

Chapter 52: Data Manipulation

Section 52.1: Format numbers as money

Fast and short way to format value of type Number as money, e.g. `1234567.89` => `"1,234,567.89"`:

```
var num = 1234567.89,
    formatted;

formatted = num.toFixed(2).replace(/\d(?=(\d{3})+\d+)/g, '$&,'); // "1,234,567.89"
```

More advanced variant with support of any number of decimals [`0` .. `n`], variable size of number groups [`0` .. `x`] and different delimiter types:

```
/**
 * Number.prototype.format(n, x, s, c)
 *
 * @param integer n: length of decimal
 * @param integer x: length of whole part
 * @param mixed s: sections delimiter
 * @param mixed c: decimal delimiter
 */
Number.prototype.format = function(n, x, s, c) {
    var re = '\\d(?=(\\d{' + (x || 3) + '})+' + (n > 0 ? '\\D' : '$') + ')+',
        num = this.toFixed(Math.max(0, ~~n));

    return (c ? num.replace('.', c) : num).replace(new RegExp(re, 'g'), '$&' + (s || ','));
};

12345678.9.format(2, 3, '.', ','); // "12.345.678,90"
123456.789.format(4, 4, ' ', ':'); // "12 3456:7890"
12345678.9.format(0, 3, '-'); // "12-345-679"
123456789..format(2); // "123,456,789.00"
```

Section 52.2: Extract extension from file name

Fast and short way to extract extension from file name in JavaScript will be:

```
function get_extension(filename) {
    return filename.slice((filename.lastIndexOf('.') - 1 >>> 0) + 2);
}
```

It works correctly both with names having no extension (e.g. `myfile`) or starting with `.` dot (e.g. `.htaccess`):

```
get_extension('') // ""
get_extension('name') // ""
get_extension('name.txt') // "txt"
get_extension('.htpasswd') // ""
get_extension('name.with.many.dots.myext') // "myext"
```

The following solution may extract file extensions from full path:

```
function get_extension(path) {
    var basename = path.split(/[\\\/]/).pop(), // extract file name from full path ...
                                                // (supports `\\` and `/` separators)
        pos = basename.lastIndexOf('.'); // get last position of `.`
}
```

```

    if (basename === '' || pos < 1)           // if file name is empty or ...
        return "";                          // `.` not found (-1) or comes first (0)

    return basename.slice(pos + 1);          // extract extension ignoring `.`
}

get_extension('/path/to/file.ext'); // "ext"

```

Section 52.3: Set object property given its string name

```

function assign(obj, prop, value) {
    if (typeof prop === 'string')
        prop = prop.split('.');

    if (prop.length > 1) {
        var e = prop.shift();
        assign(obj[e] =
            Object.prototype.toString.call(obj[e]) === '[object Object]'
            ? obj[e]
            : {},
            prop,
            value);
    } else
        obj[prop[0]] = value;
}

var obj = {},
    propName = 'foo.bar.foobar';

assign(obj, propName, 'Value');

// obj == {
//   foo : {
//     bar : {
//       foobar : 'Value'
//     }
//   }
// }

```