

APIs:

CRUD, REST, and Other Buzzwords

Why are we here today?

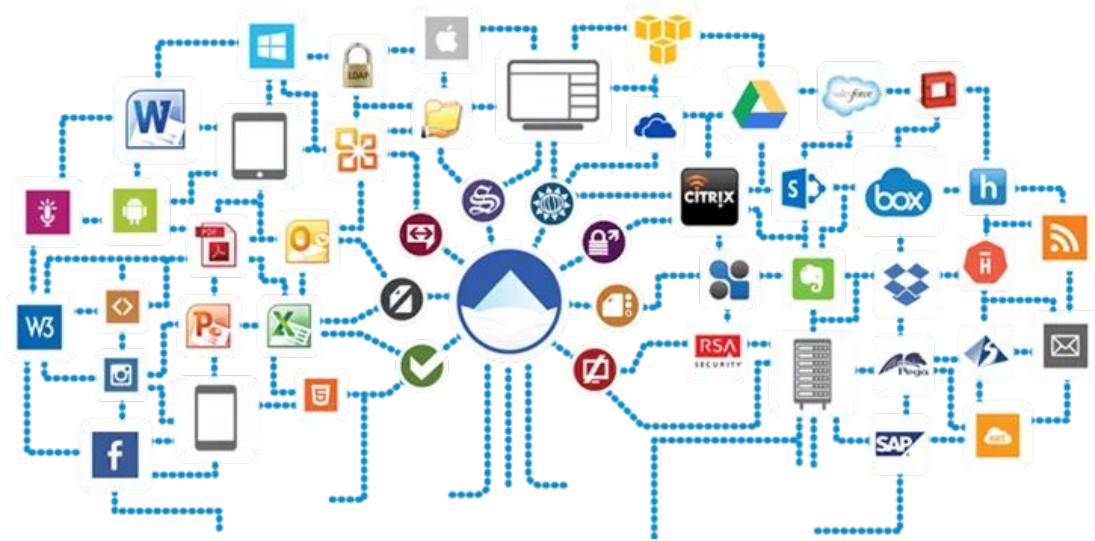
Who is Thinkful



Update with thoughtful verbage & styling

Why Learn This?

- Websites become much more fun and useful
- APIs allow us to send messages, check the weather, get directions
 - Infinite other uses!



How this works

bit.ly/tf-api-start-made-up-link

What is an API?

- Stands for Application Programming Interface
- Allows our software to communicate with other components
 - Internal and external



RESTful APIs

- Stands for REpresentational State Transfer
- Any API that uses HTTP requests to GET, PUT, POST, and DELETE data



CRUD

- Create, Read, Update, Delete
- Relates to databases
 - Create - POST
 - Read - GET
 - Update - PUT
 - Delete - DELETE



Endpoints

- A unique URL that we can use to access specific data
 - “An address” for our API
- I want user data
 - query ‘/users:userId’

User Endpoints



GET	/users/self	... Get information about the owner of the access token.
GET	/users/ <code>user-id</code>	... Get information about a user.
GET	/users/self/media/recent	... Get the most recent media of the user.
GET	/users/ <code>user-id</code> /media/recent	... Get the most recent media of a user.
GET	/users/self/media/liked	... Get the recent media liked by the user.
GET	/users/search	... Search for a user by name.

