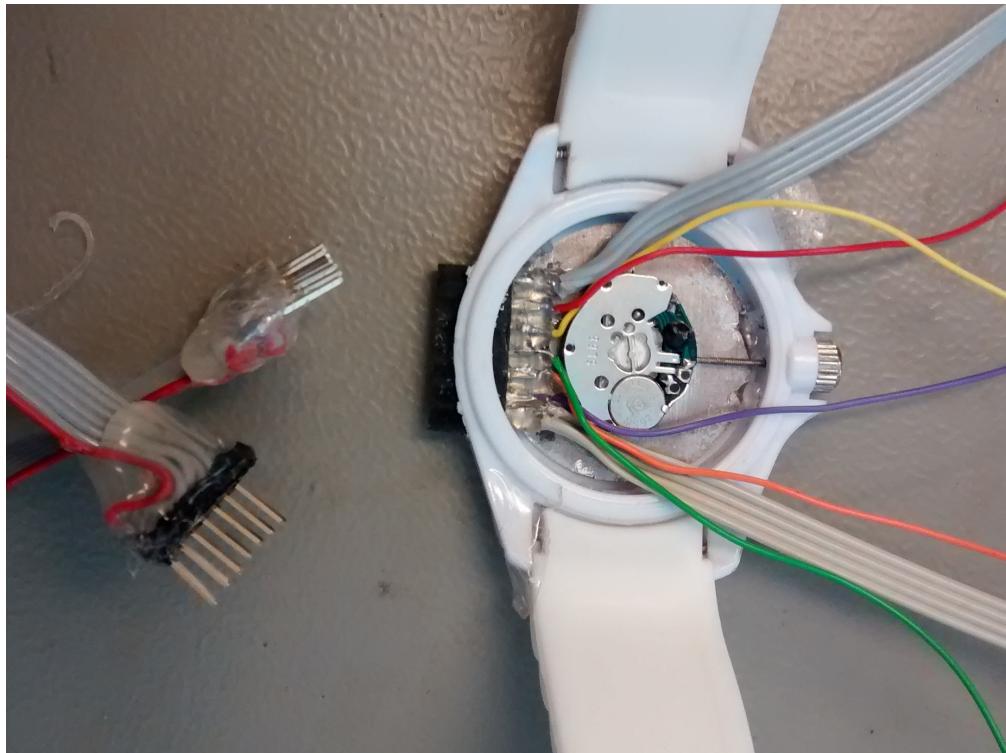
- Task: User corrects stress level
- Problem: No place for inputs on the watch
- Solution: Use pressure sensor

Sensor Input Modalites

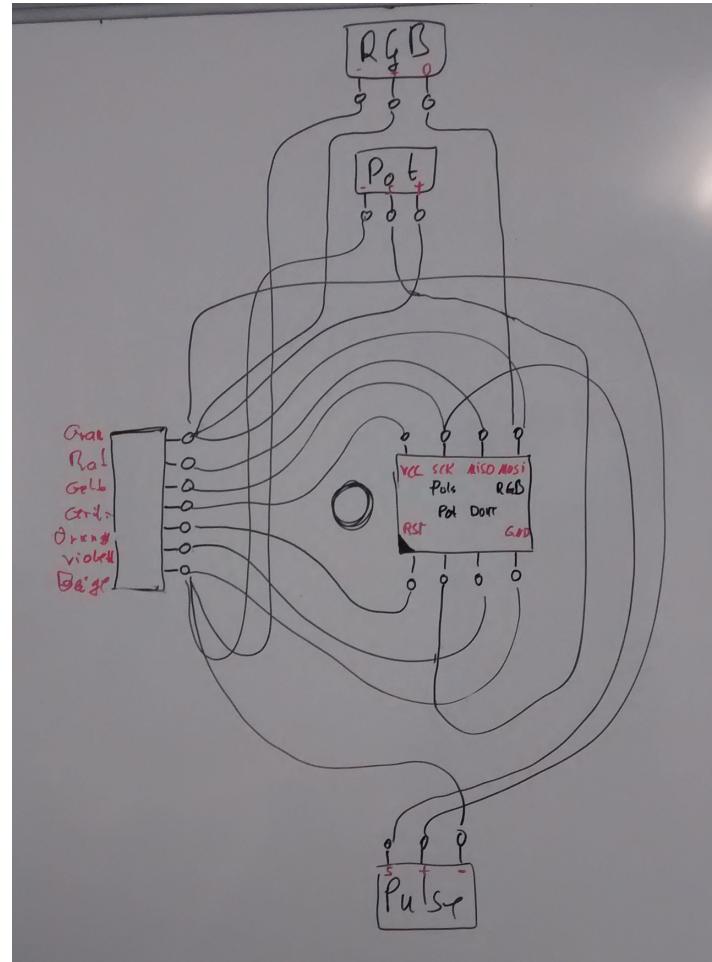
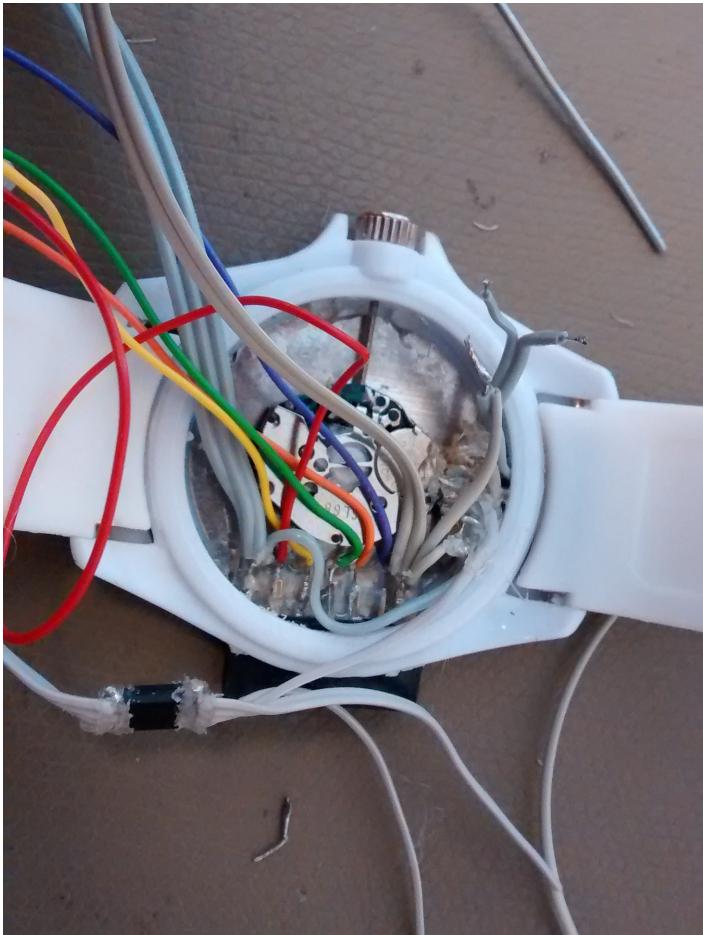
Implementation

Data Port

- programmer
- voltage supply



Wiring



Demo

The End

