Ontology Requirements Specification Document

1 Purpose

The purpose of this ontology is to model the provenance generated by users and contents in the context of "El Viajero" platform and to use OPM as reference provenance ontology.

2 Objectives

The objectives of this ontology are both to keep track the actions of the users in the platform (so other users can stay tuned to them), and to trace the contents produced by them.

3 Language

The ontology must be implemented in OWL or RDF(S) languages.

4 End users

User 1. A user from the platform that needs to query the metadata associated to a resource (e.g. guide, photo, post, etc) in order to check where it comes from (sources, authenticity, etc).

User 2. An automatic system that needs to query the metadata associated to a resource (e.g. guide, photo, post, etc) in order to check where does it come from (sources, authenticity, etc).

User 3. An external user (third party), that needs to check the sources of a piece of information which points to the platform as reference.

5 Intended uses

Use 1. Accessing and querying the metadata related to the description of a resource of the platform.

Use 2. Accessing and querying the metadata about the evolution of a resource of the platform (e.g. photo, video, post, etc.).

Use 3. Inserting new metadata in the platform.

6 Ontology Requirements

a. Non Functional Requirements

NFR1. The ontology must be written in English.

NFR2.The ontology must use OPM as a reference model. The purpose of this ontology is to reuse existent vocabularies rather than create new ones.

b. Functional Requirements. Set of Competency Questions

<u>Nº</u>	Competency Question	Answer
CQ1	Which references have been used in the post: "Iberia, de mal en peor"?	Reference to post with id 11234, photo with id 4335, guide with id 3345 and external link: http://externalResource.es
CQ2	What was the role of each of the references used in the post "Iberia, de mal en peor"?	The role of the post was "reference", the role of the image was "illustration" the role of the guide was "AditionalInformation" and the role of the external resource was "reference"
CQ3	Which guides refer to lat 1.234, long 233.222?	Guides with id 1233, 1234 and 12

CQ4	Which guides refer to places close to the previous point?	Guides with id 1122, 2234 and 453
CQ5	Who are the creators of the guide "Picoteo dublinés"?	Oscar Gutierrez
CQ6	Who are the authors of the photographs used in the guide "Picoteo dublinés"?	Andrés Campos
CQ7	How many recommendations has the guide "Picoteo dublinés"?	32
CQ8	Which guides have been written by Oscar Gutierrez in the last month?	Guides with id 1789, 56 and 232
CQ9	Which guides have photographs of Andrés Campos?	Guides with id 1789 and 1223
CQ10	Which guides have photographs with a description of "Dublin" on them?	Guide with id 1789
CQ11	Which other newspaper published the guide "Picoteo Dublinés"?	El Viajero, edition 5-12-2009
CQ12	How was the guide "Picoteo Dublinés" modified in the last month?	The author added a new description
CQ13	Which activities has the user "Pepe" carried out this month?	He has posted comments in two posts (id 1231 and 135), and he has uploaded 1 new photo (id 897)
CQ14	Which comments has the user "Pepe" done in the last 3 days?	Comment in post with id 1231
CQ15	Where has the latest post of user "Pepe" been uploaded from?	At coordinates lat 1.222, long 124.556
CQ16	Have any of user "Pepe"'s friends done any activity in the last 24 hours?	Yes, user "Rosa", has posted a new entry on blog with id 6547
CQ17	Which of user "Pepe"'s friends, followers or idols have posted recently?	User "Rosa"
CQ18	Which posts have been created by Pepe?	Posts with id: 223, 224, 225 and 226
CQ19	Which references have been used in the guide "Picoteo dublinés"?	Guide with id 36372 ("Niños y otros duendes")
CQ20	How has the latest post from user "Pepe" evolved?	It has been modified 3 times (2-2-2008, 3-2-2008 and 6-2-2008), adding new references.
CQ21	Which are the highest rated posts (from the	Post with id 2322

		iLikes of Facebook)?	
	CQ22	Which references of post with id 332 is from the friends, followers or idols of user "Pepe"?	Reference to post with id3355
	CQ23	Which of user "Pepe"'s idols has commented something lately?	Idol user "Rosa"

7 Pre-Glossary of Terms

a. Terms from the Competency Questions

User, Guide, Post, Idol, Follower, Friend, Coordinates, Reference, Role, Blog, Upload, Comment, Author, Illustration, Creator, Date, Recommendation, Evolution, Rating

b. Terms from the answers

User, Post, Guide, Photo, Idol, Coordinates, Comment, Role, External Link, Illustration, Reference.

c. Objects

Guide with id 3345, 36372, 7899, 232, 1223, 1234, 12, 1122, 2234, 453, photo with id, user "Pepe", user "Rosa", post with id 2322,3355, 223, 224, 225, 226, 11234, 4335 coordinates lat 1.222, long 124.556, dates 2-2-2008, 3-2-2008 and 6-2-2008, El Viajero, edition 5-12-2009, Oscar Gutiérrez, Andrés Campos, http://externalResource.es