

### **GAV-Style Integration Practice Problem**

You are given two databases containing information about movies. The database A consists of Movie elements, with subelements Title (unique), Director (unique), and Actor (one or more). The database B consists of Actor elements, with subelements Movie that have attributes Title and Director.

1. Define the schemas of A and B using XML Schema.
2. You are supposed to enforce the requirement that different movies have different titles. For both A and B, either show how this can be done or explain why it cannot be done.
3. Define in XQuery the mapping from B to A. Make sure of the following:
  - You don't end up with duplicate movies.
  - The set of actors for a movie is the union of the corresponding sets from A and B (duplicates eliminated).