

What is JSON?

JSON stands for JavaScript Object Notation. It is a format used to store and exchange data in a way that is easy for both humans and computers to understand. Think of it like a standardized way of creating a list of items using simple text.

Why Do We Use JSON?

JSON is popular because it is lightweight, easy to read, and easy to write. It's commonly used in web development and application programming to send data between a server and a client (like a web browser).

The Structure of JSON

JSON is made up of two main structures: **objects** and **arrays**.

- **Objects:** These are collections of key/value pairs, where each key is a name and each value is the data. You can think of it like a box that holds different items, where you can find every item by its name.

```
{
  "name": "John",
  "age": 11,
  "hobby": "soccer"
}
```

- **Arrays:** These are ordered lists of values. You can think of it like a list of items where the order matters.

```
[ "apple", "banana", "cherry" ]
```

How to Read JSON

A JSON object starts and ends with curly braces {}, and the key/value pairs are written as "key" : "value". If there are multiple pairs, they are separated by commas. An array starts and ends with square brackets [], and all items inside are separated by commas.

Example of JSON

Here is a JSON example that describes a person:

```
{
  "person": {
    "name": "Emily",
    "age": 11,
    "interests": ["reading", "art", "games"]
  }
}
```

Conclusion

Now you have a basic understanding of JSON! It's a simple yet powerful way to handle data in programming. Remember, this format is used in many applications you use every day, like games and websites!