Lodash

huy.do@htklabs.com

Agenda

- Introduction
- Installation
- Common functions
- Notes

Introduction

- A modern JavaScript utility library delivering <u>modularity</u>, performance, & <u>extras</u>.
- Current version v4.0.0
- Pure Javascript
- Environment: Browser & NodeJS
- Tested in Chrome 46-47, Firefox 42-43, IE 9-11, Edge 13, Safari 8-9, Node.js
 0.10.x, 0.12.x, 4.x, & 5.x, & PhantomJS 1.9.8.



Installation

Browser

<script src="https://cdnjs.cloudflare.com/ajax/libs/lodash.js/4.0.0/lodash.min.js" />

• npm

npm i lodash

Bower

bower install lodash

Usage

Nodejs

```
var _ = require('lodash');
```

Browser

```
Using global variable
```

 Many functions belong to categories

- Array
- Collection
- Date
- Function
- Lang
- Math
- Number
- Object
- Seq
- String
- Util

1. Validate data type

```
_.isArray
_.isBoolean
.isDate
_.isEmpty
_.isFunction
_.isInteger
_.isNaN
.isNil
_.isNull
_.isNumber
_.isObject
_.isString
.isUndefined
```

```
_.isArray([1, 2, 3]);
// \rightarrow true
_.isBoolean(false);
// → true
_.isBoolean(null);
// \rightarrow false
.isNumber('3');
// \rightarrow false
_.isObject({});
// \rightarrow true
```

2. Comparison

```
_.isEqual
_.isEqualWith
_.isMatch
_.isMatchWith
_.lt
_.lte
_.eq
_.gt
_.gte
```

```
var object = { 'user': 'fred' };
var other = { 'user': 'fred' };
_.eq(object, object);
// \rightarrow \text{true}
_.eq(object, other);
// \rightarrow false
_.isEqual(object, other);
// \rightarrow \text{true}
var object = { 'user': 'fred', 'age': 40 };
_.isMatch(object, { 'age': 40 });
// \rightarrow \text{true}
```

3. Searching

```
_.findIndex
_.findLastIndex
_.indexOf
_.lastIndexOf
_.last
_.find
_.findLast
_.first → head
```

```
var users = [
  { 'user': 'barney', 'age': 36, 'active': true },
  { 'user': 'fred', 'age': 40, 'active': false },
  { 'user': 'pebbles', 'age': 1, 'active': true }
];
_.find(users, function(o) { return o.age < 40; });</pre>
// → object for 'barney'
```

4. Filter

```
_.filter
_.map
_.reduce
_.reject
_.without
_.max
_.maxBy
_.min
_.minBy
```

```
var users = [
  { 'user': 'barney', 'age': 36, 'active': true },
 { 'user': 'fred', 'age': 40, 'active': false }
];
_.filter(users, function(o) { return !o.active; });
// → objects for ['fred']
function square(n) {
 return n * n;
_.map([4, 8], square);
// \rightarrow [16, 64]
```

5. Optimize array

```
_.union _.unionBy _.unionWith
uniq _.uniqBy _.uniqWith
.difference
.differenceBy
.differenceWith
_.xor
_.xorBy
_.xorWith
_.zip
_.zipObject
_.zipWith
```

```
_.uniq([2, 1, 2]);
// \rightarrow [2, 1]
_.union([2, 1], [4, 2], [1, 2]);
// \rightarrow [2, 1, 4]
_.difference([3, 2, 1], [4, 2]);
// \to [3, 1]
```

6. Utils

```
_.clone
_.cloneDeep
_.cloneDeepWith
_.cloneWith
_.delay
_.after
```

```
var objects = [{ 'a': 1 }, { 'b': 2 }];
var shallow = _.clone(objects);
console.log(shallow[0] === objects[0]);
// \rightarrow \text{true}
var objects = [{ 'a': 1 }, { 'b': 2 }];
var deep = _.cloneDeep(objects);
console.log(deep[0] === objects[0]);
// \rightarrow false
```

6. Utils

```
_.delay
_.after
_.before
```

```
var saves = ['profile', 'settings'];
var done = _.after(saves.length, function() {
  console.log('done saving!');
});
_.forEach(saves, function(type) {
  asyncSave({ 'type': type, 'complete': done });
});
// 	o logs 'done saving!' after the two async saves have completed
```

Notes

- Find suitable function first
- Almost functions are sync
- Be careful with return (new object or modified object)
- Almost lodash functions are implemented on ES6

Ref:

- https://jsbin.com/
- https://jsfiddle.net/

Q&A

Thanks for your listening!