

The aim of the project is to design a 'Wheelchair Tilt Communicator' system that can operate the wheelchair of a differently abled person, with the tilting movements of his/her head. This system can be of great use to physically challenged people who cannot move their hands or legs, but who can make head and eye motions. This wheelchair can be operated in any direction, using head tilting movements.

The Design and Development of this head motion-controlled wheelchair has been achieved using tilt sensors and wireless modules. The head motion-controlled wheelchair designed using tilt communicator system will turn out to be of great use for quadriplegic patients and people having more than 45% or more disability, as this can be operated easily through head gestures. The wheel chair can be produced in a cost-effective way. It is intended to be used as a human-friendly interface for the elderly and physically challenged, to operate the wheelchair using their head motions, rather than their hands.

Features:

- Wheelchair control using head motion
- Easy interface with the help of tilt sensors
- The wheelchair is designed at a low price and a high degree of functionality



# 10 PROJECT

## DESIGN AND DEVELOPMENT OF HEAD MOTION CONTROLLED WHEELCHAIR

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