
MenuOptions Documentation

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CHAPTER 1

MenuOptions was created for one reason:

To reduce - *to an absolute minimum* - the # of keystrokes and clicks required for data entry & navigation.

CHAPTER 2

What it looks like:

Features:

- Input masking
- multi-column autocomplete
- menu system based on JSON
- rocker control
- auto-configuration

Other benefits:

- uses color highlighting to show autocomplete matches
- mouseover filtering to reduce choices
- it can utilize data from a variety of JSON types (array, array of arrays, single object, array of objects)
- the value associated with with the label string is saved in the input element automatically (in the `menu_opt_key` - no need to manually update a hidden field)

CHAPTER 3

Prerequisites:

- jQuery version ≥ 1.9
- jQuery ui version ≥ 1.10
- download `MenuOptions` from git
- download `MenuOptions` from npm

See the live examples

at MenuOptions.org

Contents:

4.1 Quick start instructions

4.1.1 Installation

```
npm install menuoptions
  -- or --
git clone https://github.com/compsult/MenuOptions.git
```

The important part of the installation is under *dist*

Here are the 6 files needed for MenuOptions. Note: this is a subset of the directory tree

```
├── css
│   └── menuoptions.min.css
├── imgs
│   ├── greencheck.png
│   ├── red_x.png
│   ├── rocker.png
│   └── ui-bg_glass_75_dadada_1x400.png
└── js
    └── jquery.menuoptions.min.js
```

You can use any directory name for the javascript and css files but the images directory needs to be called *imgs* (it's referenced in the menuoptions.css file). You can get around this restriction by editing menuoptions.css to use your directory name.

4.1.2 Quick start to create an input mask

Below are examples of using the currently available input masks

```
$('#input#MdYtest').menuoptions({
  "ClearBtn": true,
  "Mask": "Mon DD, YYYY"
});
$('#input#YMDtest').menuoptions({
  "ClearBtn": true,
  "Mask": "YYYYMMDD"
});
$('#input#Phonetest').menuoptions({
  "ClearBtn": true,
  "Mask": "(999) 999-9999"
});
$('#input#Timetest').menuoptions({
  "ClearBtn": true,
  "Mask": "HH:MM AM"
});
```

4.1.3 Quick start to create menu

see [Quick start menu demo](#)

Pass in a array of objects in the format:

```
{ <textToDisplay> : <href link|javascript> }
```

to MenuOptions to create a simple drop down menu.

The example below has 2 URLs and a javascript command.

```
var Data = [ {"javascript": function() { alert('Run some javascript'); }},
             {"Google": "http://www.google.com"},
             {"Yahoo": "http://www.yahoo.com"}];

$('#button[id$="menutest"]').menuoptions({
  "Data": Data;
  "MenuOptionsType": "Navigate", // Navigate is for menus
});
```

4.1.4 Quick start to create select drop down

see [Quick start select demo](#)

You can create a select drop down with a simple array:

```
var Data = [ "January", "February", "March", "April", "May", "June", "July",
             "August", "September", "October", "November", "December" ];

$('#input#selecttest').menuoptions({
  "Data": Data
});
```

4.2 Masks

4.2.1 How pre-defined masks work

Note : [User defined masks](#) work slightly differently than [pre-defined masks](#) masks

1. Each key stroke is evaluated.
2. If the key stroke is valid, the standard mask will be shown.
3. If the key stroke is invalid, allowable values will be shown.
4. For fixed length masks, a green check will appear when the input is both valid and complete.

See [masks demo here](#)

4.2.2 Mask key specifications

Help

You can specify one of three positions to show help (and error) messages

Notes:

1. the default is 'right' (the other options are 'top' and 'bottom')

```

$('input#YMDtest').menuoptions({
  "onSelect": function(mo, data) {
    console.log(mo, data.newVal, data.newCode, data.type );
  },
  "ClearBtn": true,
  "Help": 'bottom', // or 'top' or 'right'
  "Mask": "YYYYMMDD"
});

```

4.2.3 User defined Masks

Requirements for user defined masks

1. **“Mask” must be an object** (not a string, as in pre-defined masks)
2. **“Mask” object must contain the ‘Whole’ key** which specifies the use defined RegExp

Notes:

1. You do not get the character by character validation (and therefore, the character specific error messages) with user defined masks.
2. If you use FixedLen with a user defined masks, it is helpful to make the ‘HelpMsg’ message be that exact length. This will make the progress highlighting behave as intended (i.e., showing the user how many valid characters were entered and how many need to be entered to fulfill the ‘FixedLen’ requirement).

