Hui Xin Data Collection 3/13/20

Notebook:	Animation Templates		
Created:	3/13/2020 11:50 AM	**Updated:**	3/15/2020 6:55 AM
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URL:	https://stackoverflow.com/questions/25515936/perform-curl-request-in-javascript		

JavaScript/JSON Methods/Libraries to Know:

Perform **curl** request in javascript?

- https://stackoverflow.com/questions/25515936/perform-curl-request-in-javascript

Let in JS

- https://stackoverflow.com/questions/762011/whats-the-difference-between-using-let-and-var?page=1&tab=votes#tab-top

JSON.parse()

- A common use of JSON is to exchange data to/from a web server
- When receiving data from a web server, the data is always a string
- Parse the data with JSON.parse(), and the data becomes a **JS object**

```
'{"name":"John", "age":30, "city":"New York"}'

// Use the JavaScript function JSON.parse() to convert text into a JS object

var obj = JSON.parse('{"name":"John", "age":30,"city":"New York"}');
```

JSON.stringify()

- Data to a web server must be as a string

```
var obj = { name: "John" , age: 30 ,city: "New York"};

//convert to string

var myJSON = JSON.stringify(obj);

// myJSON is now the obj as string. Send to server

document.getElementById("demo").innerHTML = myJSON;

Output:

{"name":"John","age":30,"city":"New York"}
```

```
//Stringify a JS Array

var arr = [ "John", "Peter", "Sally", "Jane" ];

var myJSON = JSON.stringify(arr);

document.getElementById("demo").innerHTML = myJSON;

output:

["John","Peter","Sally","Jane"]
```

Fs (File System) module

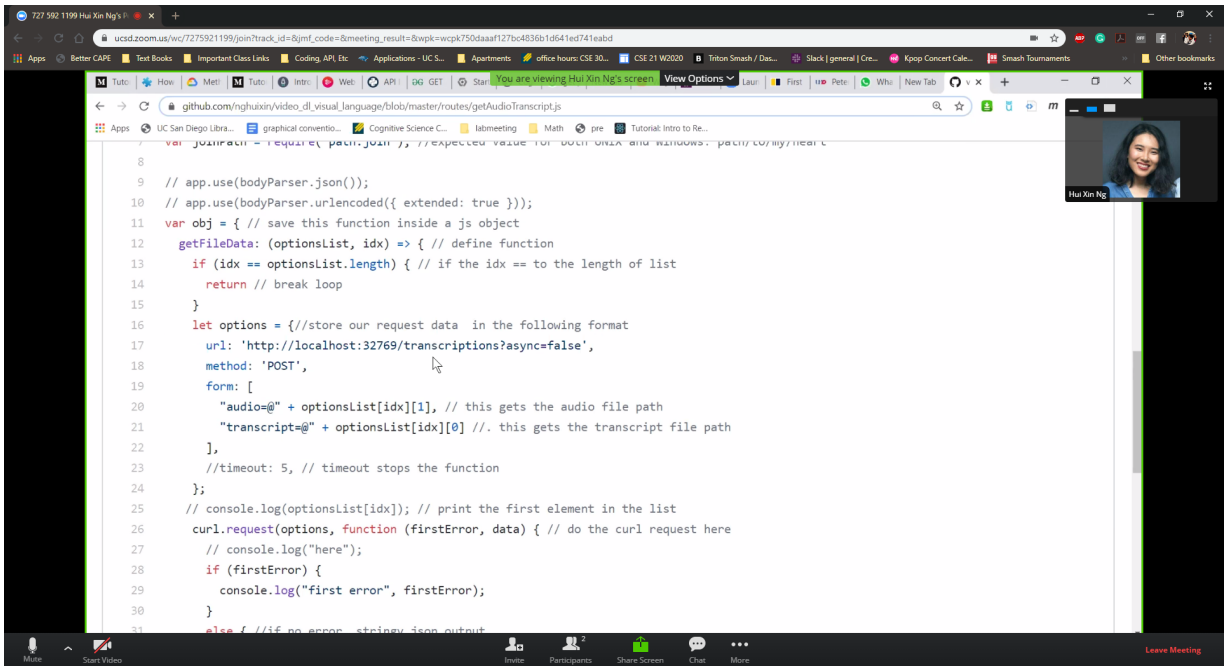
- Node. js includes fs module to access physical file system. The fs module is responsible for all the asynchronous or synchronous file I/O operations.
- https://www.tutorialsteacher.com/nodejs/nodejs-file-system