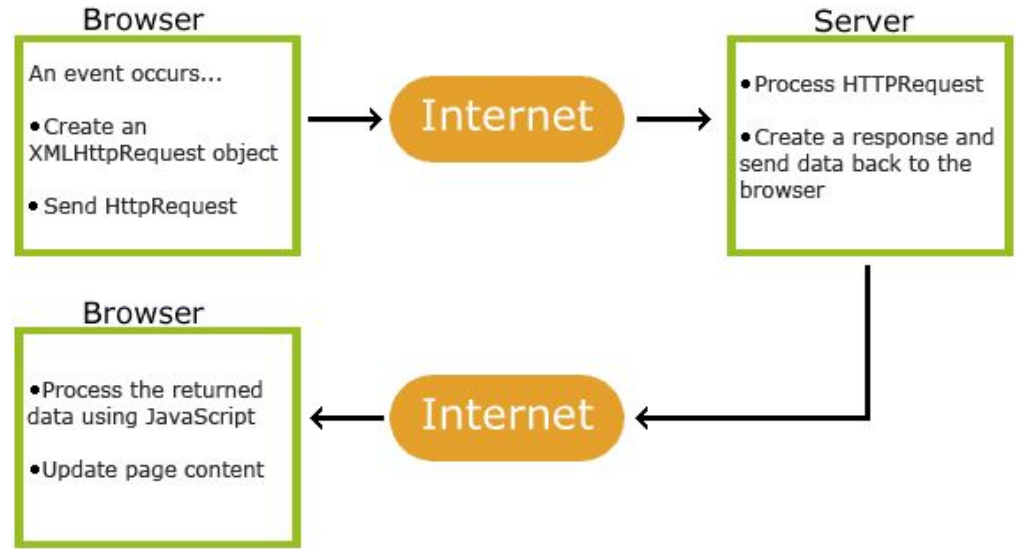
JSON

- JavaScript Object Notation
 - Very similar to objects in JavaScript
- A popular way of sending data

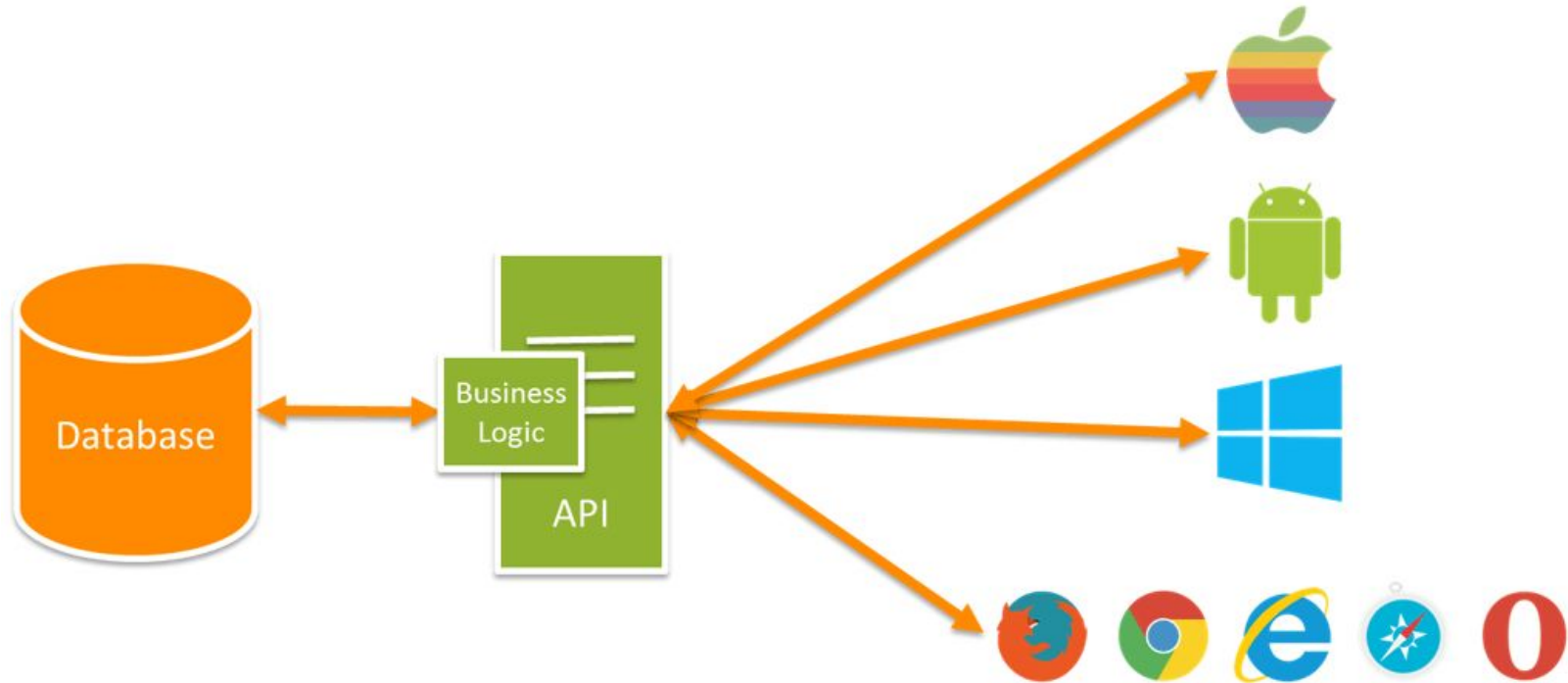
```
{
  "orders": [
    {
      "orderno": "748745375",
      "date": "June 30, 2088 1:54:23 AM",
      "trackingno": "TN0039291",
      "custid": "11045",
      "customer": [
        {
          "custid": "11045",
          "fname": "Sue",
          "lname": "Hatfield",
          "address": "1409 Silver Street",
          "city": "Ashland",
          "state": "NE",
          "zip": "68003"
        }
      ]
    }
  ]
}
```

AJAX

- Asynchronous JavaScript And XML
 - A way of creating asynchronous web applications



How does it all connect ?