Example

```
$('#input#DrName2').menuoptions({
  "ClearBtn": true,
  "Help": 'bottom',
  "Mask": {
    Whole : '^[ A-Za-z0-9\-\.,]*$',
    HelpMsg : "Doctor Name"
  },
  "Justify": 'left'
});
```

Whole (required)

This is the RegEx that matches the input and signifies that the input is completed (the one exception is if the FixedLen is defined - in that case, the input is not complete until the FixedLen character count is reached)

HelpMsg (optional)

When using a User Defined masks, you can specify the Help message text to display while user is inputting data into the input element.

FixedLen (optional)

When using a User Defined masks, you can specify a FixedLen. To pass validation, the input string must be this exact length.

4.2.4 Pre-defined masks

YYYYMMDD

```
"Mask": "YYYYMMDD"
```

Mon DD, YYYY

```
"Mask": "Mon DD, YYYY"
```

USphone

Note: the “Phone” mask saves the phone number as numbers (formatting is stripped) in the `menu_opt_key`

```
"Mask": "USphone"
```

HH:MM AM

```
"Mask": "HH:MM AM"
```


Money

Note: the “Money” mask saves the amount as a float in the `menu_opt_key`

```
"Mask": "Money"
```

See masks demo

4.3 Parameters specifications for menus



Show me the menu demo

4.3.1 Parameter list for menus

Table 4.1: Paramters for Menus

Parameter	Type	Allowable Values	Default	Required
<i>BootMenuOfs</i>	integer	positive integer	125	false
<i>ColumnCount</i>	integer	positive integer	1	false
<i>Data</i>	JSON object	array, object or array of objects	none	true
<i>Filters</i>	array of objects	{'str': 'str'} or {'str': 'RegExp'}	none	false
<i>MenuOptionsType</i>	string	'Select' or 'Navigate'	'Select'	false
<i>ShowAt</i>	string	'Bottom' or 'Right'	'Bottom'	false
<i>ShowDownArrow</i>	string	'None' or '<color>'	'black'	false
<i>Sort</i>	array of strings	['alpha' 'num', 'desc' 'asc']	['alpha', 'asc']	false
<i>Width</i>	integer	positive integer	width of parent	false
<i>Window</i>	string	'repl' or 'new'	repl	false

4.3.2 Parameters explained for menus

BootMenuOfs

options: **positive integer**

BootMenuOfs is useful to control where the menu appears when you have a [Bootstrap navbar menu](#) that has been expanded from a collapsed state. This allows control of how far from the left that the menu will appear

```
'BootMenuOfs': 150,
```

ColumnCount

options: **positive integer**

MenuOptions defaults to a single column. To show have more than one column, use the *ColumnCount* parameter.

Data

options: {}, or [{}, {}, ...]

MenuOptions menus accept the following in *Data*

1. **a single multikey object** { 1:"Jan", 2:"Feb",... }
2. **an array of single key objects** single key [{1:"Jan"},{2:"Feb"}...]

Filters

options: [{ 'text' : 'text' }, ...] or [{ 'text': 'RegExp' }, ...]

Filters enable mouseover filtering of menu items You can filter by plain text or by regular expression Here is an example of using Filters with a RegExp ([Filters demo](#))

```
'Filters': [ { 'Biz' : '^(CNBC|MarketWatch)' }, { 'Search' : '^(Google|Yahoo)' } ],
```

MenuOptionsType

options: **'Select'** or **'Navigate'** or **'Rocker'**

MenuOptions defaults to "Select". To create a menu drop down, call menuoptions with MenuOptionsType = "Navigate"

```
'MenuOptionsType': 'Navigate'
```

ShowAt

options: **'bottom'** or **'right'**

MenuOptions accepts a string to tell it where to display the menu

```
"Bottom" means that the menu will appear underneath  
"Right" means that the menu will appear to the right
```

ShowDownArrow

options: **None or <color>**

ShowDownArrow defaults to “black”, meaning a down arrow will automatically be appended to the end of a menu drop down in the color black. Set ShowDownArrow to “None” if you would rather not see this arrow. Set ShowDownArrow to “silver” if you would like the arrow color to be silver.

```
'ShowDownArrow': 'silver'
```

Sort

options: [**'alpha' or 'num', 'desc' or 'asc'**]

Setting the property to an empty array will cause a Data array (or array of objects) to be displayed in the original order. With no sort, a single object will be displayed in random order.

