Chair of Hope

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Palestine is considered one of the states which has high proportion of disabled people relative to its population. This project is based on a concept of which these people can control their house devices and gadgets by buttons placed on a remote control which works wirelessly. It was found out that these devices/instruments can be controlled using a mobile-phone, but this idea was not considered because there are large numbers of the disabled don’t know how to use a mobile-phone. But most importantly, normal or electric. A prototype was invented that conveyed this initial idea which relies on using a remote control that is controlled by the less abled person who is in the wheelchair who lack movement from the waist down. For example the use of the stairs using a silicone belt on the wheels of the chair. The belt itself has treads which create a grip on the ground 80% of the time. If the chair tilts, there is a sensor that is able to recognize this and rebalance the chair automatically for the less abled person. The less abled person can adjust the height of the chair and this is implemented using a control panel that is connected wirelessly to the chair. A magnetic signal can be sent from the sending circuit to the receiving circuit wirelessly and the other electrical appliances can be opened using the chair. In the prototype, two appliances were used, a fan and a light. The frequency of these two appliances differs, one is 49 and one is 27 megahertz for each circuit. A signal was implemented to be sent to a person to assist them if this should occur. This signal will be sent by a double action button to alert them. The telephone is linked to the button that can send a double action to alerts a family member immediately.

Awards Won:
Fourth Award of $500