


Credit 3

The home automation can be defined as one that ermite a higher quality of life through technology. Home automation applied to the tertiary sector buildings is called **building automation**. Home automation seek to improve the quality of life for its users and optimize energy resources in the building. Domotics Benefits: energy savings, the comfort Delos users, reducing the suit home and increasing their quality of life and personal Lasegurudad assets, the optimization of the communication network, remotely managing the facilities and home computers. **The most requested features are**: Fecilidad of use (user friendly), flexibility (easily expanded Interconoctividad (single system or they are all interconnected i conpatibilidad having tel.Internet etc with other components. realitsen Per les funcions that is divideixen amb 4 areas. **Area Security Management**: Intrusion Control, Simulation of presence, access control (video intercom), technical alarm Getion (fires, gas, water), medical alarms **Management Area** better quality of life **comfort** and comfort: blinds and awnings, automation, control and lighting control, control and regulation of air conditioning, automatic watering Control **Management Area** Planning and zoning **power** air conditioning, Rationalization of electric charges, management fees, lighting control **management Area** Remote telephone **communications** equipment installed in the housing, Remote Internet, transmission of alarms. **The digital home** as one that provides: transport connections to broadband network, DSL, Data network, multimedia network, aviat podrem fer from home com les coses per fer exemple des home school. The home dg allow users to have in their domestic environment for all technological means of information.

Classification of sensors: **discrete sensors** are those that entegan a signal that can present a number of specific values depending on the scale read (switch): Magnetic sensor, smoke sensor, water sensor, gas sensor, thermal conductivity : its funcionamieto relies on the phenomenon that when a constant electric current flowing through a wire surrounded by a gas inside a chamber temperature of the wire will depend on the thermal conductivity outside gas.-infrerros By absorbing the light-solid state. glass break sensor infrared sensor **continuous sensors** are those that generate a signal of type contunuo. Sensor Lighting: Lamps (LDR + R-Luz) Photovoltaic cells (consisting of generating an electric current when light shines on them. Temperature Sensor: thermocouples (differential) resistance thermometer ( Termistors (semiconductor material according to the temperature resistance. **Humidity sensor** by varying dimensional, claruro battery (gracias a body, components i podem have continuity if more leads umeda ai) Effect Capacitive **Conditioners for resistive sensors, passive attenuators for continuous signals, signal continuous passive attenuators, resistive attenuators, amplifiers for continuous and discrete signals. A filter** is an operator whose mission is to nullify certain signals with a frequency that has specific values. Low Pass: the pass band extends from zero frequency to the cutoff frequency High Pass: the pass band extends from its cutoff frequency to infinite frequency