



Kendo UI[®]

by  Telerik

Fast, Light, Complete

70+ jQuery-based UI widgets in one toolset



JS Framework Agnostic | No lock in



AngularJS Integration | Bootstrap Theme



Extensive Data Visualization Support



Mobile Specific Widgets | App Tooling



Touch Support | Adaptive Rendering

Modern Comprehensive HTML5/JS Framework

Why Kendo UI?

Everything you need, in one neat package



What's in the Box?

The different parts of Kendo UI

 Application Framework

 Web UI

 Mobile UI

 Data Visualization

Web UI

30 Widgets (and growing...)

AutoComplete

Button

Calendar

ColorPicker

ComboBox

DatePicker

DateTimePicker

DropDownList

Editor

Grid

ListView

MaskedTextBox

Menu

MultiSelect

Notification

NumericUpDown

PanelBar

PivotGrid

ProgressBar

Scheduler

Slider

Sortable

Splitter

TabStrip

TimePicker

ToolBar

Tooltip

TreeView

Upload

Window

Mobile UI

A complete application toolset for building hybrid and mobile web applications

ActionSheet

ButtonGroup

Drawer

Forms

ListView

MobileButton

ModalView

NavBar

Popover

Scroller

ScrollView

SplitView

Switch

TabStrip

Data Vizualization

Charts / Graphs/ Other Visuals

Area Charts

Bar Charts

Barcode

Box Plot Charts

Bubble Charts

Bullet Charts

Chart API

Diagram

Donut Charts

Funnel Charts

Gantt

Line Charts

Linear Gauge

Map

Pie Charts

Polar Charts

QR code

Radar Charts

Radial Gauge

Range Bar Charts

Scatter Charts

Sparklines

Stock Chart

TreeMap

Waterfall Charts

From the very Simple

A Kendo UI AutoComplete Widget

Shipping countries in Europe

Choose shipping countries:

- Sw
- Sweden
- Switzerland



To the very Complex

A Kendo UI Scheduler

TeamSchedule

The image displays a Kendo UI Scheduler application interface. At the top, there is a navigation bar with 'Today' buttons, a date range selector ('Monday, June 10, 2013 - Friday, J...'), and tabs for 'Day', 'Work Week' (which is selected and highlighted in orange), 'Week', 'Month', 'Agenda', and 'Timeline'. Below the navigation is a horizontal timeline featuring three team members: a woman with a red checkmark, a man with a blue checkmark, and another man with a green circle. The main area is a grid-based scheduler. The columns represent days from Monday 6/10 to Friday 6/14. The rows represent time intervals from 7:00 AM to 11:00 AM. A blue box labeled 'Take the dog to the vet' is scheduled for 7:00 AM on Monday. A blue box labeled 'Call Charlie about the' is scheduled for 11:00 AM on Friday. A blue box labeled 'Alex's Birthday' spans from 7:00 AM to 11:00 AM on Friday.

	Mon 6/10	Tue 6/11	Wed 6/12	Thu 6/13	Fri 6/14
all day					Alex's Birthday
7:00 AM	Take the dog to the vet				
8:00 AM					
9:00 AM					
10:00 AM					
11:00 AM			Call Charlie about the		

From Web essentials

A Kendo UI Grid

	First Name	Last Name	Country	City	Title			
▲	Nancy	Davolio	USA	Seattle	Sales Representative			
OrderID	Ship Country	Ship Address			Ship Name			
10258	Austria	Kirchgasse 6			Ernst Handel			
10270	Finland	Torikatu 38			Wartian Herkku			
10275	Italy	Via Ludovico il Moro 22			Magazzini Alimentari Riuniti			
10285	Germany	Taucherstraße 10			QUICK-Stop			
10292	Brazil	Av. Inês de Castro, 414			Tradição Hipermercados			
10293	Mexico	Avda. Azteca 123			Tortuga Restaurante			
10304	Mexico	Avda. Azteca 123			Tortuga Restaurante			
10306	Spain	Gran Vía, 1			Romero y tomillo			
10311	France	67, rue des Cinquante Otages			Du monde entier			
10314	USA	2817 Milton Dr.			Rattlesnake Canyon Grocery			
◀◀ ◀ 1 2 3 4 5 6 7 8 9 10 ... ▶ ▶▶								
1 - 10 of 123 items								
▶	Andrew	Fuller	USA	Tacoma	Vice President, Sales			
▶	Janet	Leverling	USA	Kirkland	Sales Representative			
▶	Margaret	Peacock	USA	Redmond	Sales Representative			
▶	Steven	Buchanan	UK	London	Sales Manager			

