

Toodledo: Date Formatter

This document describes a javascript utility to parse user entered dates into a machine readable format. The user is given a text input into which they can type a date. We need to interpret a wide variety of user inputs and normalize it into a unix timestamp that can be stored in the database.

You will need to write a javascript function that accepts a string and returns an integer.

```
function parseDateString(string) {  
    ...  
    return time; //unix timestamp: seconds since 1970  
}  
  
or  
  
var date = new myDate(string);  
var time = myDate.time();
```

I know that there are some 3rd party libraries that may do most of this already, so check those out. You may use 3rd party libraries as long as they have a license that permits commercial use without a license or restrictions. You may format your code however you want. Object oriented design is encouraged.

Functionality

I would like to match the capability of PHP's `strtotime` as much as possible.

<http://www.php.net/manual/en/datetime.formats.relative.php>

<http://www.php.net/manual/en/datetime.formats.date.php>

At a minimum, the following strings should be recognized:

- 1) Tom, tomorrow, tod, today, yest, yesterday, now
- 2) +1 day, -1 day
- 3) +1 week, -1 week
- 4) +1 month, -1 month
- 5) +1 year, -1 year
- 6) next Monday/Mon
- 7) next week
- 8) next month
- 9) next year
- 10) Jan 1

- 11) Jan first
- 12) Jan 1st
- 13) January 1
- 14) Jan 1, 2013
- 15) Jan 1, '13
- 16) January 1, 2013
- 17) January 1, '13
- 18) 1/10, 1.10, 1-10
- 19) 1/10/13, 1.10.13, 1-10-13
- 20) 1/10/2013, 1.10.2013, 1-10-2013
- 21) 2013-10-01
- 22) last day of dec
- 23) last day of December
- 24) first of march
- 25) 1st of march
- 26) in 2 days/weeks/months/years/d/w/m/y/mon/yr/yrs
- 27) 2 days/weeks/months/years/d/w/m/y/mon/yr/yrs ago
- 28) first/last/1st/2nd/3rd/4th mon/monday of July 2013

It should recognize the user's locality and use that to determine how certain dates are entered. For example, in this country 1/10 would mean January 10th. In Europe the same string means October 1st. This is because of the difference between m/d/y and d/m/y date formatting.

Entering a date without specifying the year ("Jan 4") should always default to the future and not a date in the current year that is in the past.

Testing

You should create unit tests to easily test your code. If you can, use jsTestDriver (<http://code.google.com/p/js-test-driver/>) to test your code across all the major browsers. It should work in the latest version of Chrome, Safari, Firefox, Opera and IE as well as IE8 and IE9. Mac and PC.

Project Requirements

The project will use Github to manage the code repository.

You will need to keep track of your hours worked on the project. Please round up or down to the nearest 15 minutes.