**CAR SEAT TEMPERATURE CONTROL SYSTEM**

# Introduction: -

Car seat temperature control system is one the feature that we can see in most of the cars now a days, It used to control the temperature of the car seat. When a person gets into the car and seated, the button sensor will be activated. Then, the user gets the access to turn ON the heater. We can adjust the temperature that we want. The temperature sensor keeps monitoring the temperature and sends the analog value to the microcontroller. The microcontroller processes the analog input of the temperature sensor and outputs temperature value through serial communication. All the activities of the control system are done on a Atmega328 microcontroller along with temperature sensor, Heat generator, and LCD display, etc.

# Features: -

* System will sense whether driver or passenger seated or not.
* We can modify the temperature in the vehicle.
* Displays the temperature on LCD display.
* Low cost and robust system.

# Requirements: -

## High-Level Requirements

| **ID** | **Description** |
| --- | --- |
| HLR\_01 | Microcontroller |
| HLR\_02 | Heater |
| HLR\_03 | Temperature Sensor |
| HLR\_04 | Display |
| HLR\_05 | Software Used |

## Low-Level Requirements

| **ID** | **Description** |
| --- | --- |
| LLR\_01 | ATMega328 |
| LLR\_02 | Switches |
| LLR\_03 | LCD |
| LLR\_04 | Avr GCC compiler |

**SWOT:-**

**4W’s and 1H: -**

What: Car seat temperature system.

Where: Cars (Automotive).

When: Cold temperature areas.

Why: To avoid coolness and feel warm.

How: By setting the temperature.