Good Coding Practice:

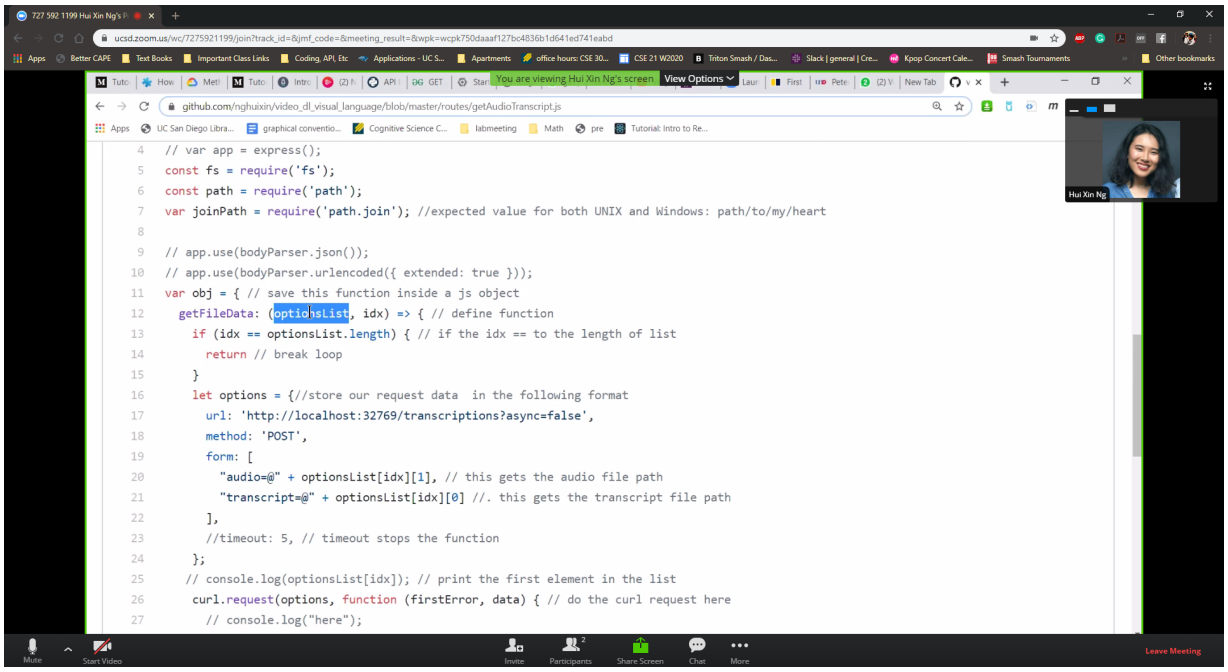
Code basic example of your intended project and confirm your knowledge of the documentation by seeing if your basic example works.

Then code your actual projecte

getTranscripts.js:

