Vision Documentation

Smart House Project

Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 2015-09-23 | 0.1 | The users should be able to control the home electronics devices with help of mobile application. | Liaquath Hassan |
| 2015-10-17 | 0.2 | The users should be able to control the home electronics devices with help of mobile application. | Liaquath Hassan |
| 2015-11-08 | 0.2 | The users should be able to control the home electronics devices with help of mobile application. | Liaquath Hassan |
| 2015-11-25 | 0.3 | The users should be able to control and look at the status of home electronics devices with help of mobile application and web service. | Liaquath Hassan |

Product Overview

# Product concept

## Stakeholders

Stakeholders are companies those are interested in testing out new techniques, future users of smart home products, typically persons with interest in smart devices and mobile phones, but also teachers at the department.

## Introduction

The concept is to connect all the electronics devices (light bulbs, fans, speakers, thermometer etc.) with a system so that the current states of those devices (on/off) can be acquired by the micro controller (Arduino) and read by the database server so that users will be able to give command to update/change the states of those devices. For some devices users will also be able to see the updates/status (temperature, for example).

# Goals

The goal of the project is to make such a smart home system where users will enjoy secure, safe and easily accessible services which provide them overall control and monitoring facilities of their homes devices.

# Implementation

The implementation of the whole project requires works in different sub group level. In this part we are implementing the device part. The basic idea is to set up devices and connect them with a micro controller that connected with server. So when a user sends a message to change the state of a device the micro controller should be able to handle that command. That is to pass that information to change the state and also the database should be updated so that user can see the status of a device. For microcontroller device we use Arduino. The communication between Arduino and server can be handled using processing.

# Basic concept

The microprocessor (Arduino) reads information from the database, update them when necessary.

# Basic requirements

We here list a set of basic requirements and desires from the stakeholders. Some of the items listed here may also be found at the documents for requirements and supplementary requirements.