

Location aware notification system, using Arduino and a smartphone

Purpose

The purpose of the project is to create a notification system, which will track an Arduino boards position using GPS. The Arduino board has to notify an administrator, using an application on a smartphone, if said board moves out of a pre-defined area.

Functional demands

Absolute minimum requirements

- Drawing of acceptable area on a map, using a browser and google maps API
- Export of coordinates from said area.
- Notification by LED on Arduino board whenever it is outside said Area.

Acceptable minimum requirements

- Drawing of complex editable area.
- Tracking of the Arduino via Bluetooth if outside of said area.

Extensions

- Device / User specific area control
- Notification via gprs or other wireless signal to a smartphone when device is outside area
- Device can fetch acceptable area “over the air”

Time Schedule

- Deadline 5/3 – Absolute minimum
- Deadline 9/4 – Acceptable minimum
- Deadline 7/5 – Extensions
- Deadline 26/6 - Report