

Design and Fabrication of Smart Electric Wheel Chair

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Synopsis :

The IoT-based wheelchair is a revolutionary assistive device designed to enhance mobility and accessibility for individuals with physical disabilities. This cutting-edge wheelchair integrates Internet of Things (IoT) technology, enabling seamless connectivity and real-time monitoring of various aspects of the user's mobility.

The main objective of our project is to design and development of smart electric wheelchair to use it for disabled person. Our aim is to reduce the man power and attain the maximum efficiency. Using Internet of Things, it is the each and every field of common man's life by making everything bright and intelligent. Internet of things refers to a network of things which make a self-configuring network. Smart Wheel Chair is mechanically controlled devices designed to have self-mobility with the help of the user command. This reduces the user's human effort and force to drive the wheels for wheelchair. These types of wheelchairs are gradually replacing the traditional wheelchairs; however, their expensive costs are preventing a large size of disabled people from having one. According to the organization of World Health (WHO), only 5 to 15% out of 70 million disabled people have access to wheelchairs. Therefore, we need to offer a cost-effective Smart that not only minimized the cost but also provides plenty of features that use the latest components and technologies.

In summary, the IoT-based wheelchair represents a significant advancement in assistive technology, empowering individuals with physical disabilities to enjoy greater mobility, independence, and accessibility. By leveraging IoT connectivity and smart features, this wheelchair enhances safety, comfort, and convenience, while enabling real-time monitoring and control.