Hydraulic jack is a device used for lifting heavy loads by the application of smaller force. It is based on Pascal's Law which states that the intensity of pressure is transmitted equally in all directions through a mass of fluid. Lifting the car to replace a wheel or fix a flat tyre is not easy. For these types of operations, we need heavy force. Traditional ways to lift a car are difficult for the physically challenged or the aged. In this situation, an automatic app controlled hydraulic jack is more useful.

## **Features**

- The entire assembly is controlled by the app
- The brain of this project is the control unit Arduino Uno which controls all the motors by receiving signals from the app with the help of a Bluetooth module (HC-05)
- The contraption is passcode protected, making the system encrypted and secure
- Helps overcome drudgery, musculoskeletal disorders, reduces the time consuming to operate



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42 PROJECT

AN APP
CONTROLLED
HYDRAULIC
JACK TO FIX
FLAT TYRES