

XSLT Assignment 2

iTunes has a strange, key-based XML file, where each track is described as follows:

```
<dict>
  <key>Track ID</key><integer>8195</integer>
  <key>Name</key><string>I'm Not Jesus (feat. Corey Taylor)</string>
  <key>Artist</key><string>Apocalyptica</string>
  <key>Album Artist</key><string>Apocalyptica</string>
  <key>Composer</key><string>Geno Lenardo &#38; Johnny Andrews</string>
  <key>Album</key><string>Worlds Collide (Deluxe Version)</string>
  <key>Grouping</key><string>Symphonic Metal</string>
  <key>Genre</key><string>Rock</string>
  <key>Kind</key><string>Protected AAC audio file</string>
  <key>Size</key><integer>3468358</integer>
  <key>Total Time</key><integer>214086</integer>
  <key>Disc Number</key><integer>1</integer>
  <key>Disc Count</key><integer>1</integer>
  <key>Track Number</key><integer>3</integer>
  <key>Track Count</key><integer>13</integer>
  <key>Year</key><integer>2008</integer>
  <key>Date Modified</key><date>2011-12-14T17:42:57Z</date>
  <key>Date Added</key><date>2012-11-21T03:21:13Z</date>
  <key>Bit Rate</key><integer>128</integer>
  <key>Sample Rate</key><integer>44100</integer>
  <key>Comments</key><string>octane, gym</string>
  <key>Release Date</key><date>2008-04-15T07:00:00Z</date>
  <key>Artwork Count</key><integer>1</integer>
  <key>Persistent ID</key><string>CD729207018ED3BF</string>
  <key>Track Type</key><string>File</string>
  <key>Protected</key><true/>
  <key>Purchased</key><true/>
  <key>Location</key><string>file://localhost/I:/Geek%20Squad%20Data%20Backup/Users/Public/Music/iTunes
/Apocalyptica/Worlds%20Collide%20(Deluxe%20Version)/03%20I'm%20Not%20Jesus%20(feat.%20Corey%20Taylor.m4p<
/string>
  <key>File Folder Count</key><integer>4</integer>
  <key>Library Folder Count</key><integer>1</integer>
</dict>
```

1. It would be more useful to utilize more standard (and descriptive) XML formats, such as those suggested by XPSF and musicbrainz.org. Plus a lot of the information might be extraneous. Convert either the sample iTunes XML files (or your own) to the format below. (Include only audio files, denoted by the word "audio" in iTunes Kind field.)

```
<xspf:playlist xmlns:xspf="http://xspf.org/ns/0/">
  <title>iTunes Library</title>
  <date>2013-02-09T20:47:14.225-05:00</date>
  <trackList>
    <track>
      <creator>Apocalyptica</creator>
      <album>Worlds Collide (Deluxe Version)</album>
      <title>I'm Not Jesus (feat. Corey Taylor)</title>
      <genre>Rock</genre>
      <grouping>Symphonic Metal</grouping>
      <date>2008</date>
    </track>
    ...
  </trackList>
</xspf:playlist>
```

