**In-Class Exercise #8 KEY**

**In-Class Exercise #8: Working with Semi-Structured Data**

Part 1: Create CSV, XML, and JSON data files that describe a set of data.

Start with this data in the form of a table. This is a subset of the data in the film table in our moviedb database:

|  |  |  |  |
| --- | --- | --- | --- |
| film\_id | title | length | rating |
| 39 | Armageddon Lost | 99 | G |
| 331 | Forward Temple | 90 | NC-17 |
| 446 | Hysterical Grail | 150 | PG |
| 857 | Strictly Scarface | 144 | PG-13 |

Write the equivalent CSV file for this data below (don’t forget the column headings):

film\_id,title,length,rating  
39,Armageddon Lost,99,G  
331,Forward Temple,90,NC-17  
446,Hysterical Grail,150,PG  
857,Strictly Scarface,144,PG-13

Write the equivalent XML file for this data below – use a <film> tag for each film:

<document>  
 <film>  
 <film\_id>39</film\_id>  
 <title>Armageddon Lost</title>  
 <length>99</length>  
 <rating>G</rating>  
 </film>  
 <film>  
 <film\_id>331</film\_id>  
 <title>Forward Temple</title>  
 <length>90</length>  
 <rating>NC-17</rating>  
 </film>  
 <film>  
 <film\_id>446</film\_id>  
 <title>Hysterical Grail</title>  
 <length>150</length>  
 <rating>PG</rating>  
 </film>  
 <film>  
 <film\_id>857</film\_id>  
 <title>Strictly Scarface</title>  
 <length>144</length>  
 <rating>PG-13</rating>  
 </film>  
<document>

Write the equivalent JSON file for this data below:

[  
 {  
 “film\_id”: 39,  
 “title”: “Armageddon Lost”,  
 “length”: 99,  
 “rating”: “G”  
 },  
 {  
 “film\_id”: 331,  
 “title”: “Forward Temple”,  
 “length”: 90,  
 “rating”: “NC-17”  
 },  
 {  
 “film\_id”: 446,  
 “title”: “Hysterical Grail”,  
 “length”: 150,  
 “rating”: “PG”  
 },  
 {  
 “film\_id”: 857,  
 “title”: “Strictly Scarface”,  
 “length”: 144,  
 “rating”: “PG-13”  
 }  
]

Part 2: Work with an API that returns JSON-formatted data

1. Open up a browser on your computer.
2. Go to the Star Wars API (<http://swapi.co>).
3. Under “Try it now!”, query the database by making calls to the API, such as:  
     
   people/4  
   planets/1  
   starships/2

Play around with different category/number combinations to get a feel for the data format.

Find an element you like (person, planet, or starship) and write down some of the JSON below:  
  
(depends on what you pick; just make sure it is JSON!)