INTELLIGENT POWER SAVING SYSTEM

Plan For Requirement Elicitation

Prepared by:
Anoop P P-ETAJECS006
Manu Thomas-ETAJECS029
Merin Mathew-ETAJECS030
Under the Guidance of: Ajay James

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1.Elicitating The Requirements

1.0.1Introduction

Our project is to create a Intelligent power saving system by reducing the wastage of electricity.This technology will enable the user not to bother about switching ON/OFF electrical appliances like bulb or fan.

The plan we have adopted to elicit the requirements of our project are described by the steps given below.The flow of requirement gathering is given in the picture given below.

1.1Identifying The Stakeholders

Stakeholders are the people who care the project and actually they are responsible for the acceptance of the project.The main stakeholders we have identified are,

- Development team.
- Users (Economic Buyers).

The development team is responsible for managing the risk and economic activities.The users are the people who are expected to use the product.

1.2Setting the Goals

The questions given below will help the development team to fix what the problem and how it can be solved.

- What problem does this project solve?
- What does the final solution look like?
- What are the actual benefits gained by adopting this solution?
- What are the risk factors that we should care about?
  - Cost estimation
  - Hardware and software availability
  - Technical skills required
  - Acceptance of the product

• How the problem is solved?

• What type of user interaction required?

1.3 Elicitation Techniques

The techniques we are using for gathering requirements from users are given below.

• Questionnaire

• Study of existing techniques and documents.

1.3.1 Questionnaire

We are planning to deliver a set of questions to the users for taking their feedbacks.We will provide enough time for the customers for answering the question. The questionnaire will be delivered to the people who need to reduce their electricity wastage in a small working environments such as offices, libraries etc.

The sample questionnaire that is to be delivered to the customers is given below.

1. Interviewed person contact details
   Please write your answer(s) here:
   - Name: ……..
   - Address : ……..
   - Email: ……..
2. What technology you are currently using for reduce electricity wastage?
   - CFLs
   - Solar energy
   - Others
3. Are you satisfied with the performance offered by the present system?
   - Yes
   - No

4.Are you familiar with human sensible power saving systems?

- Yes
- No

5.If we introduce such a device what are you expecting from it?

- Reduce the energy wastage up to 10%
- Reduce the energy wastage up to 30%
- Reduce the energy wastage up to 50%
- Other …….(specify).

6. Do you think that switching OFF the electrical appliances after their use can save electricity to

a large extent.?

- Yes
- No

7. If you realize that the proposed product has advantages over the currently available product, then can you suggest a favourable cost that is compatible with the market?

- Rs.100-500
- Rs.500-1000
- Above Rs.1000

8. Suggestions/Remarks

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1.3.2 Analysis of user replies

A brief introduction was given before filling up the questionnaire. And the findings are tabulated below.

Name:	Q No.2	Q No.3	Q No.4	Q No.5	Q No.6	Q No.7
Anoop K A	CFLs	NO	NO	Other		
Jayaprakash c	CFLs	NO	YES	30%	YES	>1000
Togy James	Solar energy	NO	YES	10%	YES	500-1000
Faisal U P	CFLs	NO	YES	30%	YES	500-1000
Vincet Joy	Other	YES	NO		YES	
Arya A B	Other	YES	NO		YES	>1000
Sruthi Kalarikkal	CFLs	NO	YES	10%	YES	>1000
Sruthi K	CFLs	NO	NO		YES	>1000
Arjun C H	Solar energy	NO	YES	10%	YES	500-1000

1.3.3 Study of Existing Technologies

Now the technology of using human sensors to save power is available for air conditioners. We are aiming to use this technology in Libraries where lighting is very important. So the study of the technology used in automatic airconditioners will be helpful to

get informations about the device and its working.It will be helpful for requirement elicitation.

1.4 Conclusion

We have considered many methods for gathering the requirements from various stakeholders for our project. The methods selected for our project are questionnaire and study of existing technology. We selected a combination of methods for requirement elicitation because of the insufficiency of a single method to collect all user requirements. And the conclusions reached are:

- Most of the people use CFLs and they are hoping for a better system system to save energy.
- All of them think that switching OFF electrical appliances after use can save energy to a large extent.
- Most of them are not familiar with an intelligent power saving system. But still they believe that the energy wastage upto 10% can be reduced by this system.
- Most of them believe that the system will cost more than 1000rs.