"Semi structured representation of educational data"

Each group should select from his department some faculty members and courses and represent information:

- on faculty members such as Employee Id, First name, Last name, Office number, Email(s), Office phone number, Mobile phone number(s), Last diploma, Position (teaching assistant, lecturer, assistant professor, associate professor, professor), specialty(s), experience (number of teaching years), citizenship, photo, Current semester time table. In addition we might be interested to know the preferences (preferred courses to teach) as well as the courses taught in the past.
- Some department courses: Course Id, Course name, Credit hours (lecture, tutorial, lab), Course type (Core or optional), Course category (university course, college course and department course).

The report must contain a TITLE and the list of group students’ names

The report outline should be like as following:

1. Introduction (motivation + scope+...)
2. An XML schema (filename.dtd): DTD (Document Type Definition) for all the data.
3. An XML data (at least: faculty.xml, Course.xml). Only an extract or more should be in the report as illustration (not the whole XML files).
4. 2 Stylesheets using xslt language (filename.xsl for each) showing different interesting views such as a table: Col1 – teachers ordered by position and experience; for each teacher Col2 – preferences; Col3 - past courses. All the views will be defined more accurately later on. Only an extract or more should be in the report as illustration (not the whole XSL files).
5. 6. 5 queries using Xquery (filename.xq) retrieving different information on faculty members, courses and sections. Queries will be specified later.
7. Conclusion: Problems encountered, lessons learnt, ...

The report must be provided as both softcopy and hardcopy. The whole data, style sheets

All the items (2 to 5) in the report should be commented (explained).

The report must include a brief introduction highlighting the importance of the project and its scope and a conclusion showing the encountered problems and the lessons learnt from this project.

**Tool**: Any free XML validating parser (Recommendation: XML Spy Trial Standard version: 30 days)

**Deadline**: *(At least one week before the final exam but see with Mr Mourad benchikh)*

**Project team**: 3 to 5 at most