

# Soldier Health Parameter Monitoring and Location Tracking System using NodeMCU

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***Abstract:** At In today's world enemy warfare is an important factor in any nation's security. The national security mainly depends on the army (ground), navy (sea), air-force (air). The important and vital role is played by army soldiers. There are many concerns regarding the safety of these soldiers. As soon as any soldier enters the enemy lines it is very vital for the army base station to know the location as well as the health status of all soldiers. In our project, we have come up with an idea of tracking the soldier as well as to give the health status of the soldier during the war, which enables the army personnel to plan the war strategies. By using the location sent by the GPS modem, the base station can understand the position of the soldier. As the climatic conditions are changing rapidly, the winters are getting much colder, especially in northern region and the western region of India. Since we developed a smart army jacket using control media devices such as GSM, GPS, and sensors in the jacket. The smart army jacket aims for providing reliable health monitoring as well as position tracking of soldier. Some of climatically conditions are led to Unfortunate deaths of soldiers. This jacket can automatically sense the temperature inside, outside using temperature sensors. We are using coils for heating purpose and the temperature of the coil will depends on the outer temperature. GPS, GSM are the models used for communication purpose. Hence for monitoring the health and the heart rate of the soldier health monitoring equipment sensors are been establish in the jacket as well.*

**Keywords:** Soldier Health, Location Tracking, GSM modem, Embedded System, Sensors.

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