
SMART SHOP PROJECT

Aim

This software creates dynamic environment conditions to fit people moods in order to generate a more suitable place for purpose of the area.

It can be used to make a shop more endearing, to encourage the customers to buy our products, or it can be used in a garden to let the area more relaxing for visitors, or it can be used in a cinema to get more addictive the projections.

How it works

It works on sensorial environment conditions like lights, temperature, color and music to generate a more suitable place for the people inside. Linking this software with sensors and actuators let the system to control all these variables and modify them with a custom logic implemented in a decision service.

Structure

*This prototype software deploys some sample **RESTful microservices that communicate between HTTP protocol**. The microservices' net is used to collect all the data from sensors microservices, to process them in a decision service and to communicate to actuator microservices the action needed.*

What's a RESTful microservice?

A RESTful web microservice implements REST architecture.

REST means "Representational State Transfer" and it is an "architectural style". A REST architecture has a **complete independent logic for server and client** and the communication between client and server is **stateless**: every message sent by a client to the server must be like it is his first message, not related to previous communication.

Why choose REST architecture?

The most important advantages of REST are **reliability and scalability** due to the clear separation between client and server and their complete independent deployment. This let also to use **different code languages and specific technologies for each service**.