

Open Data Management & the Cloud

Guidelines for Knowledge Verification (a.k.a. test/exam)

In general terms, the knowledge verification will consist in preparing and presenting a small project of data management facing the content of the lectures. At presentation time there will be a discussion with Q&A.

Going slightly deeper in the detail...

The student is supposed to:

- choose a set of data, a collection of files s/he feels comfortable with;
 - (e.g.: a few images, a set of tabular information, paper reports, ...);
- identify the concepts and content of the above *data resource*;
- think about the use cases for discovery, access, interoperability of it;
- define a model for the data resource:
 - putting it in words on paper;
 - drawing a conceptual model for it;
 - translating the conceptual model into logical and/or physical ones;
- use the tools and formats explained in the lectures (or similar ones) to prepare a digital resource out of the model and data resource;
 - (e.g.: an RDB implementation, some demo XML files or an XSD schema);
- design the interfaces for services devoted to discover and access the resource, taking into account interoperability and cloud solutions:
 - what annotation should be used;
 - what services can benefit of cloud solutions and why;
 - how can data curation and preservation be taken into account;

It is not needed to do all of the above at the same level of detail. There's no need to implement a full repository with production level services on top of it. What is required is investigation of the data and description of the final resource and services, plus possibly some actual prototyped solution (an entity-relation diagram? A small search/filter service? An annotated set of data out of the original plain one?).

The presentation (slides/demo) of the finalised project should describe what has been done and why and what where the difficulties in building the project or the foreseen ones if it were to be put in production.