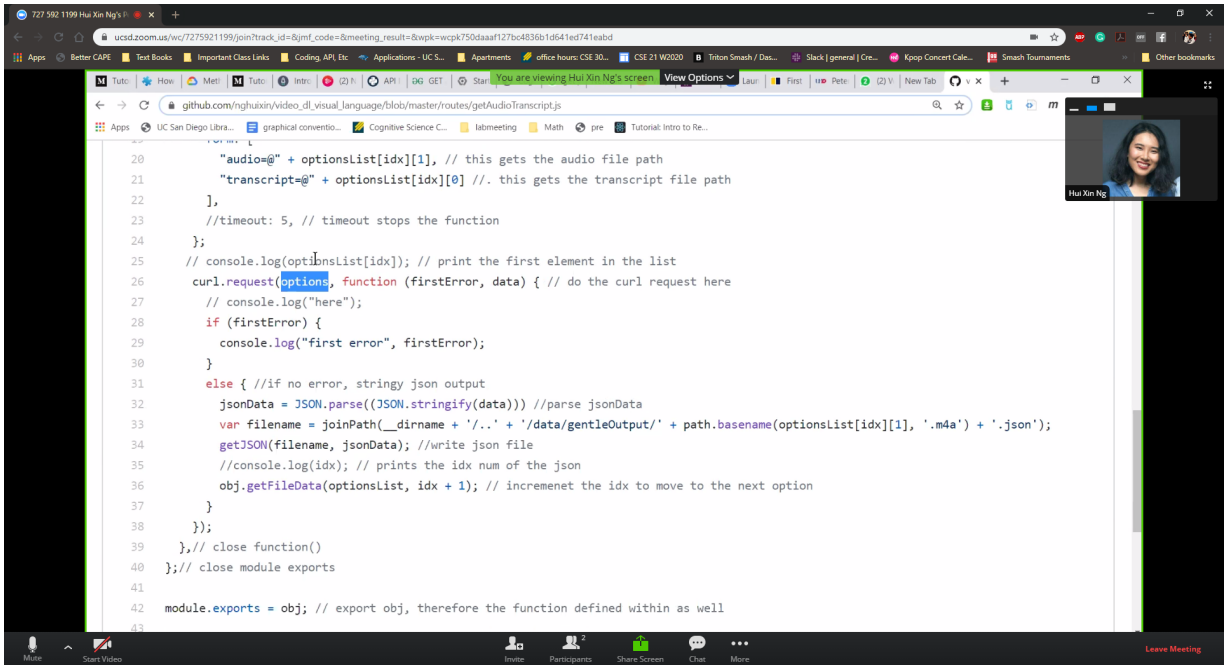


- optionslist: contains list of the audios and transcripts
  - inside Hui Xin's youtube-dl/downloads/audio
    - All the audios of the youtube videos extracted



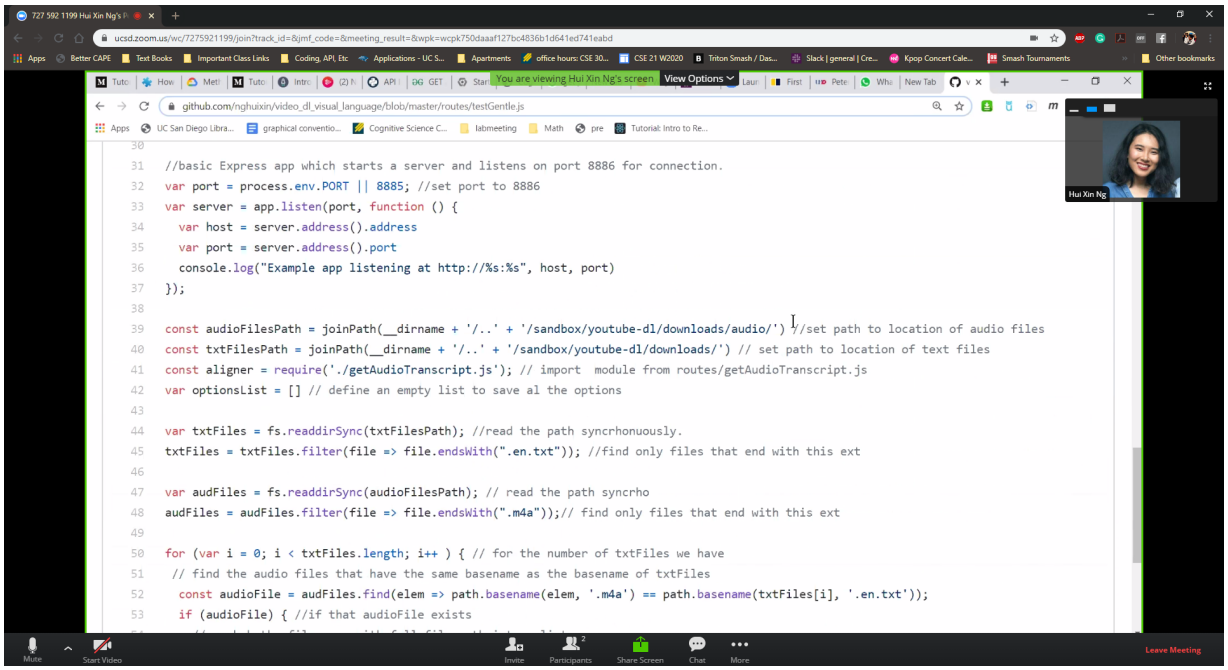

```
getFileData(...):

idx = argument Hui Xin created in order for her to move to the next element in the list of lists.
```

```
var obj = JSON object
// recursive function that calls obj.getFileData

    var filename = joinPath...
    //She defined the output as gentleOutput folder
    //getJson saves the Gentle Jsons into an output file on her local computer
```



