# 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

- Notification must be sent using GPRS or other wireless signal, to a smartphone.
- Arduino board must be traceable using and APP on a smartphone, AFTER notification has been sent.

#### **Extensions**

- User account control for the drawing of acceptable area
- Arduino board should be able to fetch new acceptable areas upon initialization over the air
- Extended user interface

## Time Schedule

- Deadline 5/3 Absolute minimum
- Deadline 9/4 Acceptable minimum
- Deadline 7/5 Report + possible extensions