November 16, 2012

In this homework, we will explore some XML data and write two XQuery
queries to filter and re-organize it.

The queries concern the XML-annotated play “Julius Caesar”, by W.
Shakespeare. You can find a copy of this document at

http://db.ucsd.edu/cse190/hw/j_caesar.xml

and the corresponding DTD at

http://db.ucsd.edu/cse190/hw/play.dtd.

You will turn in the queries only. Feel free to test them using one of the
following open-source XQuery engines:

  in-memory-only engine.
- Galax (http://www.galaxquery.org/). THE Complete reference
  implementation of the standard. Implemented in OCAML.
- MonetDB (http://www.monetdb.org/XQuery/). Based on in-memory
  column-oriented engine; among the fastest out there. Installation re-
  quires more overhead. Project frozen since March 2011.
1. (50 pts) Find the speaker of the line
   “Et tu, Brute! Then fall, Caesar.”
   as well as the act in which he speaks this line. Output an XML element
   with tag result, containing two child elements: one with tag speaker
   and another with tag act-title.

2. (50 pts) For each speaker in the play, output an XML element with tag
   speaks containing a child element speaker and a list of child elements
   act_title, one for each act the speaker speaks in.