## daniel-nagy / md-data-table

## Join GitHub today

Dismiss

GitHub is home to over 20 million developers working together to host and review code, manage projects, and build software together.

Sign up

## Material Design Data Table for Angular Material

© 296 commits	<b>پ 4</b> branches	♦ 43 releases	13 contributors	<b>ئ</b> اِّة MIT
Branch: master ▼ New pull rec	quest			Find file Clone or download •
daniel-nagy committed on Jur	27, 2017 Update README.md		Latest (	commit d8627e1 on Jun 27, 2017
арр	map language to limit option	S		2 years ago
dist	Convert mdTableProgress class directive into an attribute directive.			
src	Convert mdTableProgress class	ss directive into an attribute dire	ective.	a year ago
gitignore	adding dist			3 years ago
jshintrc jshintrc	early implementation of md-d	disable-select		3 years ago
CHANGELOG.md	update docs			a year ago
Gruntfile.js	fixing select menu styles for a	ngular material v1.0.4		2 years ago

■ LICENSE.md	Create LICENSE.md	3 years ago
README.md	Update README.md	9 months ago
bower.json	bump version	a year ago
index.js	fixing select menu styles for angular material v1.0.4	2 years ago
package.json	bump version	a year ago

#### **■ README.md**

# Material Design Data Table

This module is an effort to implement Material Design data tables in Angular Material. Data tables are used to present raw data sets and usually appear in desktop enterprise applications. Data tables are particularly useful for visualizing and manipulating large data sets.

Specification for Material Design data tables can be found here.

- License
- Demo
- Installation
- Usage
- Change Log
- API Documentation
- Contributing

## License

This software is provided free of charge and without restriction under the MIT License

## Demo

A live demo.

A fork-able Codepen. Please use this to reproduce any issues you may be experiencing.

## Installation

#### **Using Bower**

This package is installable through the Bower package manager.

```
bower install angular-material-data-table --save
```

In your index.html file, include the data table module and style sheet.

```
<!-- style sheet -->
k href="bower_components/angular-material-data-table/dist/md-data-table.min.css" rel="stylesheet" type="text/css"
<!-- module -->
<script type="text/javascript" src="bower_components/angular-material-data-table/dist/md-data-table.min.js"></script>
```

Include the md.data.table module as a dependency in your application.

```
angular.module('myApp', ['ngMaterial', 'md.data.table']);
```

Using npm and Browserify (or JSPM)

In addition, this package may be installed using npm.

```
npm install angular-material-data-table --save
```

You may use Browserify to inject this module into your application.

```
angular.module('myApp', [require('angular-material-data-table')]);
```

## Usage

#### **Example Controller**

```
// Assume we have a $nutrition service that provides an API for communicating with the server
angular.module('demoApp').controller('sampleController', ['$nutrition', '$scope', function ($nutrition, $scope) {
    'use strict';

    $scope.selected = [];

    $scope.query = {
        order: 'name',
        limit: 5,
        page: 1
    };

    function success(desserts) {
        $scope.desserts = desserts;
    }

    $scope.getDesserts = function () {
        $scope.promise = $nutrition.desserts.get($scope.query, success).$promise;
    };
}
```

### **Example Template**

```
<md-toolbar class="md-table-toolbar md-default">
<div class="md-toolbar-tools">
 <span>Nutrition</span>
</div>
</md-toolbar>
<!-- exact table from live demo -->
<md-table-container>
<thead md-head md-order="query.order" md-on-reorder="getDesserts">
  <span>Calories</span>
   Fat (g)
   Carbs (g)
   Protein (g)
   Sodium (mg)
   Calcium (%)
   Iron (%)
  </thead>
 {{dessert.name}}
   {{dessert.calories.value}}
   {{dessert.fat.value | number: 1}}
   {{dessert.carbs.value}}
   {{dessert.protein.value | number: 1}}
   {{dessert.sodium.value}}
   {{dessert.iron.value}}{{dessert.iron.unit}}
```

## **API** Documentation

#### v0.10.x

- Column Sorting
- Edit Dialogs
- Inline Menus
- Numeric Columns
- Pagination
- Row Selection
- Table Progress
- Table Toolbars

#### **Earlier Versions**

- 0.9.x
- <=0.8.14

Tables are sorted alphabetically by their first column. I will be **camelCasing** attributes in tables (otherwise the cells would wrap and be difficult to read) but don't forget to **kebab-case** them in your template.