Width

options: **positive integer**

MenuOptions will try to match the width of the parent element (it may be wider if the contents cannot fit). The Width parameter allows the user to override the default width.

Window

options: **“repl” or “new”**

When a menu item is clicked, you can opt to have a new browser window open by using the “new” option. The default will be to replace the current URL with the one that was just clicked.

```
'Window': 'new'
```

4.4 Parameters specifications for multi-column autocomplete

(press enter to select 1st choice in list)



Show me the multi-column autocomplete demo

4.4.1 Parameter list for multi-column autocomplete

Table 4.2: Parameters for multi-column autocomplete

Parameter	Type	Allowable Values	Default	Required
<i>ClearBtn</i>	boolean	true or false	true	false
<i>ColumnCount</i>	integer	positive integer	1	false
<i>Data</i>	JSON object	(see Data section)	none	true
<i>DataKeyNames</i>	object	(see DataKeyNames section)	none	false
<i>Disabled</i>	boolean	true or false	false	false
<i>DisableHiLiting</i>	boolean	true or false	false	false
<i>Filters</i>	array of objects	{ 'str': 'str' } or { 'str': 'RegExp' }	none	false
<i>Height</i>	integer	positive integer	height of dropdown	false
<i>Help</i>	string	'right' 'top' 'bottom'	'right'	false
<i>InitialValue</i>	object	{ 'ky' 'val': <value> }	{ }	false
<i>Justify</i>	string	'right' 'left' 'center'	left	false
<i>MenuOptionsType</i>	string	'Select' 'Navigate' 'Rocker'	'Select'	false
<i>onSelect</i>	function	function()	none	false
<i>PlaceHolder</i>	<deleted>	<as of v1.6.1>	–	–
<i>SelectOnly</i>	boolean	true or false	false	false
<i>ShowAt</i>	string	'Bottom' or 'Right'	'Bottom'	false
<i>Sort</i>	array of strings	['alpha' 'num', 'desc' 'asc']	['alpha', 'asc']	false
<i>TriggerEvent</i>	<deleted>	<as of v1.5.1>	–	–
<i>UseValueForKey</i>	boolean	true or false	false	false
<i>Width</i>	integer	positive integer	width of dropdown	false

4.4.2 Parameters explained for MenuOption multi-column autocomplete

ClearBtn

options: **true or false**

ClearBtn instructs MenuOptions to place a clear button on the right side of the <input> element. It will clear that <input> element when clicked and cause the drop down list to appear.

ColumnCount

options: **positive integer**

MenuOptions defaults to a single column. To show have more than one column, use the ColumnCount parameter.

Data

options: [] or [[], [], ...], {} or [{}, {}, ...]

MenuOptions accepts the following in *Data*

1. **an array** ["Jan", "Feb", "Mar" ...]

2. **an array of arrays** `[["Jan","Feb","Mar"],["Apr","Jun","Jul"]...]`
3. **a single multikey object** `{ 1:"Jan", 2:"Feb",... }`
4. **an array of multikey or single key objects**
 - (a) single key `[{1:"Jan"},{2:"Feb"}...]`
 - (b) multikey `[{1:"Jan",2:"Feb"},{3:"Mar", 4:"Apr"}...]`
5. **an array of multikey objects where keys are specified and extracted** (see [DataKeyNames](#))

Notes:

1. Use arrays when you want the `menu_opt_key` to equal the displayed text, e.g., when using US State abbreviations. So the display would be 'AL' (for Alabama) and 'AL' would be stored in the `menu_opt_key`
2. Use objects when you want to save a code in `menu_opt_key`. For example, if you want to display 'January' but save the code 1 in the `menu_opt_key` (and later save that code in a database or other persistent storage).

DataKeyNames

options: { "key": <key name>, "value": <value name> }

`DataKeyNames` allows you to utilize `Data` that has extra, unneeded data, only picking out the key and value fields that you specify.

