**1. The Purpose of the Document**

**1.1 The Business**

“Lockard Security” is a small home security firm with 20 employees. Currently the firm installs home alarm systems without telephone notification, or any home management features. The firm believes that there is now room for expansion in their product range and business, due to the difficulty that securing one's home from thieves causes.

**1.2 Goal of the Project**

The goal of the project is to develop a hardware/software solution and to offer a high tech home alarm and monitoring system. The project aims to provide customers with easier access to features such as heating control, lighting control, fire alarms, house alarm, panic alarm, carbon monoxide level monitoring, and text notifications.

Customers will also be provided with an easily accessible app to monitor their settings, as well as the option to have a full monitoring service provided for them on the website. The website will also provide users with the option to edit their monitoring settings.

**2. The Stakeholders**

**2.1 Stakeholders**

S01: “Lockard Security”

* Have security knowledge
* Have knowledge about the requirements and specifications
* First contact when gathering requirements
* First contact for opinions on all aspects of the system

S02: Home Owners

* Potential customers for the home monitoring system

S03: “Lockard Security” Customers

* Interact with all aspects of the system
* Will be affected by system performance
* Will be relying on the system to provide their home security
* Will be able to provide feedback on the system's performance

S04: Our Group

* Responsible for the development of the Home Monitoring System
* Required to gather requirements for the system from all other stakeholders

**2.2 The Hands on users of the apps**

HU01: “Lockard Security” present and potential customers (Primary App and Website Users)

* Role: To view and edit their home monitoring system settings
* Subject Matter Experience: Novice
* Technological Experience: Novice
* Linguistic Skills: Website and app currently only available in English

HU02: “Lockard Security” Employees (Home Monitoring System Maintainers and Fitters)

* Role: Fit alarm and home monitoring systems, and maintain the systems once they have been uploaded.
* Subject Matter Experience:
* Technological Experience:
* Linguistic Skills:

**2.3 User Participation**

U01: “Lockard Security” Employees

* Will use the system to monitor customers’ homes
* Will be primary users of the full monitoring service
* Will have knowledge of what security needs are expected from customers
* User Requirements:
  + We can conduct interviews with them to help gather requirements for the Home Monitoring System
  + Will be involved in testing and prototyping stage as well as requirements stage

U02: “Lockard Security” Customers

* Will be primary users of the self monitoring service and will use the service frequently
* Will have expectations of what the system should do, and how they expect their home to be protected/monitored
* User Requirements:
  + We can conduct interviews with willing customers and use the answers given to gather requirements for the system with employees
  + May become involved during the testing and prototyping stage

**3 Mandated Constraints**

**3.1 Solution Constraints**

The Home Monitoring System must consist of a self-monitoring application and a full monitoring application.

The self-monitoring system must be an android app that will allow customers to monitor their own homes, and must interface with the Pi based hardware of the Home Monitoring System.

The full-monitoring system must be a website that customers who want minimum hassle and want the security firm to perform the house monitoring and management for them can avail of.

**3.2 Implementation Environment of the Current System**

The self-monitoring system must interface with the Pi based hardware of the Home Monitoring System.

**3.2 Anticipated Workplace Environment**

The anticipated workplace environment of the system is on the Internet, with mobile phones, a tablet and computers used as browsing devices.

**3.3 Schedule Constraints**

The android app must be up on the play store by the end of April 2016.

Our group project must be completed by the end of April 2016.

**4 Naming Conventions and Definitions**

**4.1 Terms used by Stakeholders**

|  |  |
| --- | --- |
| **Term:** | **Definition:** |
| HMS | Home Monitoring System |
| Customer | Household who is currently using “Lockard Security’s” home alarm system. |
| Employee | Current employee who fits/manages home alarm systems, and will receive training on how to fit/manage the new home monitoring system |
| Self monitoring system | System that allows the customer to manage their own monitoring settings |
| Full monitoring system | System that allows “Lockard Security” to manage the system for the customer, providing them with minimum hassle |
| App. | Refers to the Android app that will allow the user to access the self monitoring system |

**5 Relevant facts and assumption**

**5.1 Relevant facts**

* Customers are allowed to choose which features of the HMS they wish to purchase.

**5.2 Business Rules**

* Each HMS package is sold based on the customers’ home and needs.
* Each package and the features in that package are tailored to the customer’s specific needs.

**5.3 Assumptions**

* Self-monitoring customers will have Internet access.
* Customers will purchase over the phone.
* Full-monitoring customers will tailor their settings over the phone.
* Current customers will be asked to upgrade automatically, or given the option to purchase their new package when the current one expires.
* Also assumes that self-monitoring customers have minimal knowledge of English, and basic computer and online skills.

**6 The Scope of the Work**

**6.1 The Current Situation**

“Lockard Security” is a small home security firm. Currently they are installing simple home alarm systems, with no phone notification and no home monitoring features.

**6.2 The Context of the Work**

The system will have to interact with both a home and security environment, and also work adjacent to a database that stores the household settings, local to the home’s Raspberry Pi based system, and ensure that data remains consistent between the Android app and the website.

As the system will also be interacting with a human environment, the wishes and needs of the customers within their own home will have to be adhered to.

**6.3. Work Partioning**

Not applicable.

**6.4 Business Use Cases**

Not applicable.

**7 The Scope of the Product**

**7.1 Product Boundary**

**7.2 Product Use Case List**

//not finished, obvs have loads more ☺

|  |  |  |  |
| --- | --- | --- | --- |
| **No.:** | **Event:** | **Input:** | **Output:** |
| 1 | Customer submits apply settings. | Chosen Settings | Save Confirmation or Error Saving |
| 2 | Panic alarm pressed. | User Id and PANIC | Notify guards? Next of kin? Continuous? |
| 3 | Customer requests update. | Update Request | Twitter Text |
| 4 | Customer enters account number on log in. | Household account number | Selection of profiles to choose from |

**7.3 Product Use Case List**