In this lecture, we will discuss…

Processing JSON

What is JSON?

stands for

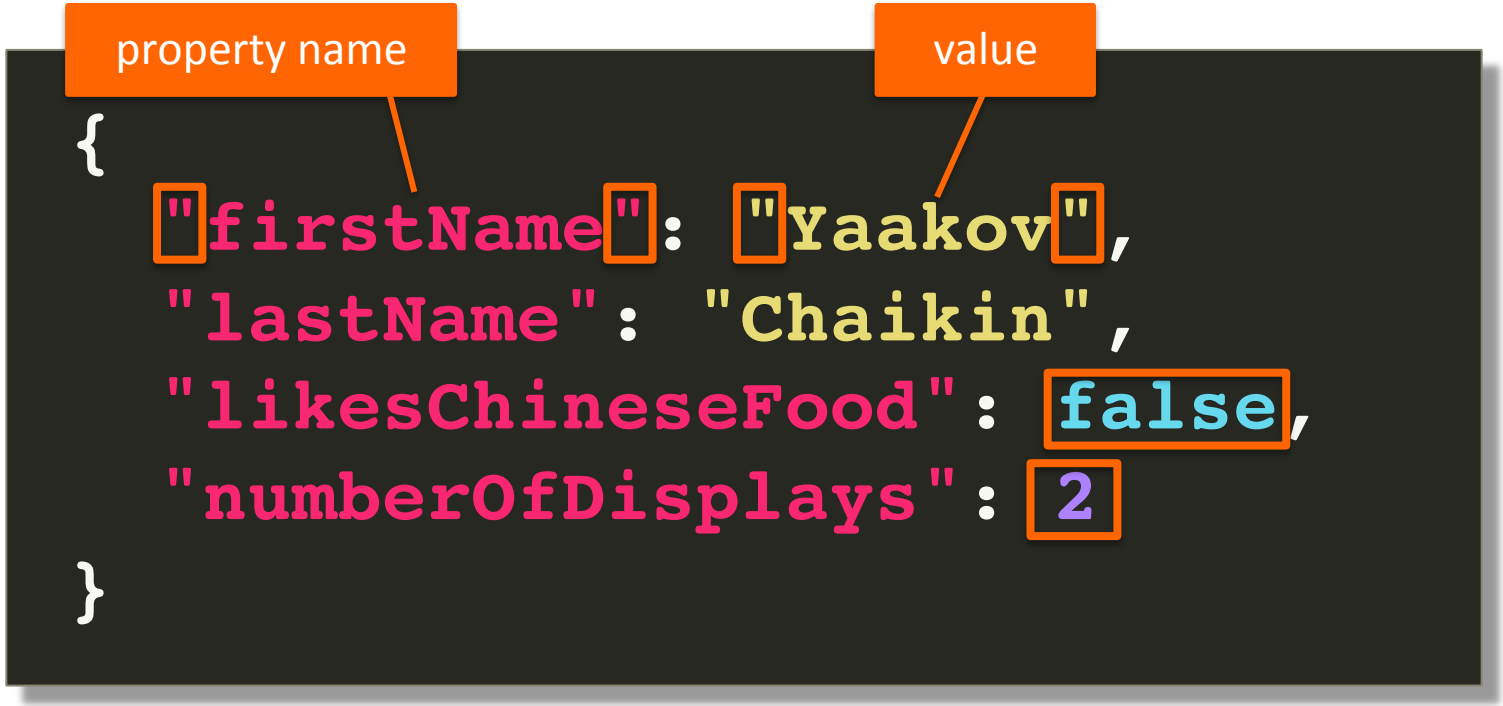
JavaScript Object Notation

- ✧ **Lightweight data-interchange format**
  - **Simple *textual* representation of data**
- ✧ ***Easy for humans* to read and write**
- ✧ ***Easy for machines* to parse and generate**
- ✧ **Completely independent of any language**

JSON Syntax Rules

- Subset of Javascript object literal syntax… but
  - Property names must be in *double* quotes
  - String values must be in *double* quotes
  - That's it!
- Syntax for everything else is *exactly* like for object literal

JSON Example



JSON Example

```
var jsonString =
'{
   "firstName": "Yaakov",
   "lastName": "Chaikin",
   "likesChineseFood": false,
   "numberOfDisplays": 2
 }';
```

Common Misconception

- **JSON is NOT a Javascript Object Literal**
- **JSON is just a string**
- **The syntax of JSON is based on object literal though**
- **Need to covert JSON into a JS object**

Converting JSON To String & Back to JSON

converts from json string to object

```
var obj = JSON.parse(jsonString);
```

converts from object to json string

```
var str = JSON.stringify(obj);
```

Summary

- JSON is a lightweight data representation
- Great format for passing data from server to client & back
- Syntax is based on Javascript object literal
  - But JSON is NOT JS object literal
- JSON.parse to convert from JSON string to object
- JSON.stringify to convert from object to JSON string