



# Introduction to Tweet JSON

`"created_by": "Miranda Barrie"`

# What is JSON?

JSON, or JavaScript Object Notation, is a syntax for storing and exchanging data that is easy for humans to read and write. We're going to explore the two structures JSON is built on, **objects** and **arrays**.

# Example of an object

**An object is an unordered set of name-value pairs. Here's how you can spot them:**

1. Objects begin with a left curly brace and end with a right curly brace
2. Each key is followed by a colon
3. Name-value pairs are separated by a comma

# Example of an object

```
{  
  "gender: "female",  
  "age": 17  
  "grade": 12  
}
```

The **object** starts with a left curly brace and ends with a right curly brace.

The first name-value pair **"gender": "female"**, begins with the name, **"gender"** is separated by a colon, has a value of **"female"**, and is separated from the following name-value pair by a comma.

# Example of an array

**An array is an ordered collection of values. Here's how you can spot them:**

1. Arrays begin with a left bracket and end with a right bracket.
2. Each value is separated by a comma

# Example of an array

```
{  
  "gender: "female",  
  "age": 17  
  "grade": 12  
  "classes": ["science", "technology", "engineering", "art", "math"]  
}
```

In the example above, the **array** starts with a left bracket and ends with a right bracket. Each value is separated by a comma.

# Example of a name

Names are simply the attributes for the values they are paired with. Names must be text wrapped in double quotation marks.

# Example of a name

```
{  
  "gender": "female",  
  "age": 17  
  "grade": 12  
  "classes": ["science", "technology", "engineering", "art", "math"]  
}
```

In this example **"gender"**, **"age"**, **"grade"**,  
and **"classes"** are all names.



# Example of a value

In the name-value pairs highlighted in the examples above, values are paired with names. Values can come in multiple formats.

1. Quoted text: `"female"`
2. The unquoted words: `true`, `false`, or `null`
3. An unquoted number: `17`
4. An array wrapped in brackets: `["science", "technology", "engineering", "art", "math"]`
5. Another JSON object wrapped in curly braces

# Tweet JSON

Tweet JSON is based on name-value pairs. Each key is an attribute that is paired with an associated value.

There are a number of fundamental attributes like the time the tweet was created at (`"created_at"`), the unique identifier of the tweet (`"id_str"`), and the actual message (`"text"`) of the tweet.

# Tweet JSON

The Tweet object is considered the 'parent object' to several child objects like the sender of the tweet (`"user"`), and the additional metadata that comes with the contextual content in tweets like links, hashtags, and attached media (`"entities"` and `"extended_entities"`).

# Tweet JSON Example

```
{  
  "created_at": "Thu May 10 15:24:15 +0000 2018",  
  "id_str": "850006245121695744",  
  "text": "Here is the Tweet message.",  
  "user": {  
  },  
  "place": {  
  },  
  "entities": {  
  },  
  "extended_entities": {  
  }  
}
```

# Breaking Down Tweet JSON

`"created_at"`: Time the tweet was created. All tweets are recorded in UTC.

`"id_str"`: Every tweet has a unique identifier. The string representation of the unique identifier.

`"text"`: The actual text of the tweet.

`"user"`: The user who posted the tweet.

# Breaking Down Tweet JSON

**"place"**: Place is not always present. Place indicates that a tweet is associated with a place, but does not necessarily originate from a place.

**"entities"**: Additional metadata that provides contextual information about a Tweet like links, hashtags, and attached media

**"extended\_entities"**: Tweets with photos, videos, and animated GIFs will include an **"extended\_entities"** JSON object

# Tweet Data Dictionary

As you begin to incorporate Twitter data into your research, it is important to consider the full list of Tweet JSON attributes and the significance of their values. A **Tweet Data Dictionary** provided by Twitter is available and is updated as the platform changes.



# Thank You

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