**Literature Review:**

Fire hazards can be very dangerous and cause human loss. It is the government rule to install fire alarm in all homes towards alerting home owners of hazards. Such method does not exist in developing countries like Bangladesh.[5] Similarly, nowadays smart devices with microcontroller is preferred in homes. Therefore, our project comes with automated temperature controlled fan speed with a built in fire alarm system. The alarm system is not highly configured with Arduino MEGA with a master-slave architecture along with wiring system and multiple sensors.[3] Rather simple LM35 temperature sensors are used which are much cheaper and can provide satisfactory results. Other researches and projects shows that smoke detector,GSM module,ATmegachip can be used to notify the owner and firestation about fire.[4][12] However,these increases the cost of the system dynamically and makes it much harder to afford. Furthermore,another project showed that a system built on smoke detector,web camp,Arduino and Rashberry Pi is highly efficient as a fire alarms system but it makes it difficult to control the speed of the fan based on temperature.[6] In the present scenario, availability of electricity is found to be in critical stage. One unit saved is one unit generated.[11] There are several ways to operate the fan speed based on temperature.One of them can be closed-looped and adjustable where you can adjust the speed percentage based on the temperature on the LCD screen.[7] Another can be using ARM microcontroller/OS-ll via voltage regulation.[8] Our system takes temperature reading for the LM35 sensor and programmed through Arduino IDE instead of LABVIEW to manipulate the percentage fan speed.[2]. Also the operating voltage is less than 5v, but the fan requires 12v to operate. Fan speed is increased by increasing the voltage or current of mosfet,[1]