What We're Building

bit.ly/tf-git-classroom

Random Quote Machine

WARNING: These quotes are awesome

Notice that the stiffest tree is most easily cracked, while the bamboo or willow survives by bending with the wind.

- Bruce Lee

“ Get Quote

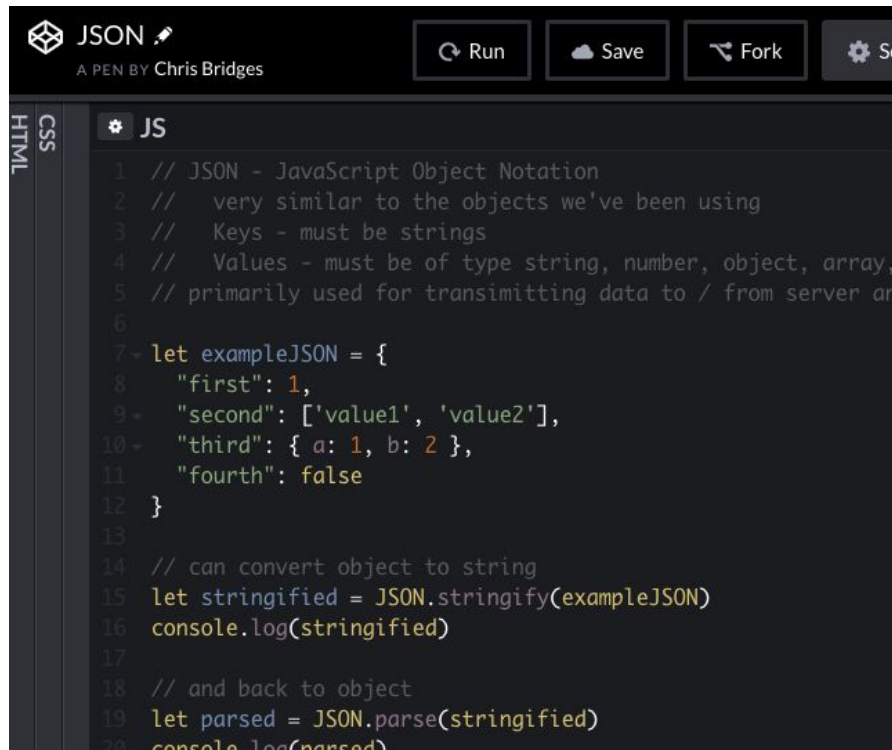
🐦 Share Quote

Summary

- API
- Restful
- CRUD
- Endpoints
- JSON
- AJAX

Assignments for tonight

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A screenshot of a code editor interface. At the top, there's a header bar with a logo, the text "JSON", and a subtitle "A PEN BY Chris Bridges". To the right of the header are four buttons: "Run", "Save", "Fork", and "Settings". On the left side, there's a vertical sidebar with tabs for "HTML", "CSS", and "JS". The "JS" tab is selected. The main area shows JavaScript code for a JSON library. The code includes comments explaining JSON, a function to stringify an object, and a function to parse a stringified JSON back into an object. The code is as follows:

```
1 // JSON - JavaScript Object Notation
2 // very similar to the objects we've been using
3 // Keys - must be strings
4 // Values - must be of type string, number, object, array,
5 // primarily used for transmitting data to / from server and
6
7 let exampleJSON = {
8   "first": 1,
9   "second": ['value1', 'value2'],
10  "third": { a: 1, b: 2 },
11  "fourth": false
12 }
13
14 // can convert object to string
15 let stringified = JSON.stringify(exampleJSON)
16 console.log(stringified)
17
18 // and back to object
19 let parsed = JSON.parse(stringified)
20 console.log(parsed)
```



jquery changing background color



jquery changing **css**

jquery changing **text**

jquery changing **background color**

jquery changing **class**



Ways to learn to code

[w3schools.com](https://www.w3schools.com)



meetup



[codecademy](https://www.codecademy.com)

[freeCodeCamp \(🔥\)](https://www.freecodecamp.org)

Two Week Free Trial

bit.ly/tf-free-ff-trail-replacewithrealone

- Free trial of Full Stack Flex online program
- Start with HTML, CSS & JS
- Personal Program Manager
- Unlimited Q&A Sessions
- Student Slack Community