Here are the functions we will provide in our automation system

Where the automation system can be used:

- Ceiling Fan(with speed control), LED bulbs, Sockets.
- Remote control devices like Air Conditioner, Television etc.
- Gas stoves(by controlling gas flow smartly using the smart gas flow controller made by our company)
- Doors and windows
- Water tap

Functions we will provide:

- 1. Without buying additional device (The master device will do the work but the operators must be bought):
 - Controlling home appliances with smartphone.
 - Enable timer for specific things like heater, geyser, gas stove etc.
 - Controlling home appliances using internet(we will provide secured cloud service for the home automation system).

2. After buying additional device:

- Fire detection sensor: Sensing fire and giving alarm.
- **Microphone (for every room):** Controlling with voice in any language.(Already done with the software section).
- **EEG sensor(separately for every person):** Controlling devices just by thinking(still under research).
- Thermostat(For every room): For controlling the Air conditioner temperature.
- Al camera: If someone wants to spend more money and make their house smarter, they can use the 360 degree Al camera in every room which will keep track of all the activities in the house.
- Other sensors and controlling device: We will also bring some other sensors and controlling devices to make the automation system smarter.

We are planning to use android or make our own operating system for controlling the whole automation system. Whatever OS we use, we will make sure that it will be very easy for people to setup and interface with the whole system.

For prototype, we have used arduino, wifi module and other things as hardware and made an android app with MIT app inventor for controlling the whole system.