XML Schema and XQuery

The purpose of these exercises is to get initial experience with XQuery and XML Schema. To do XML Schema validation, use one of the many on-line validation services, e.g. the one at http://tools.decisionsoft.com/schemaValidate/.

XML Schema

Your first task is to make an XML schema, *ActorML,* describing the data format in the file `actorlist.xml` (available on the course schedule). Your schema should be as specific as possible, i.e., not allow significant deviations from the format and conventions used. Make reasonable assumptions. Run a validator to ensure that `actorlist.xml` is contained in the language described by the schema.

Repeat this exercise with the file `acmccs98-1.2.3.xml`. Your solution should allow trees of arbitrary depth.

XML Queries

Write the following queries in XQuery, and run them on `actorlist.xml`:

1. Which movies have John Travolta and Uma Thurman starred in together?
2. What is the name of all actors in Pulp Fiction? Your query should list the actors sorted by first name.
3. What are the titles and years of all movies from the 1990s where Tom Hanks starred?