Below is the code used in [Quick start multi-column autocomplete](#)

```
var data = [{"mon_num":1, "mon_name":"January", "junk_key":"junk_val"},
            {"mon_num":2, "mon_name":"February", "junk_key":"junk_val"},
            {"mon_num":3, "mon_name":"March", "junk_key":"junk_val"},
            {"mon_num":4, "mon_name":"April", "junk_key":"junk_val"},
            {"mon_num":5, "mon_name":"May", "junk_key":"junk_val"},
            {"mon_num":6, "mon_name":"June", "junk_key":"junk_val"},
            {"mon_num":7, "mon_name":"July", "junk_key":"junk_val"},
            {"mon_num":8, "mon_name":"August", "junk_key":"junk_val"},
            {"mon_num":9, "mon_name":"September", "junk_key":"junk_val"},
            {"mon_num":10, "mon_name":"October", "junk_key":"junk_val"},
            {"mon_num":11, "mon_name":"November", "junk_key":"junk_val"},
            {"mon_num":12, "mon_name":"December", "junk_key":"junk_val"}];
$('#input#selecttest').menuoptions({
  "Data": data,
  "onSelect": function(mo, data) {
    console.log(mo, data.newVal, data.newCode, data.type );
  },
  "DataKeyNames" : { "key": "mon_num", "value": "mon_name" },
  "ClearBtn": true,
  "InitialValue": { 'val': 'December' },
  "ShowAt": 'bottom',
  "Sort": []
});
$('#input#scrolltest').menuoptions({
```

Notes:

1. `DataKeyNames` requires that `Data` be an array of objects [{}, {}, ...]

Disabled

options: **true or false**

default: **false**

Setting Disabled to true will make the MenuOptions control disabled.

Setting Disabled to false will make the MenuOptions control enabled.

Note:

1. Setting Disabled to true will disable the parent <div> of the MenuOptions control. If you placed another element in that same <div>, it will be disabled as well. To get around this, put the other element outside the <div> containing the MenuOptions control.

DisableHiLiting

options: **true or false**

default: **false**

There are 3 conditions that will cause the background of an MenuOptions input element to change to pink (indicating incomplete or error).

1. the user types in an invalid character (i.e., a character not in the multi-column autocomplete).
2. when leaving the MenuOptions input element (blur event) and the value is incomplete.
3. when using setting the initial value (using `InitialValue`) and that initial value is invalid

Set to *true* to disable this feature.

Filters

options: [{ 'text' : 'text' }, ...] or [{ 'text': 'RegExp' }, ...]

Filters enable mouseover filtering of multi-column autocomplete items. You can filter by plain text or by regular expression ([Example of using Filters with a RegExp](#))

```
'Filters': [ { 'Biz' : '^ (CNBC|MarketWatch) ' }, { 'Search' : '^ (Google|Yahoo) ' } ],
```

Height

options: **positive integer**

MenuOptions will default to the actual height of the multi-column autocomplete list. Using the Height parameter is useful to get the exact height you want for your application. It is also useful for large lists, since it will create a vertical scroll bar. ([Example of using Height to create a vertical scroll bar](#))

```
'Height': 200
```

Help

You can specify one of three positions to show help (and error) messages

Notes:

1. the default is 'right' (the other options are 'top' and 'bottom')

```
$( 'input#YMDtest' ).menuoptions({
  "onSelect": function(mo, data) {
    console.log(mo, data.newVal, data.newCode, data.type );
  },
  "ClearBtn": true,
  "Help": 'bottom' // or 'top' or 'right'
});
```

InitialValue

options: { 'ky' or 'val' : <value> }

You can use InitialValue to set (or reset) an initial value.

Note: you can use this to set the initial value (visible on the screen) or to set the key (the `menu_opt_key`) or both key and value. (see a [demo that uses InitialValue](#))

These examples show using both forms of *InitialValue*

```
'InitialValue': { 'val':'Sicilian' },
'InitialValue': { 'ky': 1 },
```

Note: *InitialValue* can only be used at initialization time.

