



Patuakhali Science and Technology University

Project proposal on IoT-Based Software Control with Sensors & Arduino

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Introduction

The use of personal computers has become a ubiquitous part of our daily lives. However, turning them on and off manually can be a hassle, especially in a busy work environment. This project aims to solve this problem by using IoT technology to control PC software such as Microsoft Word and Excel using sensors and an Arduino microcontroller.

Objective

The main objectives of this project are:

1. To design and develop a system that can control PC software such as Microsoft Word and Excel using sensors and an Arduino microcontroller.
2. To evaluate the feasibility and efficiency of the system in real-world scenarios

Methodology

The following steps will be taken to achieve the project objectives:

1. Research and design of the system, including selection of appropriate sensors and microcontroller.
2. Implementation of the system, including programming of the Arduino and integration with the personal computer.
3. Testing and evaluation of the system, including performance and reliability assessments.

Requirements

Hardware Requirements:

1. Arduino microcontroller
2. Ultrasonic sensors
3. Personal computer
4. USB cable for connecting the Arduino to the PC

Software Requirements:

1. Arduino Integrated Development Environment (IDE) for programming the microcontroller
2. Any Software like Word and Excel
3. USB drivers for the Arduino microcontroller

Working procedure

The project was implemented in the following steps:

1. Design and development of motion sensors and IOT device
2. Integration of sensors and IOT device
3. Development of mobile application
4. Testing and debugging
5. Deployment

Conclusion

This project has the potential to bring significant benefits to personal computer users by automating the process of opening and closing software such as Microsoft Word and Excel. The successful completion of this project will provide a foundation for further research and development in the field of IoT and PC control.