## **Column Sorting**

Attribute	Element	Туре	Description
mdDesc	mdColumn	[expression]	If present, the column will sort descending first. The default is to sort ascending first.
mdOnReorder	mdHead	function	A callback function for when the order changes. The callback will receive the new order.
md0rder	mdHead	string	A variable to bind the sort order to.
mdOrderBy	mdColumn	string	The value to bind to the sort order.

When the user clicks the md-column element, the value of the md-order-by attribute will be bound to the variable provided to the md-order attribute on the md-head element. If the column is already sorted by that value, a minus sign - will be prefixed to the value. For most query languages, this is the universal symbol to sort descending.

The variable can be used to send a query to the server or as the orderBy property of an ng-repeat expression.

### **Example Using ngRepeat**

## **Edit Dialogs**

Tables may require basic text editing. This module includes a service for displaying edit dialogs to modify text or anything else really. The service provides presets for both small and large edit dialogs designed for manipulating text. It also has full support for creating custom dialogs so you can be as creative as you want to be.

Unlike Angular Material dialogs, the preset methods will open the dialog.

#### Restrictions

- The dialog will always receive a new isolated scope.
- You must provide a targetEvent and the event target must be a table cell.

#### **Example**

```
$scope.editComment = function (event, dessert) {
  // if auto selection is enabled you will want to stop the event
  // from propagating and selecting the row
  event.stopPropagation();
  /*
   * messages is commented out because there is a bug currently
   * with ngRepeat and ngMessages were the messages are always
   * displayed even if the error property on the ngModelController
   * is not set, I've included it anyway so you get the idea
   */
  var promise = $mdEditDialog.small({
    // messages: {
   // test: 'I don\'t like tests!'
    // },
    modelValue: dessert.comment,
    placeholder: 'Add a comment',
    save: function (input) {
      dessert.comment = input.$modelValue;
```

```
},
targetEvent: event,
validators: {
    'md-maxlength': 30
    }
});

promise.then(function (ctrl) {
    var input = ctrl.getInput();

    input.$viewChangeListeners.push(function () {
        input.$setValidity('test', input.$modelValue !== 'test');
    });
});
});
```

## **Small Edit Dialogs**

\$mdEditDialog.small(options);

Parameter	Туре	Description
options	object	Small preset options.

Property	Туре	Default	Description
clickOutsideToClose	bool	true	The user can dismiss the dialog by clicking anywhere else on the page.
disableScroll	bool	true	Prevent user scroll while the dialog is open.
escToClose	bool	true	The user can dismiss the dialog by clicking the esc key.
focus0n0pen	bool	true	Will search the template for an md-autofocus element.

Property	Туре	Default	Description
messages	object	null	Error messages to display corresponding to errors on the ngModelController .
modelValue	string	null	The initial value of the input element.
placeholder	string	null	Placeholder text for input element.
save	function	null	A callback function for when the use clicks the save button. The callback will receive the ngModelController. The dialog will close unless the callback returns a rejected promise.
targetEvent	event	null	The event object. This must be provided and it must be from a table cell.
type	string	"text"	The value of the type attribute on the input element.
validators	object	null	Optional attributes to be placed on the input element.

The small method will return a promise that will resolve with the controller instance. The controller has two public methods, dismiss which will close the dialog without saving and getInput which will return the ngModelController.

### **Large Edit Dialogs**

Large edit dialogs are functionally identical to small edit dialogs but have a few additional options.

\$mdEditDialog.large(options);

Parameter	Туре	Description
options	object	Large preset options.

Property	Туре	Default	Description
cancel	string	"Cancel"	Text to dismiss the dialog without saving.
clickOutsideToClose	bool	true	The user can dismiss the dialog by clicking anywhere else on the page.
disableScroll	bool	true	Prevent user scroll while the dialog is open.
escToClose	bool	true	The user can dismiss the dialog by clicking the esc key.
focus0n0pen	bool	true	Will search the template for an md-autofocus element.
messages	object	null	Error messages to display corresponding to errors on the ngModelController.
modelValue	string	null	The initial value of the input element.
ok	string	"Save"	Text to submit and dismiss the dialog.
placeholder	string	null	Placeholder text for input element.
save	function	null	A callback function for when the use clicks the save button. The callback will receive the <code>ngModelController</code> . The dialog will close unless the callback returns a rejected promise.
targetEvent	event	null	The event object. This must be provided and it must be from a table cell.
title	string	"Edit"	Dialog title text.
type	string	"text"	The value of the type attribute on the input element.
validators	object	null	Optional attributes to be placed on the input element.