To reset the value after that time, use `set_select_value`

Justify

options: `left|right|center`

This will justify the text in the input element

```
"Justify": 'right',
```

MenuOptionsType

options: 'Select' or 'Navigate' or 'Rocker'

MenuOptions defaults to "Select". To create a menu drop down, call menuoptions with MenuOptionsType = "Navigate". To create a Rocker control, call menuoptions with MenuOptionsType = "Rocker"

```
'MenuOptionsType': 'Navigate'
```

onSelect

options: `function(<MenuOptions instance>, data)`

When user selects an option, either by clicking or by pressing enter while in the text box, this function will be executed

data has 3 values

1. newVal (the new value that was selected)

2. `newCode` (the code that corresponds to new value that was selected)
3. `type` (this tells you if the selection was made by “Click”, “EnterKey” or “RockerClick”)

```
"onSelect": function(mo, data) {
  if ( data.type == "EnterKey" ) {
    $("form#tst").submit();
  }
  console.log(mo, data.newVal, data.newCode, data.type );
},
```

Placeholder

<deleted> as of version 1.6.1

Due to the whimsical nature of IE, (triggering an input event when placeholder is changed), this feature was removed

SelectOnly

options: **true or false**

This makes the <input> element read-only, i.e., data can only be entered by clicking a multi-column autocomplete item (note: this prevents the use of autocomplete).

ShowAt

options: **'bottom' or 'right'**

MenuOptions accepts a string to tell it where to display the multi-column autocomplete items

```
"Bottom" means that the multi-column autocomplete list will appear underneath
"Right" means that the multi-column autocomplete list will appear to the
↳right
```

Sort

options: **['alpha' or 'num', 'desc' or 'asc']**

Setting the property to an empty array will cause a Data array (or array of objects) to be displayed in the original order. With no sort, a single object will be displayed in random order.

UseValueForKey

options: **true or false**

UseValueForKey = true means that the visible option will be the same as the `menu_opt_key`. So if the visible option were “CA”, the html built would look like:

```
<td menu_opt_key="CA">"CA"</td>.
```


Width

options: **positive integer**

MenuOptions will try to match the width of the parent element (it may be wider if the contents cannot fit). The Width parameter allows the user to override the default width.

4.5 User methods

(Click here to see demo that resets MenuOptions options & resets a MenuOptions input field)

4.5.1 `add_menuoption_key` [*deprecated*]

Alternative to `add_menuoption_key`

A call to MenuOptions with no parameters will *auto-configure*

Explanation:

if there is a **key** (a code representing the value) in the input field it will be replaced with the **value** (the text the user should see) and the `menu_opt_key` will be set to the **key**. Alternatively, if there is a **value** in the input field it will be left as is and the `menu_opt_key` will be set to the key

```
$('#input#delivery').menuoptions();
```

Useful for when a **value** is pasted into a select list field, `add_menuoption_key` will set the `menu_opt_key`, based on the text visible in the input field. So, for example, the user pasted “January” in the month field, calling `add_menuoption_key` will cause the month code to be placed in the `menu_opt_key` field.

Usage:

```
$(<selector>).menuoptions('add_menuoption_key');
```

This example shows using `add_menuoption_key`

```
$('#input#delivery').menuoptions('add_menuoption_key');
```

4.5.2 `set_select_value` [*deprecated*]

(Use this method instead)

allows the select list field to be set programmatically. Pass in an object with either ‘ky’ or ‘val’ as the key and the actual value.

Usage:

```
$(<selector>).menuoptions('set_select_value', { 'ky'|'val': <value>});
```

These examples show using both forms of `set_select_value`

```
$('#input#delivery').menuoptions('set_select_value', { 'val': 'Delivered' });
$('#input#crust').menuoptions('set_select_value', { 'ky': '3' }); // Thick
```

Note: to clear out a Rocker control (reset), set the ‘val’ to ‘’ (empty string).

```
$('#input#delivery').menuoptions('set_select_value', {'val': ''});
```

4.5.3 call MenuOptions with no parameters (*replaces set_select_value*)

```
// ---- Step #1 ----  
// set the input contents using the value  
$('#input#delivery').val('pickup');  
// -- OR --  
// set the input contents using the key  
$('#input#delivery').val('1');  
// ---- Step #2 ----  
// call MenuOptions with no parameters will auto-configure  
$('#input#delivery').menuoptions();  
// -- OR --  
// call MenuOptions with no parameters to auto-configure ALL the MenuOptions widgets_  
→ on page  
$('.ui-menuoptions').menuoptions();
```

4.5.4 refreshData [*deprecated*]

refreshData allows all parameters to be dynamically reset

Usage:

```
$(<selector>).menuoptions('refreshData', { 'option': 'option value', ...});
```

Using refreshData is no longer required to reset MenuOptions parameters.

