You Watch My Stuff

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Sponsor: Chris Wilkerson

PROBLEM
Has this ever happened to you

Theft is very common nowadays especially between college students. Today students can’t guarantee that their belongings will not be stolen while leaving it unattended. So?

IDEA
Then you need YWMSy!
The Project You Watch My Stuff was Created and Sponsored by Chris Wilkerson from Intel. The Project is an Alarm Device that can be attached or placed on to any item you would like to secure. A security device that will alert the user and keep a thief from stealing your belongings is a necessity in these days. The Alarm Device is used in conjuction with a cell phone application.

GOALS
- A phone application is used to power up the device.
- Phone application is also used to arm/disarm the alarm.
- Bluetooth Type 2 Range is about 30ft /10m in sight
- User friendly Android GUI
- Secure Communication via Bluetooth
- Alarm Triggered when device is Moved
- Panic/Finder Enabled
- Portable
- Battery life time more than 12 hours and less than122 hours

IMPLEMENTATION
The alarm device has a multicolor LED that Interacts with the user. Below is a chart of how the Alarm device turns on the LED.

- Alarm is Detecting Movement
- Alarm is ‘ON’ state
- Alarm is Activated
- Triggered Alarm (Blink .5 sec)

ANDROID APPLICATION
The Alarm device is controlled via cell phone and the pictures below shows Graphic User Interface that controlled the Alarm device. The application has buttons to ON/OFF, Enable/Disabled and Panic the Alarm Device

DESIGN BLOCK DIAGRAM

HYPOTHETICAL VISION
The You Watch My Stuff Project has future plans in expanding the many feature possibilities. The future objective of YWMSy will be to create a smaller, affordable and user-friendly device such as the designs shown below.

Features:
- Pedometer
- GPS Tracker
- Waterproof package
- Small package using surface mount components
- Close to Out of Range area cell phone notification
- Rechargeable batteries

POWER USAGE IN ALARM COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Power Usage (mW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluetooth</td>
<td>.036</td>
</tr>
<tr>
<td>Accelerometer</td>
<td>.324</td>
</tr>
<tr>
<td>Speaker</td>
<td>.105</td>
</tr>
<tr>
<td>LED</td>
<td>5</td>
</tr>
<tr>
<td>Alarm Device as a Unit</td>
<td>5.5</td>
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