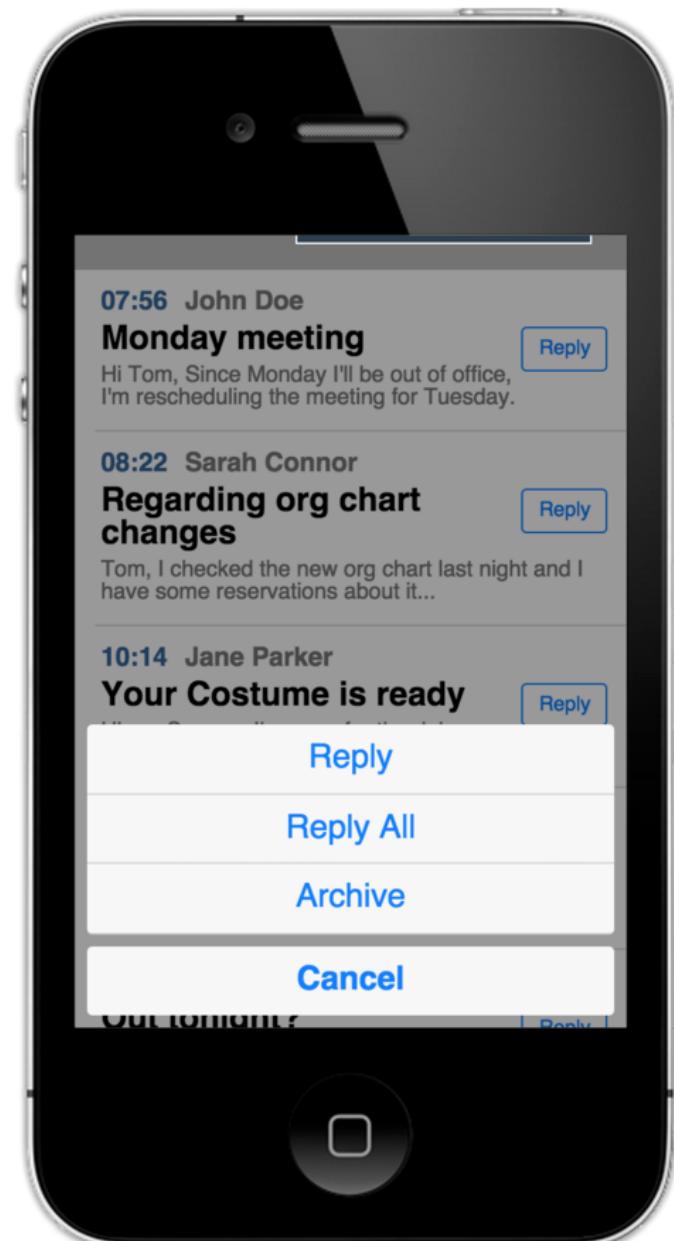
To Mobile

A Kendo UI Mobile ActionSheet



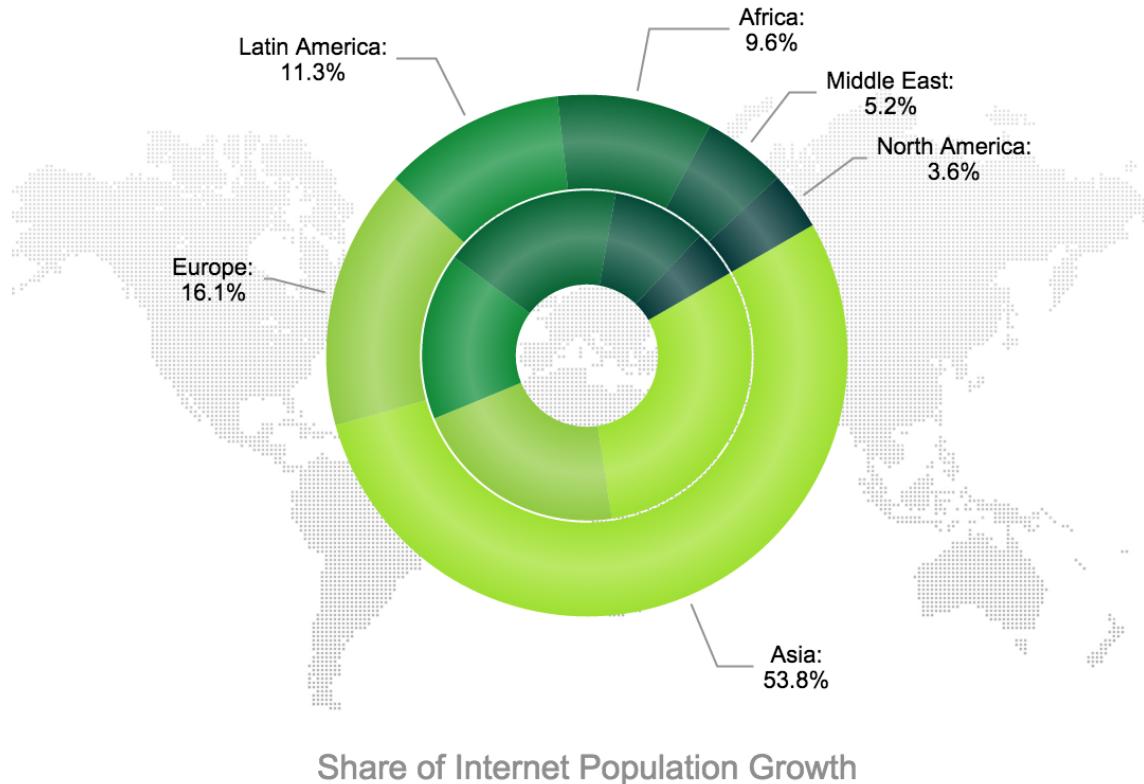
Yes, this works Cross-Platform .. And renders adaptively!

Ready?



And Everything in Between

A Kendo UI Donut Chart



Application Framework

Everything ready out of the box

1. DataSource
2. Single Page Application (SPA)
3. Globalization
4. Templates
5. MVVM
6. Validators
7. Effects
8. Drag-And-Drop
9. AngularJS Integration
10. Bootstrap Friendly



Kendo UI®



Let's code

First, set References

You can do local or use hosted CDNs

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="styles/kendo.common.min.css"
  <link rel="stylesheet" href="styles/kendo.default.min.css"

  <script src="js/jquery.min.js"></script>
  <script src="js/kendo.all.min.js"></script>
</head>
```

How do I use Kendo UI?

Well, you know jQuery right?

```
<div id="calender"></div>
```

```
// Select the 'calendar' div
$('#calendar');
```

That's all

You already know Kendo UI!

```
<div id="calendar"></div>
```

```
// Select the 'calendar' div
