**Smart Home**

**Stakeholder Requests/Questionnaire**

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**Revision History**

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**Stakeholder Requests**

1. **Introduction**

Currently, there are three main problems in the world namely power consumption, water consumption and burglary. There is a huge potentiality to conserve water and power in residential areas. Therefore, we need a smart technology which will take care of conserving power, conserving water and security issues.

**1.1 Purpose**

The purpose of this document is to collect, analyze and define needs and features of the Smart home system. This will help all the stake holders to get a better view on the proposed system

**1.2 Scope**

Smart home system helps users to monitor each and every household activity. This system automates the home and allows each and every electronic device to be accessed from mobile or web and it facilitates the concept of IOT. It ensures that there is security provided to the house.

* 1. **Definitions, Acronyms and Abbreviation**

IOT **–** Internet of things

**1.4 References**

* <https://en.wikipedia.org/wiki/Home_automation>
* <https://www.smarthome.com/>
* <https://modernize.com/home-automation>
* <http://www.smarthome.com/sc-what-is-home-automation>

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**1.5 Overview**

The first process in the requirements gathering is the requirements elicitation phase. In this phase we try to find out who are the users, stakeholders of the system. The next step in this process is to arrange interviews with the difficult types of stakeholders to get their requirements. The Other way of gathering requirements include Brain storming and also designing stake holders request questionnaire. After gathering all the requirements, we need to prioritize and set them in an order.

**2. Establish Stakeholder or User Profile**

**HOUSE OWNER:**

Description: A private Individual who will use the system for automating their home

Type: This is a casual user possibly with previous use of some automation technology

Responsibilities: Ensure that the necessary comforts and features are provided to satisfy typical home owner

Involvement: we will have some sample customers to help evaluate our design and market research results will also guide our vision

**CUSTOMER CARE**

Description: An Individual who will assist home owner with using the system

Type: This is an advanced user with experience in supporting similar smart home technologies

Responsibilities: Ensure that they rapidly respond to the home owners queries

Involvement: We will have internal customer care members on our project team to help evaluate our system

Deliverables: End user support manuals, Technical reference manuals

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**SERVICE MAN**

Description: An individual who will repair the household electronic appliances

Type: This is a general user, who may not have proper idea in using system but repairs the electronic appliances

Responsibilities: Ensure that the reported problem regarding particular appliance is solved

Involvement: We will have team of service men to ensure that all the devices in home are working properly

Deliverables: Service kit

**3. Assessing the Problem**

* + For which <application type> problems do you lack good solutions?
  + Existing homes are not smart enough to conserve water and power effectively
  + Advanced security mechanisms are not equipped with existing security systems
  + Appliances control through mobile is not integrated with existing homes.

***Ask for each problem:***

* Why does this problem exist?
* Is this problem real?
* How do you solve it now? 
* How would you like to solve it?

1. **Understanding the User Environment**

* How often do you use your mobile?
* Who are the users?
* Do you use mobile often?
* Do you use web often?
* What are the problems that you face in managing your daily activities?
* How often you use web?
* What are the types of security measurements you currently have? Is it secure?
* How are you monitoring water consumption?
* How are you monitoring power consumption?
* What kind of electricity technique you are using right now?

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* Are you using automated gated system at your entrance?
* What type of biometric check are you currently using?
* How are you managing your gardening issues?
* How often do you clean your floor?
* How do you manage your garbage?
* Are you comfortable with your current air conditioning system? Do you need any additional features?
* Are you facing any problem in recycling water in swimming pool?
* Are you currently using sensor water taps?
* Are you comfortable with your current cooling system in refrigerator? Do you need any additional features?
* How efficiently you are using your coffee maker?
* Do you have any problem in using remotes for each device?
* How do you clean your glass doors?
* Do you use videos cameras inside and around your house?
* Do you manually turn on and off your stove?
* Do you use sticky notes for the reminders?
* Are you satisfied with the current oven features?
* Do you use any dishwasher?
* Do you manually vacuum your car?
* Are you comfortable with bathroom equipments?
* What measures do you take to save rain water?
* How do you control bugs in your home?
* Do you use any motion sensors at home?
* How do you keep track of your property when you are away from home?
* How do you operate your window blinds?
* How you do you repair your damaged appliances?

**5. Recap for Understanding**

* + You have told me *[list stakeholder described problems in your own words]:*o
  + Does this represent the problems you are having with your existing solution?
  + What, if any, other problems you are experiencing?

**6. Analyst’s Inputs on Stakeholder’s Problem (validate or invalidate assumptions)**

* + *[If not addressed]* Which, if any, problems are associated with:

*[List any needs or additional problems you think should concern the stakeholder or user]*

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* + ***Ask for each suggested problem:*** 
    - Is this a real problem?
    - What are the reasons for this problem?
    - How do you currently solve the problem?
    - How would you like to solve the problem?
    - How would you rank solving these problems in comparison to others you’ve mentioned?

1. **Assessing Your Solution (if applicable)** 
   * What if you could... *[summarize the key capabilities of your proposed solution]*
   * How would you rank the importance of these?

# Assessing the Opportunity

* Who needs this application in your organization?
* How many of these types of users would use the application?
* How would you value a successful solution?

# Assessing Reliability, Performance and Support Needs

* What are your expectations for reliability?
* What are your expectations for performance?
* Will you support the product, or will others support it?
* Do you have special needs for support? What about maintenance and service access?
* What are the security requirements?
* What are the installation and configuration requirements?
* What are the special licensing requirements?
* What are the labeling and packaging requirements?

***Other Requirements***

* Which, if any regulatory or environmental requirements or standards must be supported?
* Can you think of any other requirements we should know about?

# 10. Wrap-Up

* Are there any other questions I should be asking you?
* If I need to ask follow up questions, may I give you a call?
* Would you be willing to participate in a requirements review?

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