**Candidato:** Gioele Cavallo

**Azienda:** CPTTrevano

**Periodo:** 2023-02-05 - 2023-05-26

**Presentazione:** 02.06.2023 – 10:15

**Initial situation**

*In the reality of the Trevano CPT, managing the windows is complicated. It is necessary to remember at the end of class to close the windows, and this task is the responsibility of janitors and cleaning operators as well.*

*In addition, in case of bad weather, it is necessary to be sure that all windows are closed to prevent water from ruining the classrooms.*

**Implementation**

*For this project, it was required to create a local website to display the open and closed windows of the building. In addition, classrooms with open windows and statistics on the opening and closing of individual windows and status history are also to be displayed.*

*Since the website is to be used by janitors to close open windows, it needs to be responsive so that it can be used from both mobile devices and computers.*

*Also wanted is separate users between admin and standard users who will be able to perform different operations.*

*The database will be hosted on a raspberry, as the website, and will be populated with minimal information such as: transaction number, time change status, information about the ESP32 device that collected the information, name and window/classroom number, the status of the window.*

**Results**

*All requirements were successfully implemented by creating the website and hosting it on the raspberry in the internal network.*

*The utilities were implemented but do not perform anything different from each other, this is because in discussion it was noted that it was not sure what to make the different users do, so it will be part of future development.*