// Turn it into a Kendo UI Calendar
$('#calendar').kendoCalendar();
```

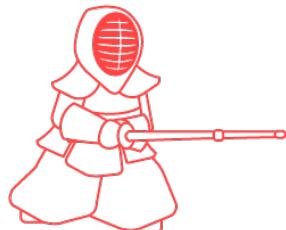


This is Imperative Initialization

Or use semantic HTML

A </div> is a div .. readable markup

```
<div id="calendarControl" data-role="calendar"></div>  
  
kendo.init(document.body);
```



This is Declarative Initialization
Use 'data-*' attributes

Widget configuration # 1

Use Properties

```
<div id="palette" />

$("#palette").kendoColorPalette({
    columns: 4,
    palette: [
        "#f0d0c9", "#e2a293", "#d4735e", "#65281a",
        "#eddfda", "#dcc0b6", "#cba092", "#7b4b3a"
    ]
});
```

Widget configuration # 2

Or use 'data-*' attributes

```
<div id="palette" data-role="colorpalette"
    data-columns="4"
    data-palette: "[
        '#f0d0c9', '#e2a293', '#d4735e', '#65281a',
        '#eddfda', '#dcc0b6', '#cba092', '#7b4b3a"]">
</div>
```

Same results ...

Let's talk Framework

Out-of-box features of Kendo UI



MVVM



Templates



Data Source

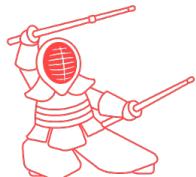
ViewModel Bindings

Built-in MVVM Pattern

