

ABSTRACT

In the feat of changing the wheel of a light motor vehicle, lifting the vehicle is an unavoidable and a complicated practice. Manual lifting using jack systems requires more human effort and comparatively time consuming also. The proposed model is an alternative solution which reduces both the human effort and vehicle lifting time. To lift the vehicle, the user need to just exert a gentle tap on a button which is present on their mobile phone, that actuates the desired hydraulic jack to the preferred height, whereas in other jacks which is present in the market will be either costlier or requires a lot of human effort in order to get the work done. In various proposals carried earlier regarding lifting the vehicle more number of jack systems, various power source terminals and requires an additional actuating means, which is redesigned with optimized conditions. The proposed system increases the comfort of the light motor vehicle users which brings them more closer to the technological up gradation. The proposed project is also mainly concentrated towards the ease of differently abled and aged persons. the power for the actuation is obtained from sequential work flow which involves several sensors, hardware, software, clouding and coding and the foremost thing is IoT which is called as internet of things. The direct and self operation of the hydraulic actuator time and human effort in doing that particular job reduces drastically, which significantly grades the reduction of weight and the cost. This enhances the affordability of the system.

Key Words: Hydraulic Jack, IoT, HTML5 Web Page, Arduino IDE.