

TravelSampo System for Creating Mobile Audio Guide Tours Enriched with Linked Data

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TravelSampo [1] is a prototype system, by which museums are able to create interactively audio guide tours inside museums and outside in the open air. The system includes a web-based editor by which a curator can describe objects in an exhibition, or in the open air, using a set of shared ontologies published in the National Ontology Service ONKI (<http://onki.fi/>), and upload related audio descriptions, text, and images. Each exhibit object is given an identifier and a geo-location. When the end-user is near the object, either in a museum or in the open air, information related to the object can be given to her based on the object's identifier or the mobile phone's GPS location. A major novelty of TravelSampo lies in its ability to associate the object metadata automatically with millions of semantically related pieces of information available through the Linked Data cloud (<http://linkeddata.org/>) and the CultureSampo system (<http://www.kulttuurisampo.fi/>). For example, a painting can be linked, based on the underlying ontologies and metadata, with the biography of the painter in Wikipedia or in the National Biography, with other paintings of the artist in the collections of other museums, with photos and books about the artist, and so on. This gives the end-user a richer experience than is possible with traditional audio guide systems. For the museums, TravelSampo offers a cost-efficient and dynamic way of creating information rich audio guide programs, and re-using and linking each others collections through linked data, leading to a win-win situation in collaborative content creation. The paper presents and discusses the underlying ideas of TravelSampo and our experiences in developing the systems especially from the content publishers', i.e. the museums' viewpoint.

[1] E. Mäkelä, J. Väättäinen, R. Alitalo, O. Suominen, E. Hyvönen: Discovering Places of Interest through Direct and Indirect Associations in Heterogeneous Sources - The TravelSampo System. Terra Cognita 2011: Foundations, Technologies and Applications of the Geospatial Web, CEUR Workshop Proceedings, Vol-798, 2011. <http://ceur-ws.org/Vol-798/proceedings.pdf>