The large method will return a promise that will resolve with the controller instance. The controller has two public methods, dismiss which will close the dialog without saving and getInput which will return the ngModelController.

## **Roll Your Own**

\$mdEditDialog.show(options);

Parameter	Туре	Description
options	object	Dialog options.

Property	Туре	Default	Description
bindToController	bool	false	If true, properties on the provided scope object will be bound to the controller
clickOutsideToClose	bool	true	The user can dismiss the dialog by clicking anywhere else on the page.
controller	function string	null	Either a constructor function or a string register with the \$controller service. The controller will be automatically injected with \$scope and \$element . Remember to annotate your controller if you will be minifying your code.
controllerAs	string	null	An alias to publish your controller on the scope.
disableScroll	bool	true	Prevent user scroll while the dialog is open.
escToClose	bool	true	The user can dismiss the dialog by clicking the esc key.
focus0n0pen	bool	true	Will search the template for an md-autofocus element.

Property	Туре	Default	Description
locals	object	null	Optional dependancies to be injected into your controller. It is not necessary to inject registered services, the <code>\$injector</code> will provide them for you.
resolve	object	null	Similar to locals but waits for promises to be resolved. Once the promises resolve, their return value will be injected into the controller and the dialog will open.
scope	object	null	Properties to bind to the new isolated scope.
targetEvent	event	null	The event object. This must be provided and it must be from a table cell.
template	string	null	The template for your dialog.
templateUrl	string	null	A URL to fetch your template from.

The show method will return a promise that will resolve with the controller instance.

Table cells have a md-placeholder CSS class that you can use for placeholder text.

### Example: A Table Cell That Opens An Edit Dialog

## **Inline Menus**

Table cells support inline menus. To use an inline menu, place an md-select element inside an md-cell element.

### Example

```
  <md-select ng-model="dessert.type" placeholder="Other">
      <md-option ng-value="type" ng-repeat="type in getTypes()">{{type}}</md-option>
  </md-select>
```

Clicking anywhere in the cell will activate the menu. In addition, if you have automatic row selection enabled the row will not be selected when the cell is clicked.

### **Numeric Columns**

Numeric columns align to the right of table cells.

Attribute	Element	Туре	Description
mdNumeric	mdColumn	[expression]	If the expression is <code>null</code> or evaluates to <code>true</code> then all the cells in that column will be right aligned

You may use Angular's number filter on a cell to set the decimal precision.

```
<!-- 2 decimal places -->
{{dessert.protein.value | number: 2}}
```

If you are using colspan you may need to manual correct the alignment and padding of cells. You can override the cell's style with a custom CSS class.

## **Pagination**

Attribute	Туре	Description	
mdBoundaryLinks	[expression]	Displays first and last page navigation links	
mdLabel	object	Change the pagination label (see more below).	
mdLimit	integer	A row limit.	
mdLimitOptions	array	Row limit options (see more below).	
mdOnPaginate	A callback function for when the page or limit changes. The page is passed first argument and the limit is passed as the second argument.		
mdPage	integer	Page number. Pages are not zero indexed. The directive assumes the first page is one.	
mdPageSelect	[expression]	Display a select dropdown for the page number	
mdTotal	integer	Total number of items.	
ngDisabled	[expression]	Disable pagination elements.	

The md-label attribute has the following properties.

Property	Туре	Default
of	string	'of' (e.g. x - y of z)
page	string	'Page:'
rowsPerPage	string	'Rows per page:'

The md-limit-options attribute supports integers or objects with the properties label and value. The latter is convenient for when you want to use language to give meaning to individual options, e.g.

```
// the 'All' option will show all items in the collection
ctrl.limitOptions = [5, 10, 15, {
   label: 'All',
   value: function () {
     return collection.length;
   }
}];
```

#### **Example: Changing The Pagination Label**

```
<!-- how to change the pagination label -->
<md-table-pagination md-label="{page: 'Página:', rowsPerPage: 'Filas por página:', of: 'de'}"></md-table-pagination>
<!-- or if the label is defined on the scope -->
<md-table-pagination md-label="{{label}}"></md-table-pagination>
```

I used Google translate so if the translations are wrong please fix them and make a pull request.

