

Ontología

María Victoria Santiago Alcalá

76656695H

Ejercicio: Develop an ontological diagram

The diagram will describe the semantic information of the context of a user of a ubiquitous system, needed to carry out the correct composition of services offered in the following case of reference:

“The user of the mentioned ubiquitous services arrives in the outskirts of a city since he wants to pick someone up at the airport. He drives a car that provides a “Navigation Service” (NS) preconfigured with the data received from the “CalendarService” (CS) in the smartphone of the user which contains an input with arrival data of the traveler. As the ubiquitous services user drives towards the airport, he prefers offered directions to get to the airport on the “vehicle information system” (VIS), in such way that he can use the mentioned NS, which interacts with the “traffic information service” (TIS), to be able to calculate the shorter distance to the airport.

When approaching to the airport area, the VIS system of the car discovers a new service, called the “airport information service” (AIS), that informs the gate number and arrival time of the flight. The NS of the user car automatically uses the new AIS service that just discovered and calculates a new route to the landing gate while the TIS provides the user with information about the available parking spaces near the gate of the flight. The user parks his car and arrives at the gate just in time to pick up the traveler.

Meanwhile, when the user wants to check his email, he discovers that has got only the messages’ header and a symbol pointing out that the process of receiving the email is not ended and will continue later when a greater bandwidth on the network was available.

We must do this exercise assuming that we do not know the service types that may be available at any time, since Web services providers act recommending a particular service depending on the current context of the user.

Hay que realizar el diagrama suponiendo que no se conocen los tipos de servicios que pueden estar disponibles en cada momento, ya que los proveedores de servicios Web actúan recomendando un determinado servicio dependiendo del contexto actual del usuario. Therefore, when the user is approaching the area of the airport, the current composition of services used in his Smartphone is modified with the availability of another service: the AIS.

Finally, the email service offers the user the possibility to choose among 5 options for accessing his emails: “head-email”, “full-email”, “encrypted-mail”, “big-mail” and “big-encrypted-email”, depending on the assessment of the context situation of the user at any moment.

El diagrama resultante ha quedado como muestra la siguiente imagen:

