JSON data class for REST calls

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Abstract

These notes discuss a flexible Javascript JSON data class: JsonContainer.

1   JsonContainer class

This class is designed to be inherited from. Such classes are common and similar or almost identical classes can be found all over.

```
class JsonContainer {
    constructor(data = {}) {
        this.setData(data);
    }

    setData(data) {
        if (typeof data !== "object" || data === null) {
            throw new Error("Data must be a valid JSON object");
        }
        this._data = { ...data }; // Clone
    }

    getData() {
        return { ...this._data };
    }

    getField(key, defaultValue = null) {
        return this._data.hasOwnProperty(key)
                ? this._data[key] : defaultValue;
```

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```
20        }
21
22        setField(key, value) {
23            this._data[key] = value;
24        }
25
26        hasField(key) {
27            return this._data.hasOwnProperty(key);
28        }
29
30        toJson() {
31            return JSON.stringify(this._data, null, 2);
32        }
33 }
```

Listing 1: JsonContainer class

```
1  const apiResponse = {
2      id: 123,
3      name: "Sample Data",
4      attributes: {
5          color: "red",
6          size: "large"
7      }
8  };
9
10 // Initialize container
11 const container = new JsonContainer(apiResponse);
12
13 console.log(container.getField("name"));
14 console.log(container.getField("unknown", "Default Value"));
15
16 container.setField("status", "active");
17 console.log(container.getData());
18
19 // Merge additional data
20 container.mergeData({ price: 99.99, available: true });
21
22 console.log(container.toJson());
```

Listing 2: JsonContainer example

Listing 2 shows a basic implementation of this the class JsonContainer.

2 Notes

ES6 (ECMAScript 6) is ECMAScript 2015.
React is based on ES6.

References

[1] https://tc39.es/ecma262/