4.5.5 [resetting MenuOptions data] (*replaces refreshData*)

```
$(<selector>).menuoptions({'option': 'option value', ...});
```

This example shows resetting a select list from input type to Rocker type and removing any previous Sort instructions

```
$('#input#pizzatype').menuoptions({"MenuOptionsType":"Rocker", "Sort": []});
```

This example shows resetting a select list's Data

```
$('#input#delivery').menuoptions({"Data": { 1: "Deliver", 2:"Pick up" } });
```

This example shows resetting a select list's Width

```
$('#input#delivery').menuoptions({'Width' : 100 });
```

This example shows making a select list display to the right (instead of at bottom)

```
$('#input#delivery').menuoptions({"ShowAt" : "right"});
```

This example shows resetting a select list's ColumnCount

```
$('#input#pizzatype').menuoptions({'ColumnCount' : 2 });
```

4.6 Using MenuOptions select with serialize

4.6.1 Pass output of serialize() to re_serialize()

See `re_serialize` demo with documentation

in a call like the one below:

```
$('#input#selecttest').menuoptions('re_serialize', $('#form').serialize());
```

Note:

The selector must be an element that has been initialized with MenuOptions. So in the example above, `$('#input#selecttest')` had to have been used initialized with a MenuOptions call (initialization example below).

```
PayMethod = { 1: "American Express", 2: "Visa", 3: "Mastercard", 4:"Discover", 5:
↪"Check",
              6:"PayPal", 7:"Cash", 8:"Money Order"}

$('#input#selecttest').menuoptions({
  "Data": PayMethod
});
```

4.7 Using dividers in a menu

4.7.1 Rules to use a divider

1. You can only use dividers in a single column menu. In other words, the `ColumnCount` must be set to 1
2. The `Data` must be an object or array of objects
3. The value must be set to 'divider'

```
{ 'Search' : 'divider' }
  ^^^^^^^
```

in a call like the one below:

```
var Menu_w_Dividers =[ { 'Search' : 'divider' },
                       { 'Google' : 'http://www.google.com' },
                       { 'Yahoo' : 'http://www.yahoo.com' },
                       { 'Business' : 'divider' },
                       { 'CNBC' : 'http://www.cnbc.com' },
                       { 'MarketWatch' : 'http://www.MarketWatch.com' } ];

$('#button[id="menu_divs_filt"]').menuoptions({
  'MenuOptionsType': 'Navigate', // this is a menu
  'Data': Menu_w_Dividers, // Data is array of objects
  // 2 mouseover filters using RegExps
  'Filters': [{ 'Biz' : '^ (CNBC|MarketWatch)' }, { 'Search' : '^ (Google|Yahoo)' } ],
  'Sort': [], // don't sort, display in the original order
});
```

See this code in a demo

4.8 Using Filters in a menu or select list

4.8.1 How Filters work

Filters are specified using an array of objects. Each key show what the user will see, each value will be the actual filter that MenuOptions uses to filter out data.

```
{ 'Biz' : '^ (CNBC|MarketWatch) ' }
^^^^  ^^^^^^^^^^^^^^^^^^^^^^^^^^^
user   MenuOptions searches
sees   using this RegExp
this
```

4.8.2 Using a plain text filter

If your **Data** is conforms to a pattern (e.g., times with AM PM), you can create a simple **Filter** like the one below

```
"Filters": [ { 'AM': 'AM' }, { 'PM': 'PM' } ],
```

See simple filter demo

4.8.3 Using a regular expression (RegExp) filter

If your data is more varied, you can use **RegExp Filters**, like the one below:

```
'Filters': [ { 'Biz' : '^ (CNBC|MarketWatch) ' }, { 'Search' : '^ (Google|Yahoo) ' } ],
```

See RegExp demo

4.9 FAQ

4.9.1 How do I reset the options in MenuOptions

see the instructions here

4.9.2 What do you mean auto-configuration?

Auto-configuration means that if you set the input field to either the key or the value, MenuOptions will automatically set the correct `menu_opt_key` and the correct value (what is shown to user). The command below will auto-configure all the MenuOptions widgets on a page:

```
$( 'input.ui-menuoptions' ).menuoptions ();
```

For example:

Assume you are using month name and month code in your **Data** and the code 12 represents the month December. If you set the input field to “December”, MenuOptions will automatically set `menu_opt_key` to the code 12. If you

set the input field to 12, MenuOptions will convert that and display December, while setting the `menu_opt_key` to the code 12.

