INTRODUCTION

Cleaning the environment around us is one of the important duties of each and every individual. Bigger the area to be cleaned, greater number of people will be needed. Some places will be so dirty that cleaning such areas causes huge impact on health. Due to dust present in the surroundings, people are prone to allergies, watery eyes, cold, cough, rashes etc . Vacuum cleaner can be used for domestic purposes such as to clean the floor, car, carpets etc. It can be used efficiently in colleges as the space is also large . In the current COVID situation since social distancing has to be maintained, a greater number of people cannot clean together. In this era where digital technology is rising rapidly, mankind is becoming more and more dependent on the same . Since majority belong to the working population, there is always a shortage of time . Since, the Arduino can be coded to cover specific areas, moving the vacuum cleaner in the desired direction and the time taken for the same can be saved as it is possible through the car carrying it. Swachh Bharat Mission is an initiative taken by Government of India in the year 2014 to keep the surroundings clean. The main aim of this mission was to make every individual prioritize cleaning as it has huge impact on every living organism's health. This has been implemented in both rural and urban areas. At present, hand held vacuum cleaners are available in the market. Automation is still budding and smart vacuum cleaners will be a huge break-through in the industry. In this project, an automated vacuum cleaner is designed. It consists of a RC car to which a vacuum cleaner is attached. Ultrasonic sensor is attached to the front of the car which is used to measure the distance if any obstacle is detected. If suppose there is an obstacle, the car changes its course as per the code. Vacuum cleaner consists of CPU Fan which runs by a battery. At the front of cleaner, a pipe is attached to suck the dust from the floor. The cleaner has space to collect the dust. Once it gets filled, it should be removed and cleaned manually. Vacuum cleaner will be carried on the RC car and the direction of the wheels depend on the code uploaded to the Arduino