

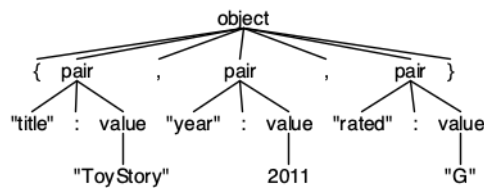
CS 320 Programming Languages

Worksheet 6- ANTLR

1. You are given the following Movies.txt file. This file keeps the information about Movies in a particular data format/notation. Please write a CFG (.g4 file) using ANTLR4 for parsing the data and its tokens

// SimpleMovie.json

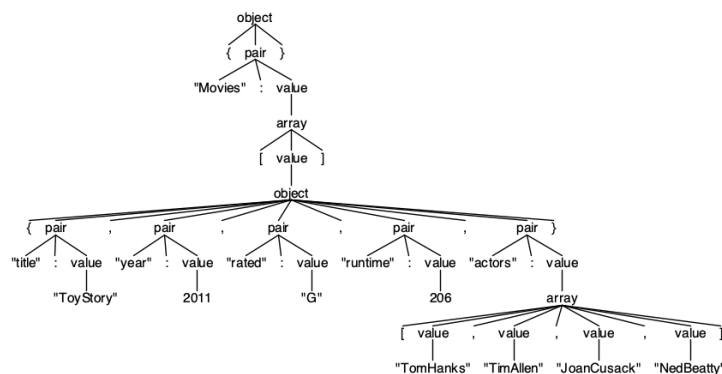
```
{
  "title" : "ToyStory",
  "year" : 2011,
  "rated" : "G"
}
```



2. Now the file has been updated to include more movies' information. Update your CFG(.g4)file using ANTLR4 for parsing the new data and its token. The file defines an array of Movies and each Movie might have different properties.

// SimpleMovie2.json

```
{
  "Movies":
  [
    {
      "title": "ToyStory",
      "year": 2011,
      "rated": "G",
      "runtime": 206,
      "actors":
      [
        "TomHanks",
        "TimAllen",
        "JoanCusack",
        "NedBeatty"
      ]
    }
  ]
}
```



3. Test your grammar with the Movies.json. Update your. g4 with any missing rules for parsing the new file correctly. Submit the final. g4 file on Canvas

//Movies.json

```
{
  "Movies":
  [
    {
      "title": "ToyStory4",
      "year": 2011,
      "rated": "G",
      "runtime": 206,
      "actors": [
        "Tom Hanks",
        "Tim Allen",
        "Joan Cusack",
        "Ned Beatty"
      ]
    },
    {
      "title": "Deadpool",
      "year": 2016,
      "rated": "R",
      "runtime": 108,
      "actors": [
        "RyanReynolds",
        "MorenaBaccarin",
        "EdSkrein",
        "T.J.Miller",
        "GinaCarano",
        "LeslieUggams",
        "StefanKapicic",
        "BriannaHildebrand"
      ]
    }
  ]
}
```