FitSense: Smart Gym Management System

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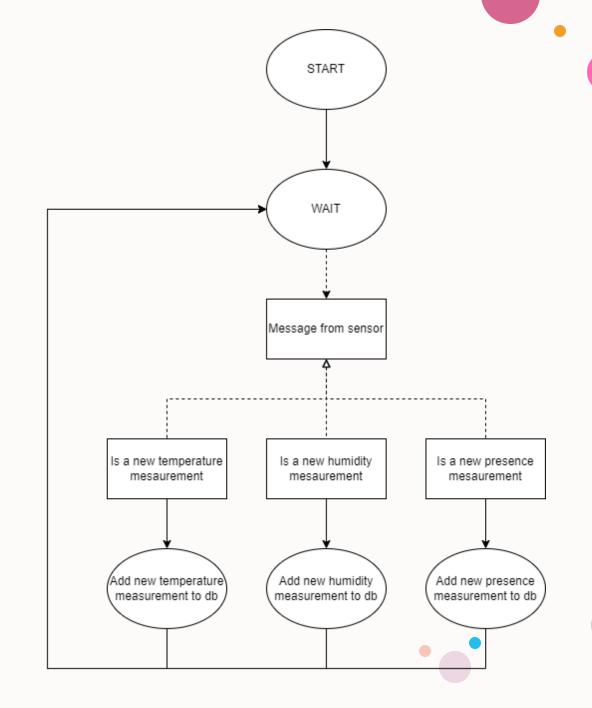
The project is about smart gym and is a system that allows people to monitor the status of gym rooms by automatically managing air conditioner system, dehumidifier system and presence detection system.

Use case:

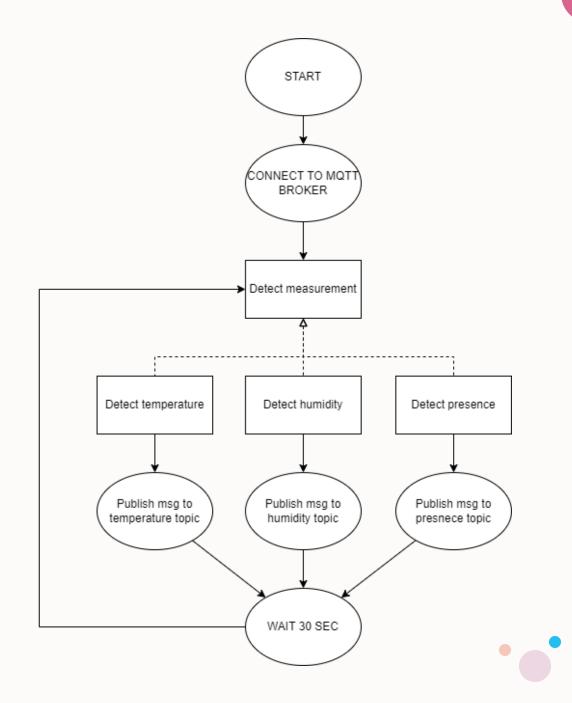


The network consists of a **border router**, an undefined number of scattered **nodes** throughout the gym areas and two applications which manage all nodes (**Cloud application** and **Remote control application**).

. Cloud application



. Sensors



Remote control Send msg to Read last measurements Is a violation START actuators application false WAIT 10 MIN WAIT Command by the Registration request Receive notification from an actuator from actuator user Is about db Is about actuators Is a violation Update db with new nodes'configuration false Send observation View/Update data in Send msg to Send msg to request to new actuators actuators actuator

. Actuators

- Res_configuration
- Res_temperature
- Res_humidity
- Res_presence
- Res_air_conditioner
- Res_dehumidifier
- Res_semaphore

