



اَبُو سَيِّدِي تَيْكُو لُو كِي مَارَا
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**FACULTY OF MECHANICAL ENGINEERING
UTM CAWANGAN JOHOR**

MEC332

MECHANICAL ENGINEERING DESIGN

PROJECT:

HANDICART

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1.0 OVERVIEW OF THE PROJECT

Shopping cart is usually used at the supermarket to put the groceries items. The shopping cart is designed with suitable height for average people but the height of shopping cart is not suitable to disabled people who use a wheelchair to move around. HandiCart is the name of the project and the name is combination of handicap and cart. HandiCart is a mechanical shopping cart that can used specifically for disabled people who rely on wheelchair and the focused for this project is to design a convenient shopping cart for disabilities people who used a wheelchair. The design of this HandiCart is different from normal shopping cart where the HandiCart have a convenient size of shopping cart in terms of height, and width. Other than that, there is an additional component at HandiCart which called as a connector. The function of this connector is to attach and detach the shopping cart with the wheelchair of users. The main objective for overall project is to create a better and safer shopping cart for disabled people by innovating the already existing shopping cart in the market.

For this project, a survey is made to collect the detail information about the facilities specifically for disabled people who use a wheelchair. most of the respondent responded that it is better if have a shopping cart that specific for disabled people and at the same time can help them to buy items such as a groceries items with easier. Prototyping for this project is designed by using a software which is SolidWorks CAD and the product testing also made in this software.