4.9.3 What is the `menu_opt_key`?

`menu_opt_key` is an attribute of the input field that holds the code that corresponds to the visible text. So, if you input field shows “December” and the code for December is 12, the `menu_opt_key` would be set to 12.

```
<input type="text" name="month1" id="selecttest" menu_opt_key="12" class="ui-
↪menuoptions">
```

4.9.4 When I use `jQuery.empty()`, the widget does not get removed. How do I fix this?

The MenuOptions widget will detect the removal of the element it is applied to. However, calling `jQuery.empty()` does not appear to trigger the remove event ******* so you will likely have to call the `destroy ()` method, for example:

```
$(YourSelector + ' .ui-menuoptions').menuoptions('destroy');
```

4.9.5 I pasted data into a MenuOptions multi-column autocomplete and now have errors when saving

MenuOptions expects that you have either clicked a selection or typed one in and pressed enter. When you paste data into a MenuOptions multi-column autocomplete, just call MenuOptions again with no parameters

```
$(YourSelector + ' input.ui-menuoptions').menuoptions();
```

This will populate the attribute `menu_opt_key` that `re_serialize()` uses to get the value that corresponds with the text the user sees.

4.9.6 How would I reset (clear the data from) all MenuOptions multi-column autocomplete and Rocker controls?

```
$(YourSelector + ' input.ui-menuoptions').val(''); // clear out the values
// clear the menu_opt_key and clear Rocker to show no selection
$(YourSelector + ' input.ui-menuoptions').menuoptions();
```

4.9.7 The clear button (or ‘X’) is not aligned correctly

There are 2 situations where this can happen.

The first is when an input element is added dynamically (using javascript). The clear button is positioned using the `jQuery UI position()` function, which requires that the element be present in the DOM and visible.

The second is when the container that surrounds the input element is being resized, as when a browser draws a table and shrinks the `<TD>` that contains the input element.

There are 2 workarounds for this. The first is to call MenuOptions again (with no parameters) immediately after adding the element or after the layout change.

```
$(YourSelector + ' input.ui-menuoptions').menuoptions();
```

For dynamically added elements, you can wrap the menuoptions call with a setTimeout, like this:

```
setTimeout(function () {
    $('#input#selecttest').menuoptions({
        "Data": { 1:"January",2:"February",3:"March",4:"April",5:"May", 6:"June",7:
↵"July",
                8:"August",9:"September",10:"October",11:"November",12:"December" }
↵,
        "Sort": []
    });
}, 200 );
```

4.9.8 How do I display text and have a hidden value, like the HTML select control?

When creating your MenuOptions select control, pass it an object, like the code below:

```
PayMethod = { 1: "American Express", 2: "Visa", 3: "Mastercard", 4:"Discover", 5:
↵"Check",
             6:"PayPal", 7:"Cash", 8:"Money Order"}

$('#input[name="t"]').menuoptions({ "Data": PayMethod,
                                   "SelectOnly": true,
                                   "ClearBtn": true,
                                   "Placeholder": "Pay Method",
                                   "ColumnCount": 2,
                                   'Width': 225 });
```

For more details, see `re_serialize()`

4.9.9 When I hit enter in a MenuOptions select, it does not submit the form

That's correct. MenuOptions uses the Enter key to select the first dropdown element. If you want to submit the form when a user presses Enter, you can do so in the onSelect option, which returns the MenuOptions instance, newVal, newCode and type (EnterKey|Click|Rocker).

For more details on onSelect see the docs

```
$('#input#selecttest').menuoptions({
    "Data": { 1:"January",2:"February",3:"March",4:"April",5:"May", 6:"June",7:"July",
            8:"August",9:"September",10:"October",11:"November",12:"December" },
    "onSelect": function(mo, data) {
        if ( data.type == "EnterKey" ) {
            $("#form#tst").submit();
        }
    },
    "Sort": [] // don't sort
});
```