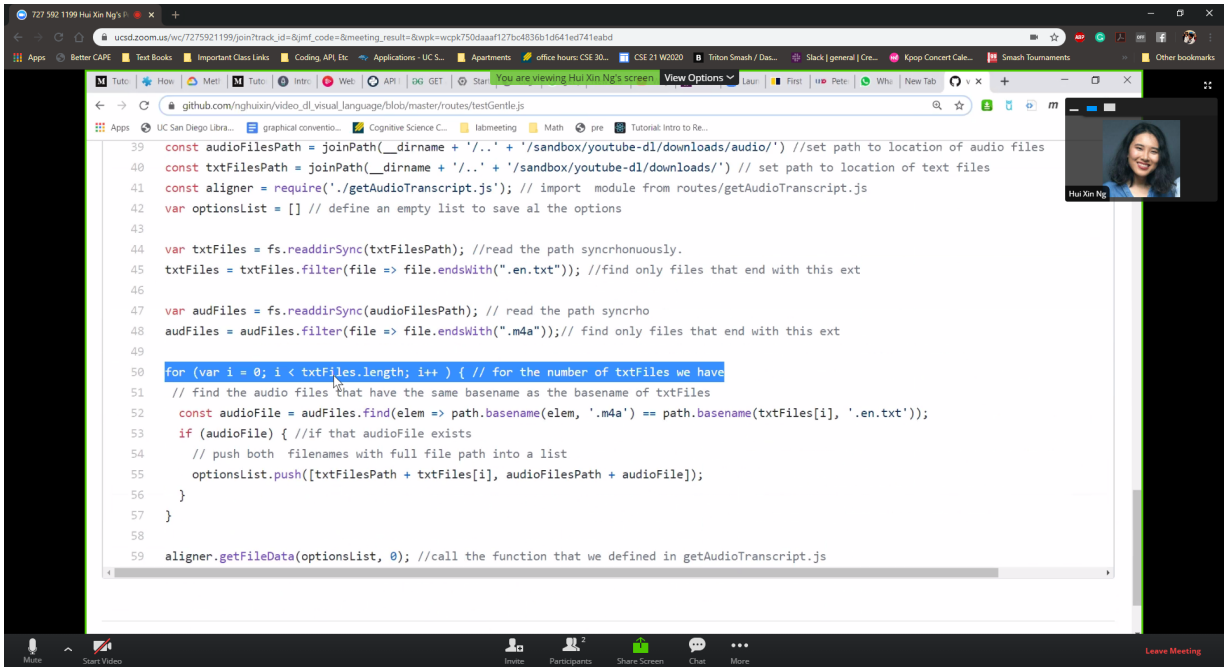

```
what is an asynchronous function?

https://www.google.com/search?
q=what+is+an+asynchronous+function&rlz=1C1CHBF_enUS815US815&oq=what+is+an+asynchro&aqs=chrome.4.0j69i57j0l6.5637j1j1&sourceid=chrome&ie=UTF-
8

first if statement is a catch

else statement toString() json output

var filename indicates

getJSON(filename,data) {
    //stringify data and parse the data
    //uses fs to write the file
    //try catch for failure and success cases
```

testGentle.js:

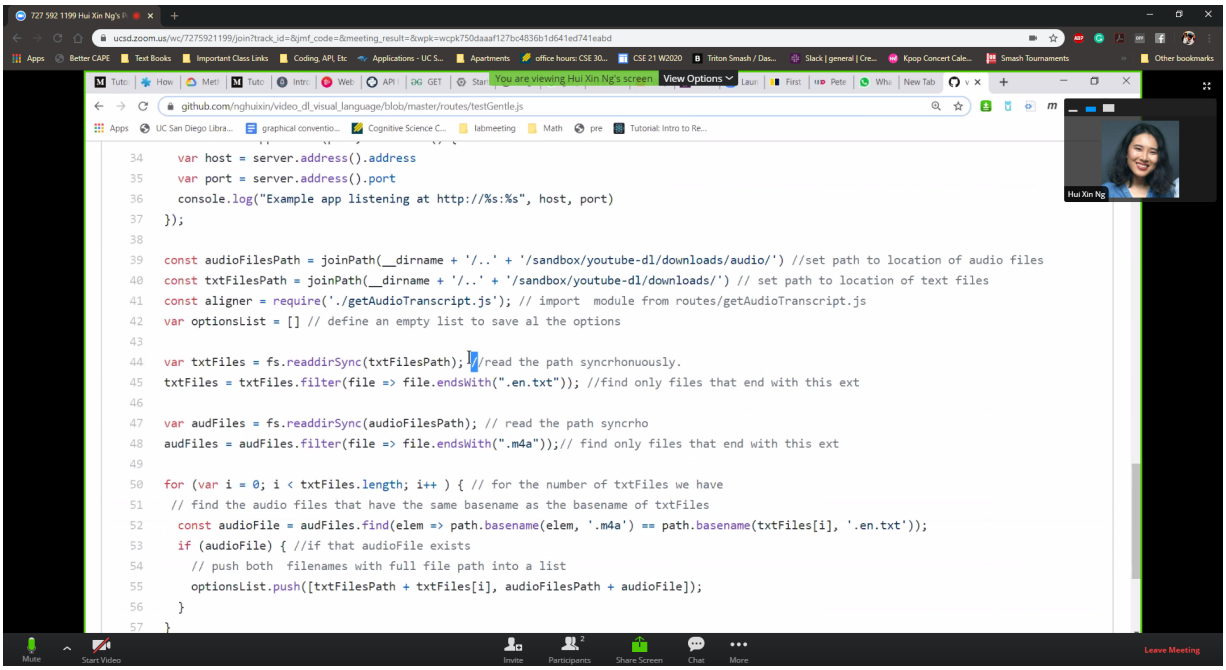


- How do I call the function getFileData from the other js?
- Define an aligner variable that requires that js file

```
// Read up on fs js documentation

txtFiles = txtFiles.filter(file => file.endsWith(".en.txt"));
// find files that end with this extension
// this is to filter out non-english transcript files
```

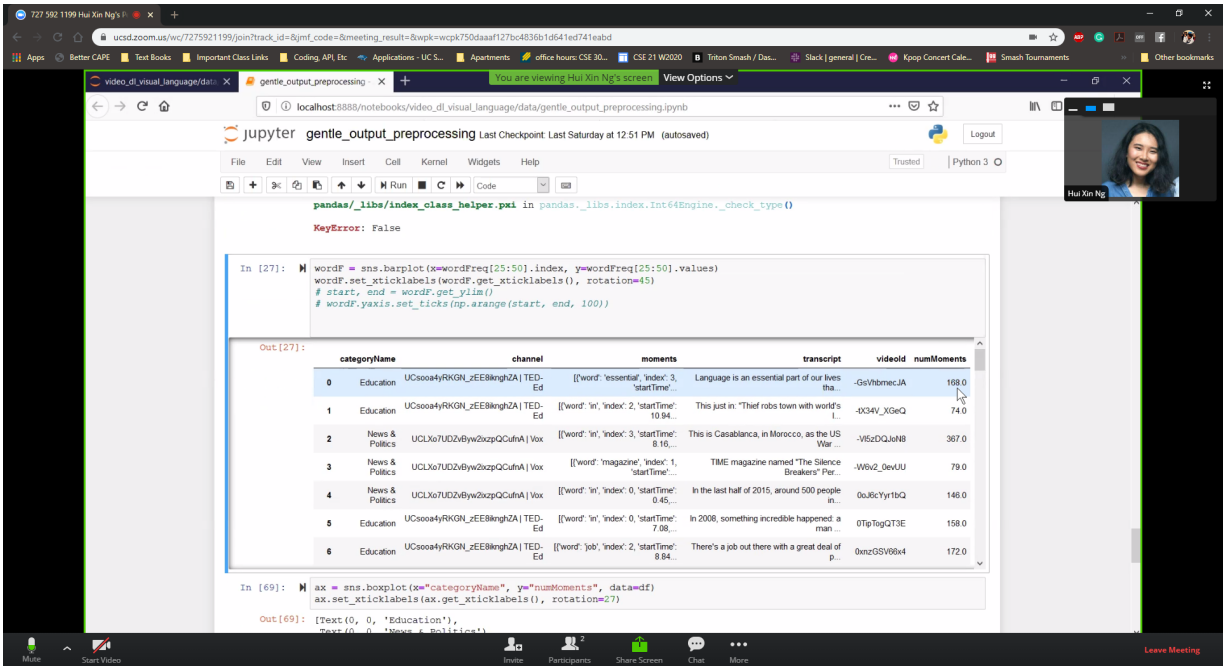



```
The for loop:
    if(audiofilename = videoId):
        push both filenames into a list
        then insert this into a list of lists

    path.basename drops the extensions so you can compare just the videoIds

Hui Xin:
    Drop the extensions to do the name comparisons then reinsert the extensions to complete the curl request
```



```
  var host = server.address().address
  var port = server.address().port
  console.log("Example app listening at http://%s:%s", host, port)
});

const audioFilesPath = joinPath(__dirname + '/..' + '/sandbox/youtube-dl/downloads/audio/') //set path to location of audio files
const txtFilesPath = joinPath(__dirname + '/..' + '/sandbox/youtube-dl/downloads/') // set path to location of text files
const aligner = require('./getAudioTranscript.js'); // import  module from routes/getAudioTranscript.js
var optionsList = [] // define an empty list to save al the options

var txtFiles = fs.readdirSync(txtFilesPath); //read the path syncrhonuously.
txtFiles = txtFiles.filter(file => file.endsWith(".en.txt")); //find only files that end with this ext

var audFiles = fs.readdirSync(audioFilesPath); // read the path syncrho
audFiles = audFiles.filter(file => file.endsWith(".m4a"));// find only files that end with this ext

for (var i = 0; i < txtFiles.length; i++ ) { // for the number of txtFiles we have
 // find the audio files that have the same basename as the basename of txtFiles
  const audioFile = audFiles.find(elem => path.basename(elem, '.m4a') == path.basename(txtFiles[i], '.en.txt'));
  if (audioFile) { //if that audioFile exists
    // push both  filenames with full file path into a list
    optionsList.push([txtFilesPath + txtFiles[i], audioFilesPath + audioFile]);
  }
}
```