```
<h1 data-bind="html: title"></h1>
<input data-role="slider" data-bind="value: amount"
       min="0" max="100">

var viewModel = kendo.observable({
    title: 'Hello World!',
    amount: 50
});

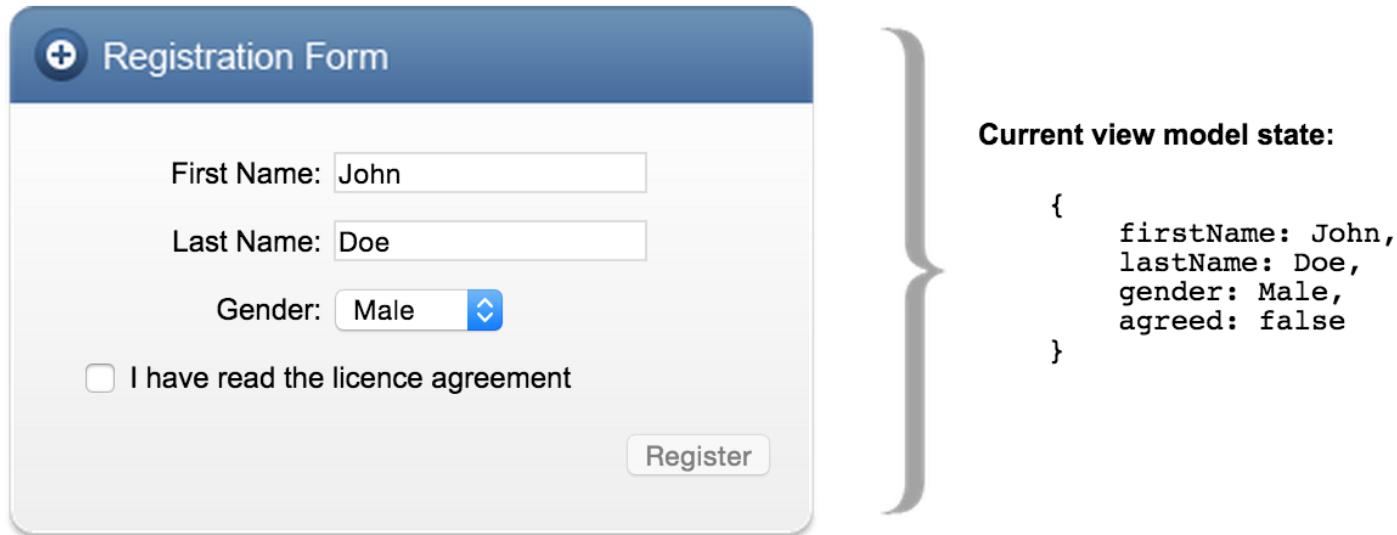
kendo.bind(document.body, viewModel);
```



Bindings are 2-Way!

MVVM in Action

UI & ViewModel always in Sync



Templates are Slick

Named & Parameterized

```
<script id="someTemplate" type="text/x-kendo-template">
    Hello, #= firstName # #= lastName #
</script>

<script>
    var scriptTemplate = kendo.template($("#someTemplate").html)
    var scriptData = { firstName: "John", lastName: "Doe" };
    // Guess the output?
    $("#script").html(scriptTemplate(scriptData));
</script>
```



Use as repeatable markup!

Data Source

A Developer's best friend!

1. Proxy for Data bindings with Kendo UI widgets
2. Works with local or remote data
3. Consistent API
4. Easy CRUD operations on data source
5. Shareable between widgets
6. Paging, Sorting, Filtering - client / server side

Data Source Hookup

Remote data bindings

```
<div id="products"></div>
<script type="text/x-kendo-template" id="template">
    <h3>#:ProductName#</h3>
</script>

<script>
$(function() {
    var template = kendo.template($("#template").html());

    var dataSource = new kendo.data.DataSource({
        transport: {
            read: {
                url: "http://demos.telerik.com/kendo-ui/service/Products",
                dataType: "jsonp"
            },
            change: function() {
                $("#products").html(kendo.render(template, this.view()));
            }
        });
        dataSource.read();
    });
</script>
```

Data Source in Action

Seeing is believing



CHAI



CHANG



ANISEED SYRUP



CHEF ANTON'S
CAJUN
SEASONING



CHEF ANTON'S
GUMBO MIX



GRANDMA'S
BOYSENBERRY
SPREAD



UNCLE BOB'S
ORGANIC DRIED
PEARS



NORTHWOODS
CRANBERRY
SAUCE



MISHI KOBE NIKE



IKURA



QUESO
CABRALES



QUESO
MANCHEGO LA
PASTORA



KONBU



TOFU

Easy CRUD Operations

Configure service endpoints

