**CHAPTER 1**

**INTRODUCTION**

* 1. **Introduction**

Smart Home System can quickly bring the future in to our homes by incorporating security, climate, and household gadgets and transforms our regular home into a futuristic smart home. These smart home systems can be used for simple or elaborate tasks by micro controllers, integrating devices and gadgets inside and outside of your home.

A simple definition for home automation is the ability to do tasks automatically and monitor or change status remotely. Common tasks include turning on lights when getting darker, turning on /off light via smartphone/laptops. A loud noise when smoke is detected, monitoring temperature, automatically turn on lights when someone walk through in the dark at night.

* 1. **Aims and Objectives**

The main objective of this project is to design and implement a low-cost wireless smart home system. The system will be developed to enable controlling various devices via Internet. A main feature of this system is that it will uses the regular home appliances/devices with no or minimal modification. The proposed design will include:

* The user interface system that will take the commands from the user through the internet.
* The communication system that carries the user commands to the terminals.

The action taken by the terminals when receiving the user command from the main controller.