S.Burigat, L. Chittaro, "Visualizing the Results of interactive Queries for Geographic Data on Mobile Devices", GIS'05, Bremen, Germany.

In this paper, the author proposed new mobile geographical applications that combine visualization and interaction techniques. Based on the analysis of users' requirement, the author provided some innovative designs to improve the interface.

(1) The new system provides not only the image information, but also supply related search result to inform user that to what extend those results matched with query. Users can acquire the visualized spatial and corresponding non-spatial information at the same time, which enhances users' satisfactory.

(2) Instead of only search for 100 percent match information, the new system provided some partially matched results which provide alternatives for user. This design provides an easier way to trace back to the search result in the previous step.

(3) The system supports several databases simultaneously, which enable user to compare and select the best search result among them.

(4) The system is very flexible and proved to be able to apply into various fields.

Technique difficulty:

(1) The resolution and screen of mobile device limit the performance and hinder the user to communicate with computer effectively.

(2) The hardware has limit memory and compute capacity which influence the processing speed.

The article is focused on user's experience. Therefore, all the application design is proposed in the user's point of view. The technique implementation details were not mentioned in this paper, but can be reached in the reference materials.