```
var crudServiceBaseUrl = "http://demos.telerik.com/kendo-ui/service";
var dataSource = new kendo.data.DataSource({
    transport: {
        read: {
            url: crudServiceBaseUrl + "/Products", dataType: "jsonp"
        },
        update: {
            url: crudServiceBaseUrl + "/Products/Update", dataType: "jsonp"
        },
        destroy: {
            url: crudServiceBaseUrl + "/Products/Destroy", dataType: "jsonp"
        },
        create: {
            url: crudServiceBaseUrl + "/Products/Create", dataType: "jsonp"
        }
    },
    batch: true,
    pageSize: 20
});
```

Data Edits Simplified

Grid Edit Modes - Inline/Popup/Batch!

Product Catalog				
Product Name	Unit Price	Units In Stock	Discontinued	Action
Chai	\$18.00	39	false	<button>Edit</button> <button>Delete</button>
Chang	\$19.00	17	false	<button>Edit</button> <button>Delete</button>
Aniseed Syrup				<button>Edit</button> <button>Delete</button>
Chef Anton's Cajun Seasoning				<button>Edit</button> <button>Delete</button>
Chef Anton's Gumbo Mix				<button>Edit</button> <button>Delete</button>
Grandma's Boysenberry Spread				<button>Edit</button> <button>Delete</button>
Uncle Bob's Organic Dried Pears				<button>Edit</button> <button>Delete</button>
Northwoods Cranberry Sauce				<button>Edit</button> <button>Delete</button>
Mishi Kobe Niku				<button>Edit</button> <button>Delete</button>
Ikura	\$31.00	31	false	<button>Edit</button> <button>Delete</button>
Queso Cabrales	\$21.00	22	false	<button>Edit</button> <button>Delete</button>
Queso Manchego La Pastora	\$38.00	86	false	<button>Edit</button> <button>Delete</button>
Konbu	\$6.00	24	false	<button>Edit</button> <button>Delete</button>

Edit

Product Name	Chai
Unit Price	\$18.00
Units In Stock	39.00
Discontinued	<input type="checkbox"/>

Update **Cancel**



I get the Chi .. how do I start?

We love Open Source

Kendo UI Core is on [GitHub](#) - Use it. Fork it.



 Application Framework

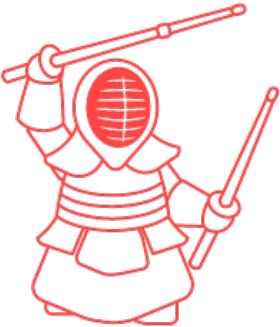
 Web UI

 Mobile UI

Yup, it's Free .. there is no catch!

Kendo UI Professional

For Enterprise apps

- 
1. Grid | PivotGrid
 2. Barcode | QR Code
 3. Scheduler | Gantt
 4. Editor | Upload
 5. Gauge
 6. Diagram
 7. Map
 8. Data Visualization | ~20 Types

Feature-rich with consistent API

Server-Side Wrappers

Renders HTML5 Kendo UI Widgets



[ASP.NET MVC](#)



[PHP](#)



[JSP](#)



Pick your server stack!

Angular JS Integration

Directives to render Kendo UI Widgets

```
<script src="js/jquery.min.js"></script>
<script src="js/angular.min.js"></script>
<script src="js/kendo.all.min.js"></script>

<div id="example" ng-app="KendoDemo">
<div ng-controller="AutoComplete">
    <h4>Select Telerik Product: </h4>
    <input kendo-auto-complete ng-model="product" k-data-source="productNames"/>
</div>
</div>
```