This code is in quick start select demo

4.9.10 How can I create a vertical scroll bar for large lists?

Below is an example. Whenever you specify a `Height` that is less than the height of the multi-column autocomplete dropdown, a vertical scroll bar will be created.

```
$( 'input#scrolltest' ).menuoptions({
  "Data": { 1:"January",2:"February",3:"March",4:"April",5:"May", 6:"June",7:"July",
           8:"August",9:"September",10:"October",11:"November",12:"December" },
  "onSelect": function(mo, data) {
    console.log(mo, data.newVal, data.newCode, data.type );
  },
  "InitialValue": { 'val': 'December'},
  "Height": 200,
  "Sort": []
});
```

This code is in [quick start select demo](#)

4.9.11 When I enter certain characters in a MenuOptions multi-column autocomplete they disappear, why?

It only disappears when you enter a character that is not in any of the multi-column autocomplete options

4.9.12 Can I use 'special' characters in a MenuOptions multi-column autocomplete (parens, curly braces)?

Yes

4.9.13 Why do we need another input widget?

MenuOptions was created for one reason. To reduce - *to an absolute minimum* - the # of keystrokes and clicks required for data entry as well as navigation.

Features:

- **Input masking**
 - error messages that explain why the input key is invalid
 - hotkeys - a single key can fill a field (e.g., 't' fills in today's date in date fields)
- **Multi column autocomplete**
 - intelligent autocomplete (characters not in any multi-column autocomplete item are automatically removed, saving keystrokes)
 - mouseover filtering lets user reduce choices by moving their mouse over a filter element
 - [auto-configuration](#)
- **Rocker control**
 - Binary options (true/false, yes/no, etc) that never hide a choice
- **Menus**

- Built from JSON
- mouseover filtering

Other benefits:

- offers the ability to combine multi column autocomplete and input mask functionality.
- uses color highlighting to show autocomplete matches
- the value associated with with the label string is saved in the input element automatically (in the `menu_opt_key` - no need to manually update a hidden field)
- it can utilize `Data` from a variety of of JSON types (array, array of arrays, single object, array of objects)

4.10 Change Log

4.10.1 1.7.1-3

Changed `RockerControl` from an option to a `MenuOptionsType`

The new format is demonstrated below:

```

$('input#on_off').menuoptions({"Sort": [],
    "Data": { 1: "On", 2:"Off" },
    "MenuOptionsType":"Rocker", // Rocker is now specified here
    "onSelect": function(mo, data) { console.log(data); }
});
    
```

The old format is demonstrated below (will not work in versions > 1.7.1-2):

```

$('input#on_off').menuoptions({"Sort": [],
    "Data": { 1: "On", 2:"Off" },
    "RockerControl": True, // this won't work after 1.7.1-2
    "onSelect": function(mo, data) { console.log(data); }
});
    
```

4.10.2 1.7.1-7

Path to static files has changed:

Table 4.3: New path for static files

Old path	New path
media/javascript	media/js
media/style	media/css
media/images	media/imgs

ShowDownArrow is no longer true or false

`ShowDownArrow` defaults to color black and allows that color to be overridden with any color you pass in. You can also pass in the “None” keyword, indicating that no arrow will be added to the menu header element.

The old format will now default to a black arrow being added to the menu header element.


```

$('button[id$="menutest"]').menuoptions({
  "Data": [ {"javascript": function() { alert('Some javascript was run'); } },
            {"Google": "http://www.google.com"},
            {"Yahoo": "http://www.yahoo.com"}],
  "MenuOptionsType": "Navigate",
});

```

The new format (below), where arrow color is specified

```

$('button[id$="menutest"]').menuoptions({
  "Data": [ {"javascript": function() { alert('Some javascript was run'); } },
            {"Google": "http://www.google.com"},
            {"Yahoo": "http://www.yahoo.com"}],
  "MenuOptionsType": "Navigate",
  "ShowDownArrow": "silver" // color of arrow is now silver, not black
});

```

4.10.3 1.7.3-15

deprecated `refreshData`

Instead, call MenuOptions the same way you would when initializing (code examples here)

4.10.4 1.7.4-7

deprecated `add_menuoption_key`

deprecated `set_select_value`

Added `DataKeyNames`

`DataKeyNames` allows you to utilize `Data` that has extra, unneeded data, only picking out the key and value fields that you specify.

Added data structure tests for menus

4.10.5 1.8.0

refactor source into several js file

add input masking

enable input masking and autocomplete together

CHAPTER 5

Indices and tables

- `genindex`
- `modindex`
- `search`