

Emergency Management Using

SHERLOCK





Roberto Yus ryus@unizar.es

University of Zaragoza (Spain)

Eduardo Mena emena@unizar.es

Manage emergency

teams



Motivation

Emergency management



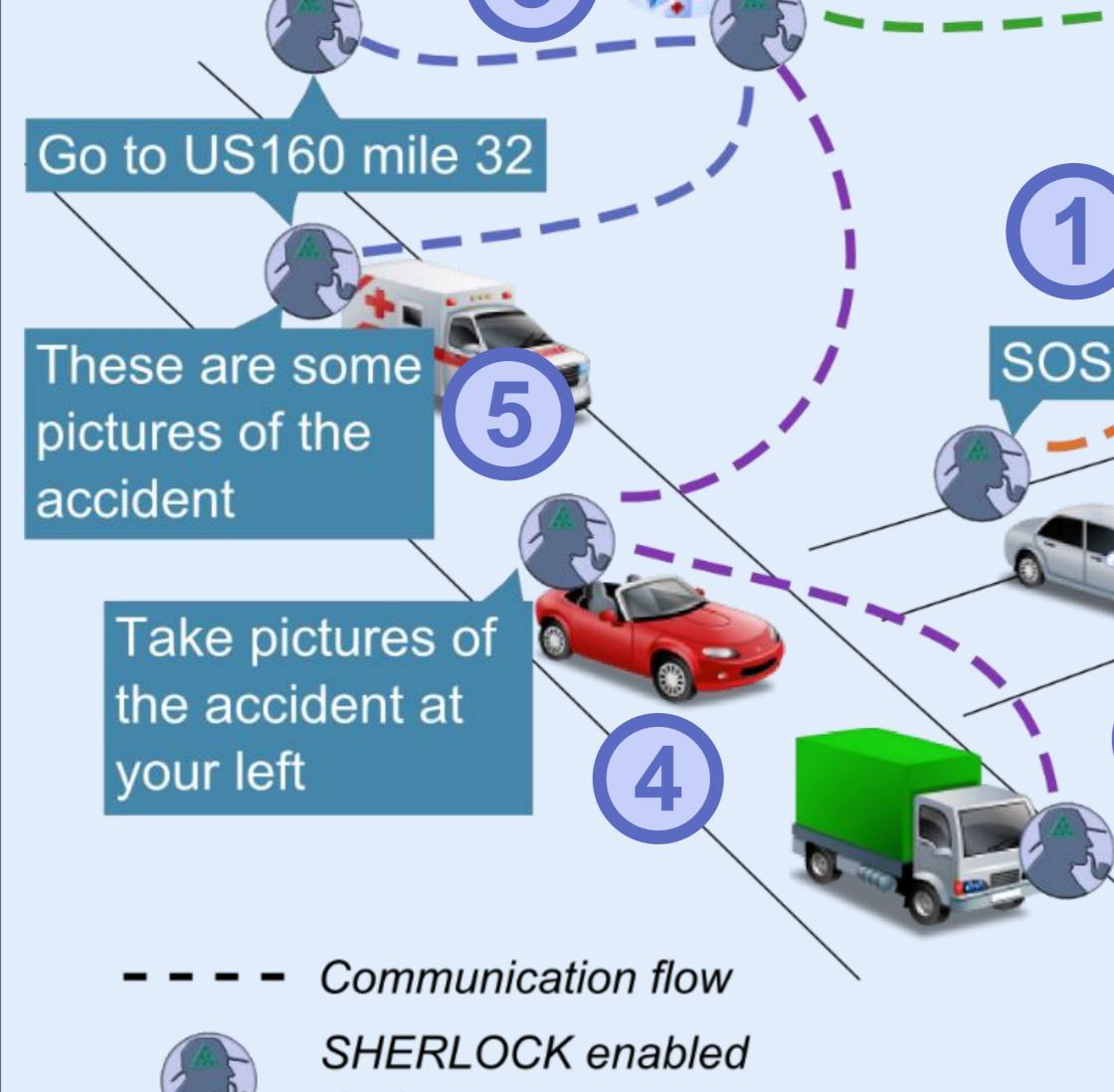


- Lack of pre-existing infrastructure or even communication break-downs. - Heterogeneous information and devices and diverse scenarios



SHERLOCK

System for Heterogeneous mobilE Requests Leveraging Ontological and Contextual Knowledge



Take pictures of the accident

Mobile computing + Semantic Web P2P ad hoc communications Knowledge representation and reasoning