### **Example: Client Side Pagination Using ngRepeat**

```
<!-- and your pagination element will look something like... -->
<md-table-pagination md-limit="myLimit" md-page="myPage" md-total="{{array.length}}"></md-table-pagination>
```

## My Pagination Isn't Working?!

- Make sure you pass <code>md-page</code> , <code>md-limit</code> , and <code>md-total</code> to the directive and that they are finite numbers.
- Pages are not zero indexed. The directive will assume pages start at one. If your query language expects pages to be zero indexed then just subtract one before making the query.

### **Row Selection**

Attribute	Element	Туре	Description
mdAutoSelect	mdRow	[expression]	Select a row by clicking anywhere in the row.
mdOnDeselect	mdRow	function	A callback function for when an item is deselected. The item will be passed as an argument to the callback.
mdOnSelect	mdRow	function	A callback function for when an item is selected. The item will be passed as an argument to the callback.
mdRowSelect	mdTable	[expression]	Enable row selection.
mdSelect	mdRow	any	The item to be selected.
mdSelectId	mdRow	number string	A unique identifier for the selected item. The identifier must be a property of the item.
multiple	mdTable	[expression]	Allow multiple selection. When enabled a master toggle will be prepended to the last row of table header.
ngDisabled	mdRow	expression	Conditionally disable row selection.
ngModel	mdTable	array	A variable to bind selected items to.

By default selected items will persist. Equality between items is determined using the === operator. In cases where items may not be strictly equal, you must provide a unique identifier for the item.

You may manually add or remove items from the model but be aware that select and deselect callbacks will not be triggered. When operating in single select mode, the deselect callback will not be triggered when a user selects another item. It will be trigger, however, if the user directly deselects the item. In multi-select mode, the master toggle will trigger select and deselect callbacks for all items selected or deselected respectfully.

Example: Row Selection From The Live Demo.

### **Example: Clearing Selected Items On Pagination**

```
$scope.onPaginate = function () {
  $scope.selected = [];
}
```

## **Table Progress**

Attribute	Target	Туре	Description
mdProgress	mdTable	<pre>promise promise<array></array></pre>	The table will display a loading indicator until all promises are resolved or rejected.

The table module can display a loading indicator for you whenever asynchronous code is executing. It accepts a promise or an array of promises. If another promise is received before the previous promise is resolved or rejected it will be placed in a queue.

Because I spent almost an hour debugging this I thought I would share with you. I'm not sure why this is the case but if you put the deferred object on the scope and try to pass the promise to the directive from that, the queue mechanism will not work properly.

#### This Will Not Work

```
function () {
   $scope.deferred = $q.defer();
   // ...
```

```
$scope.deferred.resolve();
}
```

#### This Will Work

```
function () {
  var deferred = $q.defer();
  $scope.promise = deferred.promise;
  // ...
  deferred.resolve();
}
```

In addition, if you are dealing with something that returns a promise directly (not a deferred object) you don't need to worry about it.

```
function () {
   $scope.promise = $timeout(function () {
      // ...
}, 2000);
}
```

### **Table Toolbars**

Tables may be embedded within cards that offer navigation and data manipulation tools available at the top and bottom. You can use the md-table-toolbar and md-default class on a md-toolbar element for a plain white toolbar.

If you need to display information relative to a particular column in the table you may use use a <md-foot> element. For example, say you had a calories.total property that summed the total number of calories and you wanted to display that information directly beneath the Calories column.

Observe that Calories is the second column in the table. Therefore, we need to offset the first column with an empty cell. If you need to offset many columns you can use where n is the number of columns to offset.

You may need to manually correct the the text alignment and cell padding if you use colspan.

## Contributing

#### **Requires**

- node
- grunt-cli

This repository contains a demo application for developing features. As you make changes the application will live reload itself.

#### **Update**

I noticed the nutrition app was an inconvenience for people trying to run the app locally and contribute. I have updated the demo application to remove the dependency for the nutrition app. This is also a good example of how you can take advantage of ngRepeat to easily achieve client side sorting and pagination.

### **Running the App Locally**

Clone this repository to your local machine.

```
git clone https://github.com/daniel-nagy/md-data-table.git
cd md-data-table
```

Create a new branch for the issue you are working on.

```
git checkout -b my-issue
```

Install the package dependencies.

```
npm install
bower install
```

Run the application and visit 127.0.0.1:8000 in the browser.

```
grunt
```

Make your modifications and update the build.

```
grunt build
```

