Multi-Module Security

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Description Overview

- Internet of Things.
  - Microcomputers, Phones, and a Server.
- Home Automation and Security Based Application
  - Sensors focused on physical security.
  - Mobile devices act as entry ID’s for the client.
- Expandability
  - Each Microcomputer can be configured to control a single room.
  - Multiple microcomputers can be deployed.

Description

- System Server Control point.
  - This is the control center of the security automation system.
  - Access point to all automation and security peripherals.
  - Statistic history storage
  - GPS detection of phones in system via Geofencing.
- Modules (Sensors)
  - Arduino, Raspberry Pi, SoC.
  - Relies on pre-built or third-party libraries for initial set-up of each sensor
  - Possibility of combining third-party libraries into easy template for download/install
- Phone Application
  - Communicates with the server to see sensor info
  - Live Time notification (depending on refresh rate)

Proposed Work

- Java is a key component of this project
  - User app will be programmed as an Android application (a Java-oriented OS)
  - Server setup is probably going to be set up in Java
    - This in turn handles communication between the other two components
- Setting up of the modules will be dependent on whichever language(s) the libraries are written in
- Figuring out method of communication between the server, the app, and the modules
  - client says web interface is acceptable
  - Although we may do something far more fancy

Our Client

Name: Jon Walden

Background: Technologist, works for Blue Prism as a Pre-Sales Consultant. His job is gaining understanding about Blue Prism's Clients' requirements, and then using that insight to help his team develop solutions using Robotic Process Automation.

He decided to become our client as he is looking for a better option for an automated home security system.

Thanks for your time!

Any Questions?