**ABSTRACT**

This work presents the first steps toward developing specific technology for voice user interfaces for geographic information systems. Despite having many general elements, such as voice recognition libraries, the current technology still lacks the ability to fully understand and process the semantics that real users apply to command geographic information systems. This paper presents the results of three connected experiments, following a mixed-methods approach. The first experiment focused on identifying the most common words used when working with maps in a web browser.

The second experiment developed an understanding of the chain of commands used for map management for a specific objective. Finally, the third experiment involved the development of a prototype to validate this understanding. Using data and fieldwork, we created a minimum corpus of terms in Spanish. In addition, we identified the particularities of use and user profiles to consider in a voice user interface for geographic information systems, involving the user’s proprioception concerning the world and technology.

These user profiles can be considered in future designs of human–technology interaction products. All the data collected and the source code of the prototype are provided as additional material, free to use and modify.

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