	MASTER ADEO M2 : SEMANTIC WEB
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	PROJECT TOPIC : CINEMA/FILMS
	THIS WORK CAN BE DONE IN PAIRS
Drafted by: Chelouah	Ref : *MASTER ADEO M2 DB-EXAM*
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Preamule : This project designed to familiarize yourself with conforming XML trees using schemas, DOM, Ontologies and Sparql.

Exercise 1: XSD on films

1. Give the XSD schema representing a film which is consisted of:
    - A title: text attribute
    - A year: numeric attribute between 1895 and 2050
    - At least one director
    - Possibly actors
    - The directors and actors are individuals represented by:
    - A name: text attribute
    - A first name: text attribute

2. Write an XSD schema in a films.xsd file which allows you to describe data on the theme of cinema. You are given the following constraints to respect:
    - an individual has a surname, a first name and a nationality;
    - an individual can act in one or more films
    - in the same film, an individual can play one or more roles;
    - in a film there may be no actor or several;
    - a film is made by a single individual and the film has a title, genre, year and nationality;
    - an individual can be both actor and director in the same film or in different films;
    - the possible genres are: drama, comedy, adventure, politics, thriller, western and police.

You will avoid data redundancy.

3. . Write an xsd which represents a graph of triplets: graph(subject , predicate , object)

    Example of a triplet : ?film rdfs:label ?title

4. DOM
    a. Give the films.xml file representing the films.sql file
    b. Write program in java using DOM packages that loads the films.xml file
    c. Browse the list of films and display title, kind, fyear and the firstname and lastname of the director for each film
    d. Write a function to add a film to this films.xml
    e. Write a function to save this updated films.xml file with the name updateFilms.xml

5. Sparql

Familiarization with Film and Person ontology

From the access point on the films of Tom Cruise, Study and understand the request to be able to answer the following questions. You can also study the other queries mentioned in the site. For each request requested above you must display: the label, and the abstract as well as the other information requested. We want the abstract and the Label to be displayed in French.
Note that the label as well as the abstract are part of the generic properties defined in RDFs which are: rdfs: label, and rdfs: comment. Note also that a DBpedia resource has as a URI:
http: //dbpedia.org/resource/NOMResssource.
Note also that the properties associated with a given ontology have the URI address:

http: //dbpedia.org/property/NOMPropriété

Questions :
1. Adapt the query to find films in which the actress is Sophie Marceau (or Mandy Moore), or other.
2. Display films with an author (display the author's name).
3. view movies based on other work. (view other jobs).
4. We want to display information related to the film the choristers: (URI: <http: //dbpedia.org/resource/The_Chorus_ (2004_film)), as well as the actors of this film. Find the requested query.
5. Modify the query so that there is no redundant display of certain values.
6. We wish to display the information concerning a given actor (for example Tom Cruise) We wish to cross the information collected from DBpedia (like the place of birth, name, etc.) with information from other ontologies, specifically we want to display the description according to (Dublin Core) as well as the name and website according to FOAF. Write the query that displays all of this information.

Free work: Specify a request that is important to you, and ask the necessary request (or requests) that allows you to collect the desired information.