gentle_output_processing:



```
pandas/_libs/index_class_helper.pxi in pandas._libs.index.Int64Engine._check_type()

KeyError: False
```

```
In [27]:
wordF = sns.barplot(x=wordFreq[25:50].index, y=wordFreq[25:50].values)
wordF.set_xticklabels(wordF.get_xticklabels(), rotation=45)
# start, end = wordF.get_ylim()
# wordF.yaxis.set_ticks(np.arange(start, end, 100))
```

Out[27]:

	categoryName	channel	moments	transcript	videoId	numMoments
0	Education	UCsooa4yRKGN_zEE8iknghZA | TED-Ed	[{'word': 'essential', 'index': 3, 'startTime'...	Language is an essential part of our lives tha...	-GsVhbmecJA	168.0
1	Education	UCsooa4yRKGN_zEE8iknghZA | TED-Ed	[{'word': 'in', 'index': 2, 'startTime': 10.94...	This just in: "Thief robs town with world's l...	-tX34V_XGeQ	74.0
2	News & Politics	UCLXo7UDZvByw2ixzpQCufnA | Vox	[{'word': 'in', 'index': 3, 'startTime': 8.16,...	This is Casablanca, in Morocco, as the US War ...	-Vl5zDQJoN8	367.0
3	News & Politics	UCLXo7UDZvByw2ixzpQCufnA | Vox	[{'word': 'magazine', 'index': 1, 'startTime':...	TIME magazine named "The Silence Breakers" Per...	-W6v2_0evUU	79.0
4	News & Politics	UCLXo7UDZvByw2ixzpQCufnA | Vox	[{'word': 'in', 'index': 0, 'startTime': 0.45,...	In the last half of 2015, around 500 people in...	0oJ6cYyr1bQ	146.0
5	Education	UCsooa4yRKGN_zEE8iknghZA | TED-Ed	[{'word': 'in', 'index': 0, 'startTime': 7.08,...	In 2008, something incredible happened: a man ...	0TipTogQT3E	158.0
6	Education	UCsooa4yRKGN_zEE8iknghZA | TED-Ed	[{'word': 'job', 'index': 2, 'startTime': 8.84...	There's a job out there with a great deal of p...	0xnzGSV66x4	172.0

```
In [69]:
ax = sns.boxplot(x="categoryName", y="numMoments", data=df)
ax.set_xticklabels(ax.get_xticklabels(), rotation=27)

Out[69]: [Text(0, 0, 'Education'),
```

```
numMoments: number of synset rating words that appear in that transcript
```