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GeoguideRome, urban geotourism offer powered by mobile application technology

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Geoheritage studies have been highly intensified and diversified in recent years. This field of research has a strong applicability, especially in interdisciplinary and sustainable forms of tourism. For this purpose the most modern technologies are used for supporting the dissemination of research results, in particular for educational purposes (Kenteris et al., 2011 and references therein). This is the case of smartphone and tablet applications developed by the Institute of Geography and Sustainability of Lausanne University (IGD), devoted to geotourist itineraries.
This work presents the application developed for the city of Rome, based on the itinerary proposed by the Earth Sciences Department of the Sapienza University (Del Monte et al., 2013; Pica et al., 2015). The Aeterna Urbs, with more than 3000 years of historical development, is a very good place to develop urban geotourism, especially because most of the cultural places are related to morphological features (Pica et al., 2015). As shown by the Geoguide Lausanne (Reynard et al., 2015) – a virtual itinerary showing the relationships between geology/geomorphology, climate/hydrology, and urban development in Lausanne (Switzerland) – and TOURin-STONES – a virtual guide on the rocks used for the construction of urban monuments and infrastructures in the city of Turin (Italy) – the urban context has the advantage of easily showing the links between natural features and human activities.
From a technical point of view the application is an updated version of Geoguide Lausanne using jQuery Mobile as development framework, which allowed for increasing the usability and solved some gaps of the previous versions. The contents are organized the same way as for the Geoguide Lausanne, proposing three educational themes, an itinerary arranged in georeferenced stops shown by images and described in their characterizing aspects. The themes are Geology, History and Legends. By means of the relationships between them they educate the users to the links existing between geology/geomorphology and Man (History and Legends). The itinerary develops in 9 stops, represented on the city map and geolocalized; a list of the stops allows the access to the contents and the illustrations. Each stop illustrates its related themes through a set of corresponding icons.
The mobile applications Geoguide (igd.unil.ch/geoguide/) have several strenghts :
• Accessible online, as a website, they allow the users to add advanced contents and to organize the city visit at home or to re-experience it after the trip;
•They are usable on any kind of device (smartphones, tablets, computers) and in its stand-alone mobile app version do not require any Internet connection, making them easily accessible to anyone;
•They do not have any impact on the field, such as panels or signs on the sites for which autorizations can be difficult to obtain in urban environments;
•They allow the tourism sector to increase the tourist offer of a city with naturalistic contents, often neglected in the context of cultural tourism.

References

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