

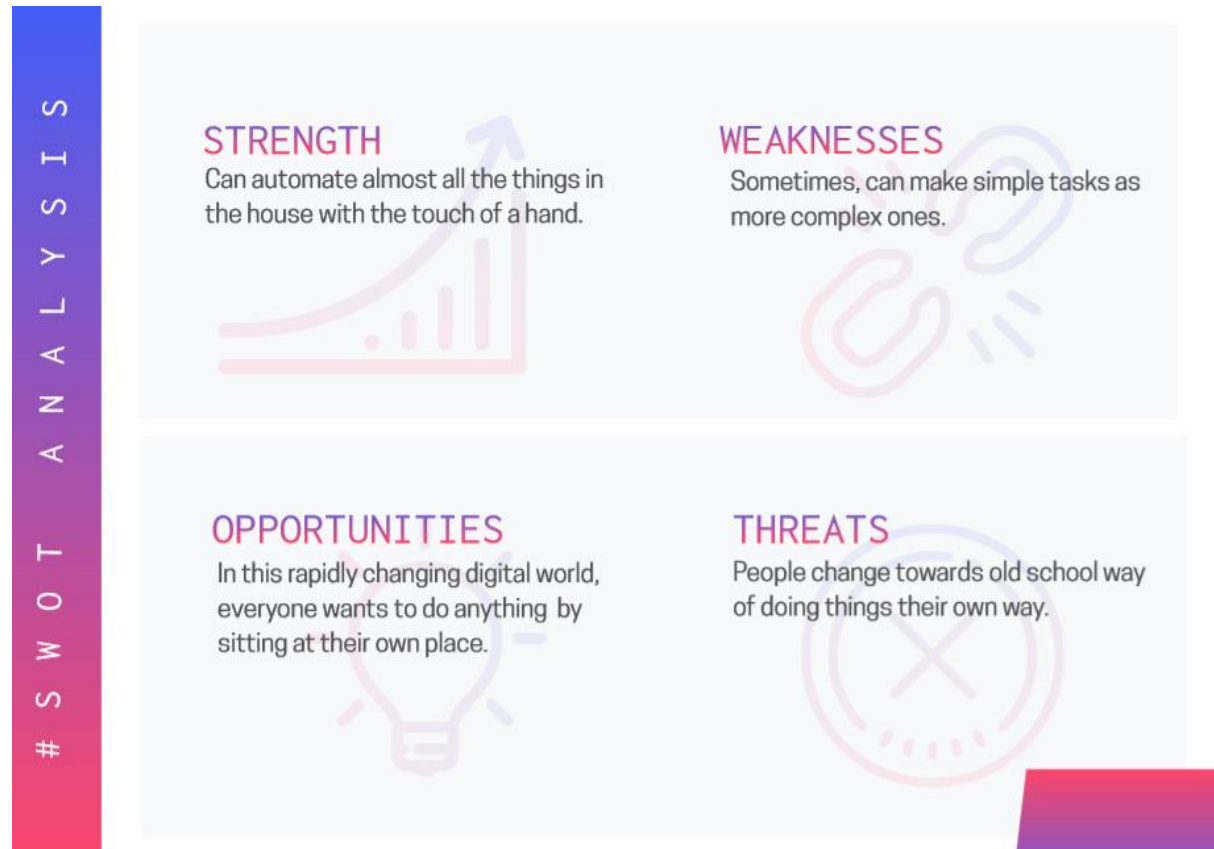
SMART HOME AUTOMATION

INTRODUCTION

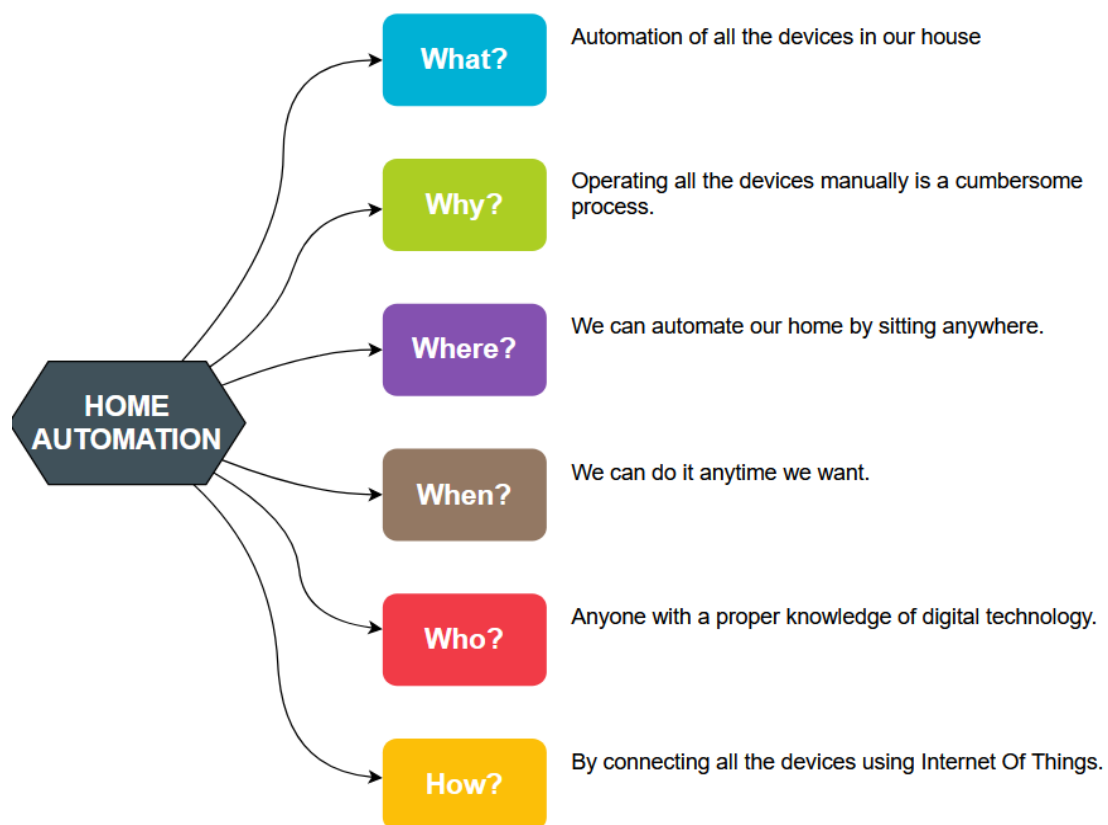
The main objective of this project is to develop a home automation system using an Arduino board with Bluetooth being remotely controlled by any Android OS smart phone. As technology is advancing so houses are also getting smarter. Modern houses are gradually shifting from conventional switches to centralized control system, involving remote controlled switches. Presently, conventional wall switches located in different parts of the house make it difficult for the user to go near them to operate. Even more it becomes more difficult for the elderly or physically handicapped people to so. Remote controlled home automation system provides a most modern solution with smart phones. In order to achieve this, a Bluetooth module is interfaced to the Arduino board at the receiver end while on the transmitted end, A GUI application on the cell phone sends ON/OFF commands to the receiver where loads are connected. By touching the specified location on the GUI, the loads can be turned ON/OFF remotely through this technology.

Nowadays, we have remote controls for our television sets and others electronic Systems, which have made our lives real easy. Have you ever wondered about home automation which Would give the facility of controlling tube lights, fan and other electrical appliances at home using a remote control? Off-course, yes but, are the available options cost-effective? If the answer is no, we have found a solution to it. We have come up with a new system is super-cost effective and can give the user, the ability to control any electronic device without even spending for a remote control. This project helps the user to control all the electronic devices using his/her smartphone

SWOT ANALYSIS



5W1H ANALYSIS



REQUIREMENTS

HIGH LEVEL REQUIREMENTS

ID	DESCRIPTION	STATUS
HR01	ATmega 328	Implemented
HR02	Bluetooth module	Implemented
HR03	Flash memory	Implemented

LOW LEVEL REQUIREMENTS

ID	DESCRIPTION	STATUS
LR01	Digital I/O pins	Implemented
LR02	Analog input pins	Implemented
LR03	SRAM and EEPROM	Implemented

COMPONENTS USED

ARDUINO

The Arduino Uno is a microcontroller board on the ATmega 328p. It has 14 digital input and output pins.

BLUETOOTH MODULE

Serial port Bluetooth module is used.