Smart Home Security

Design Proposal

03/02/2016

Joseph Robicheaux

Rahul Gandhi

Yubraj Budhathoki

Prepared for

Software Engineering II

Client: Mrs. Kussmann

McNeese State University

**Project Name**

Smart Home Security

**Project URL**

https://github.com/msu-ybudhathoki/SmartHomeSecurity.git

**Project Scope**

The goal of this project is to design a simulation of a Smart Home Security. Deliverables include:

* A simulation of a box as a home
* Arduino controlled motion sensor, keypad lock, current sensors and cameras
* C code for Arduino
* All other associated documentation for the project

**Date**

March 2, 2016

**Project Background and Description**

Smart Home Security is the project which gives the simulation of a home security system. Here, we are designing a home where there are number of security system installed in the home. The alarm and the camera is triggered and the user is notified when:

* The main door of the home is opened
* Motion is detected in the room
* An Electric bulb is turned on

The user should be able to:

* Activate or deactivate the security system
* Remotely look at the videos captured by cameras
* Turn on or off the alarm

**Project Scope Overview**

A simulation of a home security system including rooms, door, light bulbs, and the underlying logic allowing the home to be smartly safe and secure.

**Projected Schedule**

Order and receive parts – February 13, 2016

Keypad lock and LCD– March 2, 2016

Motion sensor – March 2, 2016

Design Documentation – March 2, 2016

Magnetic Key strips – March 7, 2016

Requirement Documentation – March 7, 2016

Assemble all individual tasks – March 17, 2016

Add current sensors – March 24, 2016

Add cameras – March 24, 2016

Remote connection – March 31, 2016

Any additional tasks – April 7, 2016

Testing – April 14, 2016

Documentation – April 21, 2016

PowerPoint – April 28, 2016

**Cost Estimate**

200 hours

$200

**Deliverables**

Documentation -- by the end of semester Spring 2016

Arduino Code -- by the end of semester Spring 2016

Fully functional project -- by the end of semester Spring 2016

**Future Tasks**

Refactor and add other features for smart home security system.

**Affected Parties**

Joseph Robicheaux, Rahul Gandhi, Yubraj Budhathoki and Kay Kussmann

**Team Profile:**

Joseph Robicheaux

Qualifications: Arduino, Programming, Error checking, Hardware

Rahul Gandhi

Qualifications: Project management, Documentation, Problem Solving, C programming

Yubraj Budhathoki

Qualifications: Arduino, Design, Team management, Database management, Documentation

**Potential users:**

Anybody who is interested in smart home security technology especially home owners.

**Plan of work:**

Joseph Robicheaux

* Magnetic Strips for door
* Remote connection
* Requirement Documentation
* Camera

Yubraj Budhathoki

* Motion sensor
* Current sensor
* PowerPoint
* Design Documentation
* Project management

Rahul Gandhi

* Keypad lock and LCD
* Home simulation
* Requirement Documentation
* Assembling all individual code together

**Contact Information**

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Kay Kussmann = kkussman@mcneese.edu

**Approval and Authority to Proceed Section**

Joseph Robicheaux \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rahul Gandhi \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Yubraj Budhathoki \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Kay Kussmann \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_