

3. XPath with Identities

The purpose of this lab is to

1. deepen the skills to write XPath queries
2. practice using identities and identity references in XPath.

Open the `courses-ID.xml` file in Eclipse.¹ Write XPath expressions that return answers to queries below.² The queries train, among other things, the use of IDs and IDREFs.

1. Which course has the lowest enrollment? Note: There are some courses without enrollment figures.
2. Which courses have at least two instructors?
3. Return the titles of the courses taught by Prof. Aiken.
4. Who are the co-teachers of Jerry Cain, that is, which people are jointly teaching a course with Jerry Cain?
5. Which are the courses taught by Jerry Cain, but not by Mehran Sahami?
6. Return the titles of courses taught by instructors from the department of Linguistics.
7. Which courses have prerequisite courses that are taught at another department than the course itself?
8. Which courses are taught by an instructor who also teaches one of the courses prerequisites?
9. Which courses have a lower enrollment than any of their prerequisites?
10. Which courses are taught by a lecturer?
11. Which instructors (i.e., professors or lecturers) do not have a middle initial?

¹The data are taken, with slight modification of the ID's, from the website of the online course "Introduction to Databases" by Jennifer Widom at <http://openclassroom.stanford.edu>.

²The queries are original.