Filling a cistern

TOLEDO-GARCÍA, Daniel, MANZANARES-LÓPEZ, Luis Jesús, CENTENO-CANO, Manuel Guadalupe and PÉREZ-CALDERÓN, Benito

Motivation

Figure 1

General objectives

Previously the filling system of the water tank in households or establishments is done through a single motor, and sometimes the filling speed is not fast enough and we do not know the current level of the tank, that is why we plan to implement a system in which we can monitor it and know more aspects of it in real time, such as pH and water quality to mention a few.

Theoretical framework

One problem with filling is that common control devices often fail due to poor monitoring of filling, thus leading to loss of contents.
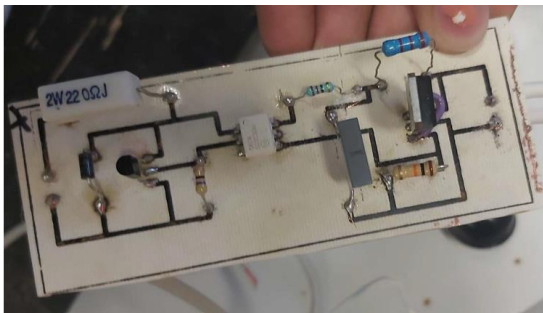
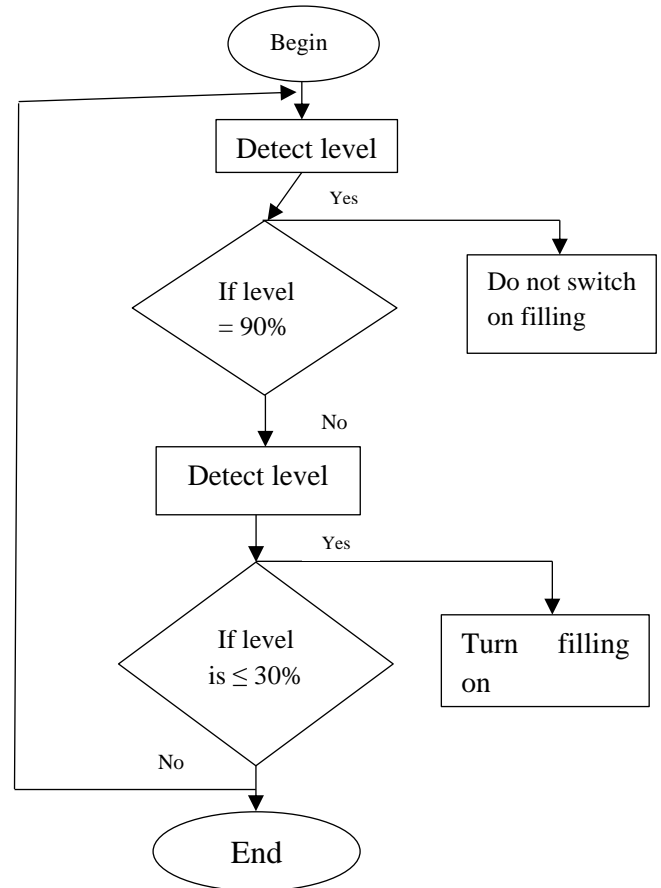**Figure 2**

Results

Figure 3

Development

Figure 4

Future of research

One of the main things we will be working on will be to develop an application in which you can keep a record of water consumption that has been in the home over the days, and thus raise awareness in people so that they do not misuse it because, as we have seen as time goes by, people are suffering more and more from water shortages in some parts of the country. In addition, we will improve our system by installing sensors to monitor the water level, as well as to measure other parameters such as pH, water quality or liquids, among others.

Conclusions

This project can be expanded according to the needs of each of our users, so we can use it to send sensor data to the internet, activate a pump or mechanism or even sound an alarm. or even sound an alarm.

References

https://hetpro-store.com/TUTORIALES/sensor-hc-sr04/

https://www.gob.mx/conanp/articulos/sabes-cuanta-aguaconsumes#:~:text=De%20acuerdo%20a%20la%20Organizaci%C3%B3n,de%20consumo%20como%20de%20higiene.

https://www.fundacionaquae.org/sabes-cuanta-agua-consumes-a-diario/

Project website: https://www.ecorfan.org