device

Go to US160 mile 32

How it works

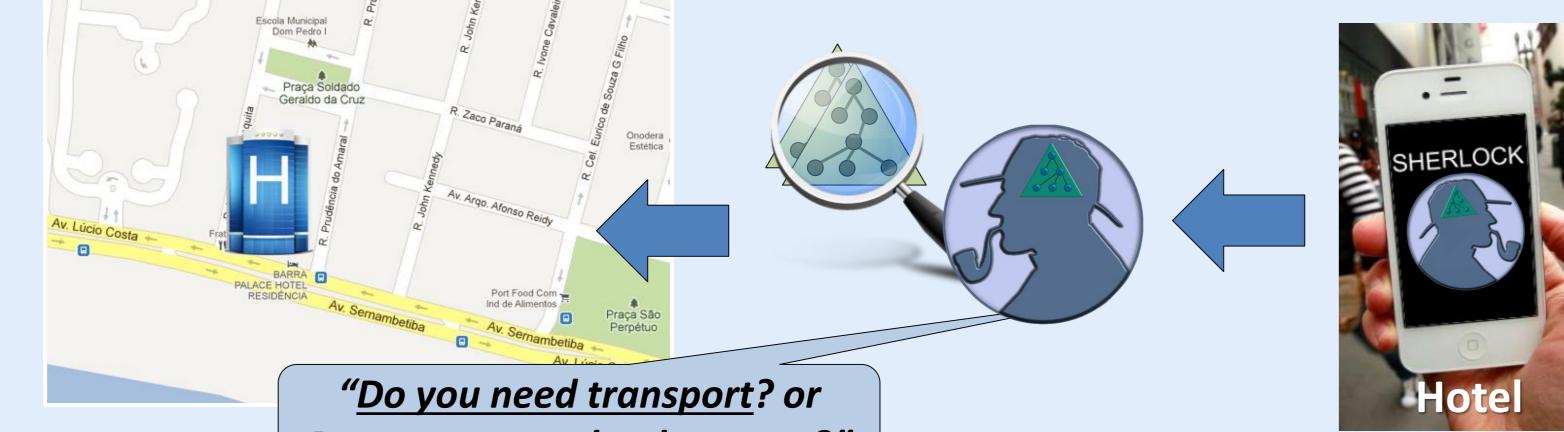
1) Share knowledge

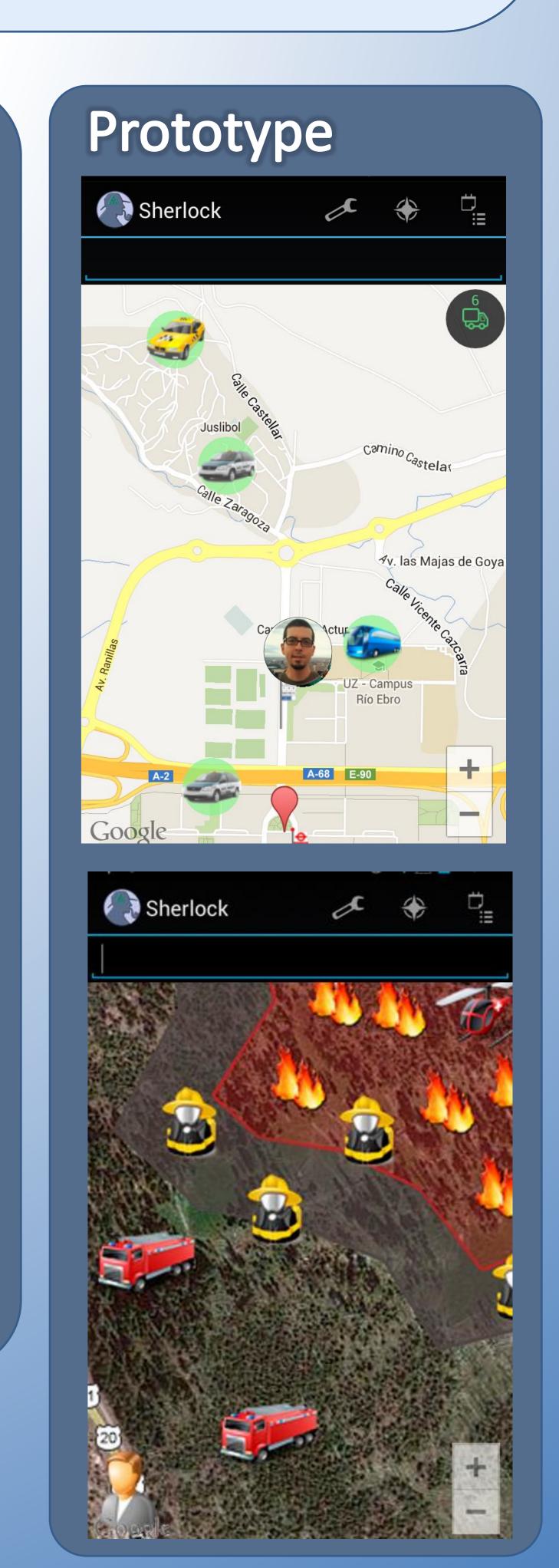
- You meet people
- SHERLOCK
 - communicates with their devices
 - exchanges ontologies
 - increases its knowledge



2) Ask SHERLOCK

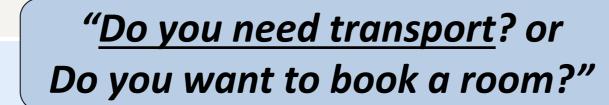
- You need information
- SHERLOCK
 - reasons what could interest you using ontologies and contextual







shows the most appropriate services





- You select a service Ο
- SHERLOCK Ο
 - deduces the adequate service providers
 - communicates with other devices to locate them on a map
 - keeps this information updated in real-time