```
<script>
angular.module("KendoDemo", [ "kendo.directives" ])
    .controller("AutoComplete", function($scope){
        $scope.productNames = [
            "Telerik Kendo UI",
            "Telerik AppBuilder",
            "Telerik UI for ASP.NET"
        ];
    })
</script>
```



Let's hit the SPA ...

App Building Blocks

SPA Components



Routers



Layouts



Views



Everything you need - out of the box!

Router

SPA Components Breakdown

-  Tracks application state
-  Manages navigation between states
-  Integrates into browser history stack
-  Application states become bookmarkable
-  Supports parameters for routes to entities

Router in Action

URL Change fires events

```
<div id="demo">
    <a href="#">Home</a>
    <a href="#/about">About</a>
</div>
```

```
var router = new kendo.Router();

router.route('/', function(e) {
    // Event Handler
});

router.route('/about', function(e) {
    // Event Handler
});

router.start();
```

Layouts & Views

SPA Components Breakdown



Layout is the container for Views



View is a chunk of markup



Views have a corresponding ViewModel



Views render when URL changes

Layout in Action

Like a container Master page

```
<div id="demo"></div>

<script type="text/x-kendo-template" id="layout">
<div id="layout">
    <ul data-role="menu">
        <li><a href="#">Home</a></li>
        <li><a href="#/about">About</a></li>
    </ul>
</div>
</script>
```

```
var layout = new kendo.Layout('#layout');
var router = new kendo.Router({
    init: function() {
        layout.render('#demo');
    }
});
router.start();
```

View in Action

HTML markup with ViewModel binding

```
var homeModel = kendo.observable({
    title: 'Home'
});

var home = new kendo.View('#home', { model: homeModel });
```

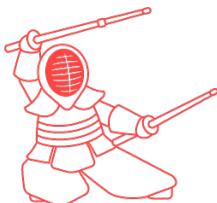
```
var layout = new kendo.Layout('#layout');
var router = new kendo.Router({
    init: function() {
        layout.render('#demo');
    }
});

router.route('/', function(e) {
    layout.showIn('#someContainer', home);
});

router.start();
```



Let's talk Mobile ...



Use Web skills to make Mobile Apps!

Kendo UI Mobile

Build Hybrid or Mobile Web apps



Completely Open Source & Free!



Bower install to any project



Has Angular Directives to render



Totally Cross-Platform

Hybrid Mobile Apps

Kendo UI Mobile powered



Best with AppBuilder

Use [Cordova Plugins](#) for Native API



Respective App Store presence

Remember the UI Widgets

A complete application toolset for building hybrid and mobile web applications

ActionSheet

ButtonGroup

Drawer

Forms

ListView

MobileButton

ModalView

NavBar

Popover

Scroller

ScrollView

SplitView

Switch

TabStrip

Mobile App Architecture

Building Blocks with Kendo UI Mobile

- Kendo UI Mobile includes App Framework
- App container initializes all UI widgets
- Apps are made of Views
- Views can share Layouts - like TabStrips or NavBar
- Heavy usage of 'data-*' attributes
- UI Widgets render adaptively or use Flat theme
- Transitions add to Native feel
- True single code base for Cross-Platform apps

Kendo UI Mobile Basics

Views, Layouts & Initialization

```
<div class="app">

    <div data-role="view" data-title="Home" id="home" data-layout="main"></div>
    <div data-role="view" data-title="About" id="about" data-layout="main"></div>

    <div data-role="layout" data-id="main">
        <div data-role="header">
            <div data-role="navbar">
                <span data-role="view-title"></span>
            </div>
        </div>
        <div data-role="footer">
            <div data-role="tabstrip">
                <a href="#home" data-icon="home">Home</a>
                <a href="#about" data-icon="about">About</a>
            </div>
        </div>
    </div>
</div>

// Initialization
new kendo.mobile.Application('.app');
```

Kendo UI Mobile

Flexibility for Developers



Offline capabilities



Flat Themes

OS Adaptive Rendering



Plays well with others



Kendo UI®

Feel the Zen

Tooling that truly helps



[Interactive Dojo](#)



[Web ThemeBuilder](#)



[Mobile ThemeBuilder](#)



[Chrome Inspector](#)



[Demos](#) | [Forums](#) | [Docs](#)



To Recap ..

Something for everyone



Kendo UI Core

Application Framework | Web | Mobile | Completely Free



Kendo UI Professional

Enterprise UI | Licensed per Developer | Support & Maintenance



 Telerik Kendo UI®

Modern Web & Mobile Done Right!

kendoui.com | @KendoUI