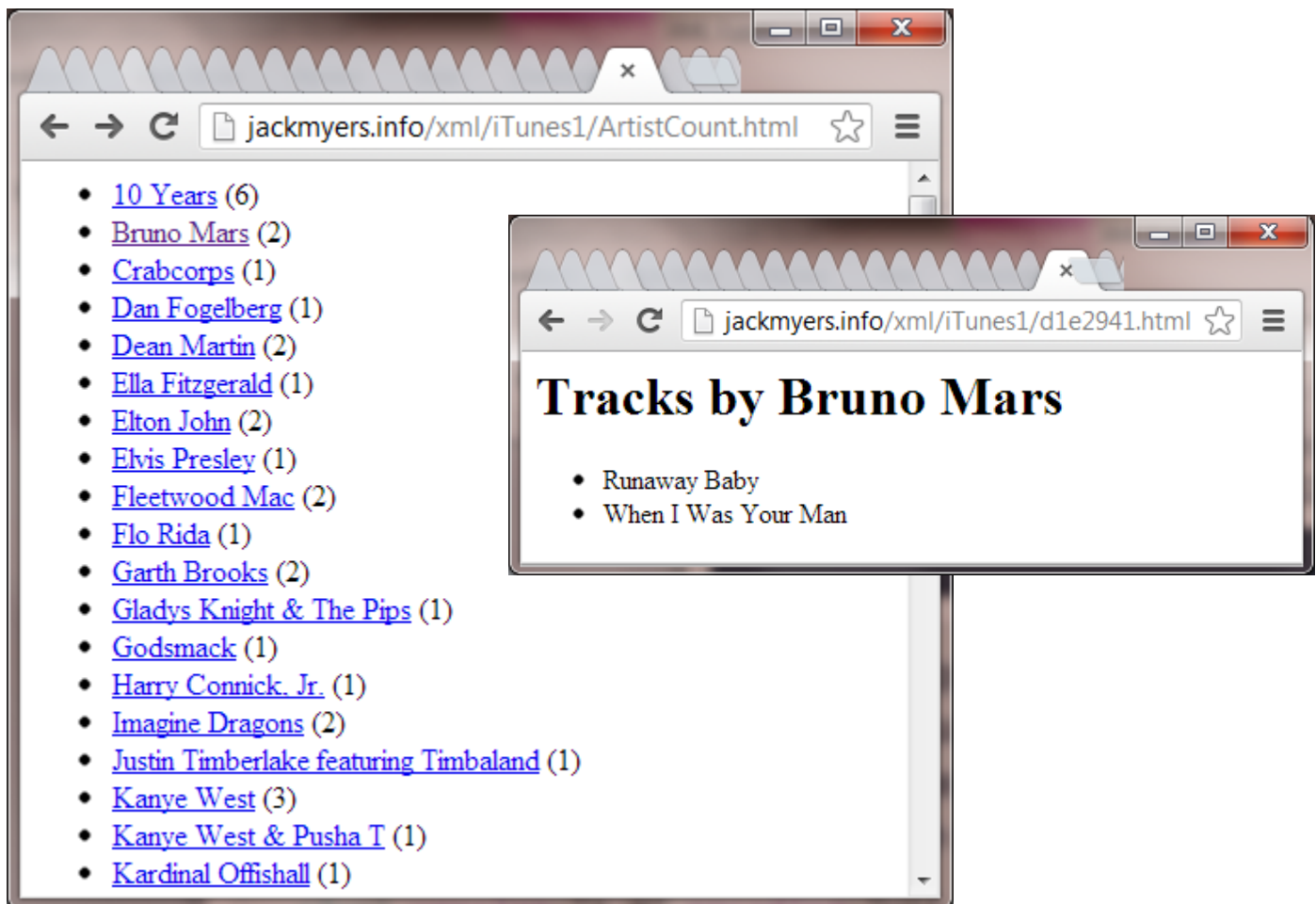
Note that the date of the playlist is in the current-dateTime() format.

Hint: You will need to use good XPath syntax, and use of following-sibling

2. Now that the file is in this format, transform it again to show a count of tracks by artist.
3. If you want to go on, redo step two, but instead of just showing the count by artist, make each artist a hyperlink to his/her/their own HTML file which will list all the tracks from that artist.

Hint: You can transform the artist name to remove spaces and special characters. While this will help you to avoid difficult file names for artists (e.g., Evelyn "Champagne" King.html), it requires complex XSL string functions. Plus, duplicate file names in Windows is always a possibility – (e.g., "ToadTheWetSprocket.html" is the equal to "ToadtheWetSprocket.html"). Look into the XSL function "generate-id()" to give you short, but unique file names per artist.

For an example, see <http://jackmyers.info/xml/iTunes1/ArtistCount.html>



The image shows two overlapping browser windows. The background window displays a list of artists and their track counts, with each artist name as a hyperlink. The foreground window shows the detailed view for Bruno Mars, listing his tracks.

Background Window: jackmyers.info/xml/iTunes1/ArtistCount.html

- [10 Years](#) (6)
- [Bruno Mars](#) (2)
- [Crabcorps](#) (1)
- [Dan Fogelberg](#) (1)
- [Dean Martin](#) (2)
- [Ella Fitzgerald](#) (1)
- [Elton John](#) (2)
- [Elvis Presley](#) (1)
- [Fleetwood Mac](#) (2)
- [Flo Rida](#) (1)
- [Garth Brooks](#) (2)
- [Gladys Knight & The Pips](#) (1)
- [Godsmack](#) (1)
- [Harry Connick, Jr.](#) (1)
- [Imagine Dragons](#) (2)
- [Justin Timberlake featuring Timbaland](#) (1)
- [Kanye West](#) (3)
- [Kanye West & Pusha T](#) (1)
- [Kardinal Offishall](#) (1)

Foreground Window: jackmyers.info/xml/iTunes1/d1e2941.html

Tracks by Bruno Mars

- Runaway Baby
- When I Was Your Man