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Abstract:

This paper discusses an IoT -based smart wheelchair through which the elderly and those who are physically challenged i.e., those who cannot do the basic movement without the help of others, will be able to do their basic movement. This wheelchair will also allow COVID-19 patients to move from one place to another in a relatively contactless condition at the hospital or airport. This wheelchair comes with a smart band through which the basic physical condition of the body, such as body temperature, pulse rate, blood oxygen, etc. parameters can be known. If the level of any of these parameters is abnormal, the system will immediately send a notification to the user's family member or access person. Additionally, the system has location tracking through which family members can track the user's location whenever they want. NodeMCU, temperature sensors, pulse sensors, etc., have been used as hardware to build the system and a mobile application designed for remote monitoring.