

Group 29

# MAINTENANCE MANAGEMENT SYSTEM

## 1. Motivation

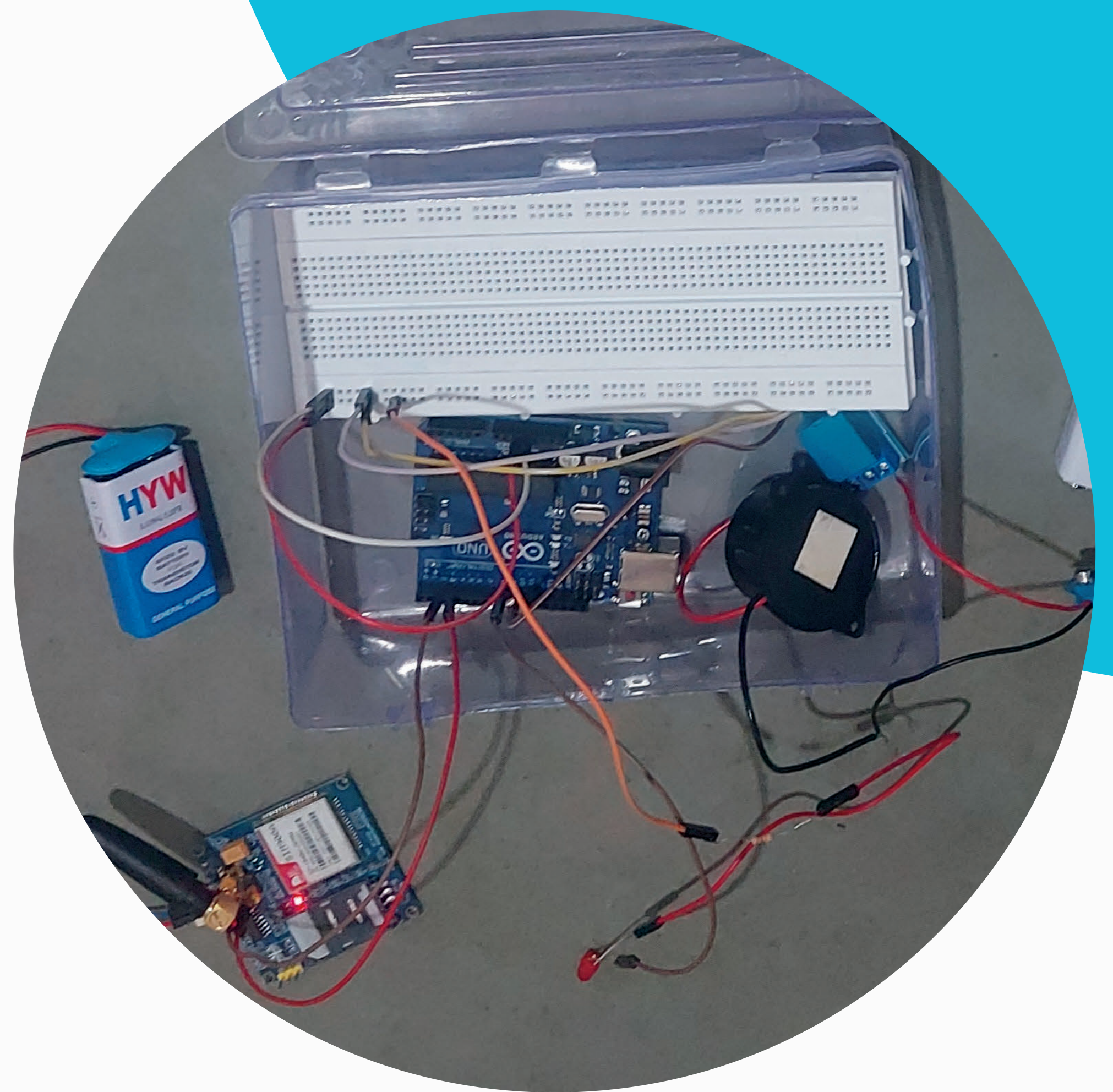
We see that in apartments, there is a system of collecting electric bills, especially maintenance on a monthly or quarterly or yearly basis. The residents keep postponing the deadlines of paying maintenance and when asked by the secretary, they have a thousand excuses for the same.

## 2. Problem Statement

The residents won't take the matter seriously until there is a personal loss associated with the same because until now there is no difference between the facilities accessed by the ones who pay maintenance and the ones who don't. So, a proper solution needs to be discovered to make this difference visible and more effective.

## 3. Design/Implementation

The design implemented by us uses the Arduino Uno (R3 ATmega328P) along with the GSM module, a relay, and a buzzer. The Arduino detects the amount received from the resident from the SMS it receives via the GSM module, updates the number of days remaining in the code, and instructs the relay to act accordingly.



Exploration Project

We tested our initial version with a buzzer and LED indicator to signal when maintenance is due and electricity is cut afterwards.

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