

2011



**CODE ON TIME**

vs. Iron Speed

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## Code On Time Generator vs. Iron Speed

*Code On Time Generator* generates true Web 2.0 web apps that are efficient, fast, and easy to customize. *Iron Speed Designer* also attempts to do this. This page will help you compare the pros and cons of using *Code On Time* web app generator and *Iron Speed Designer*.

Compare our [live demo](#) projects to the demo projects presented by [Iron Speed](#).

Our generated code is compact while *Iron Speed Designer* creates a bloated output. We have intelligently designed multifunction pages. No proprietary DLLs are needed to run *Code On Time* applications. Application customization is a breeze with *Code On Time Designer* and *Designer Spreadsheet*. Generating applications does not require database modification on your part - nothing will be changed. *Code On Time* applications have *Data Sheet View* and *Chart View* available in all pages. Every page has *Quick Find*, as well as adaptive filtering options and a search bar. You also have the ability to create an RSS of your sorted and filtered data, as well as export to CSV, TIFF, spreadsheet and word document.

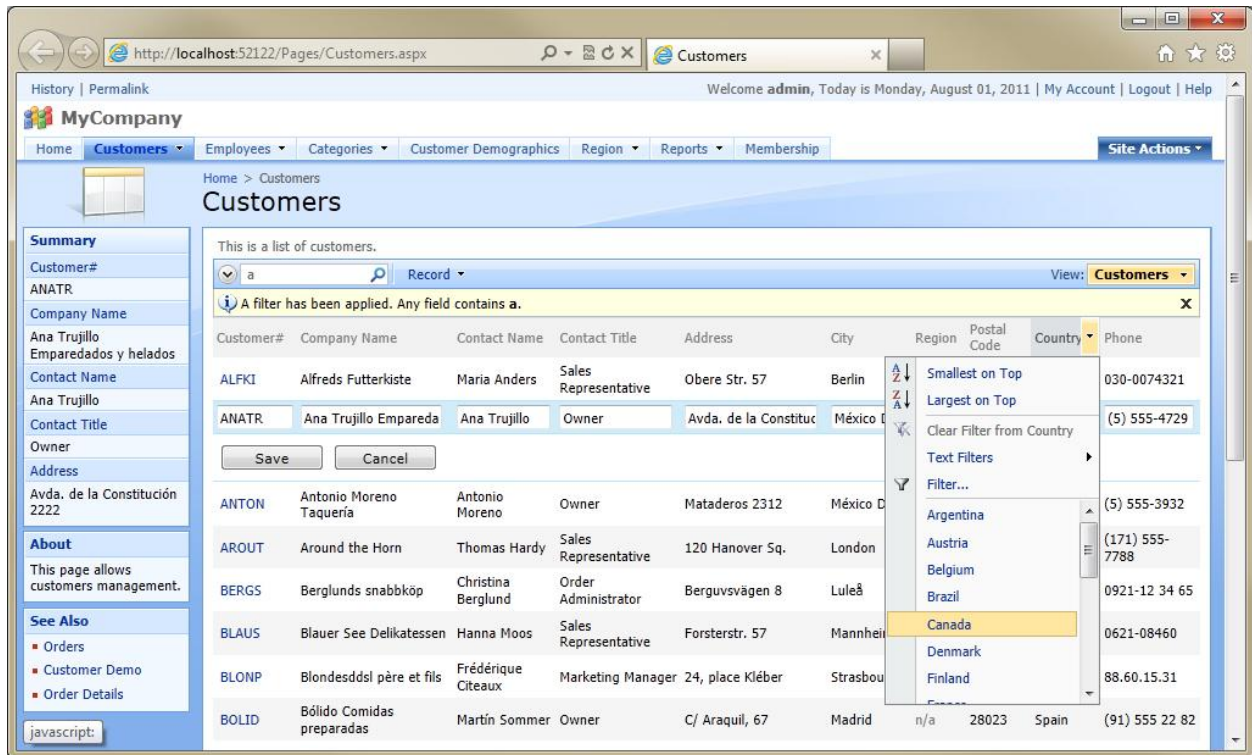
Don't believe us? Read on below for further elaboration, or [request](#) a *WebEx* presentation now! Our free live presentations will be conducted by knowledgeable developers capable of answering most tricky technical questions.

### Compact code base

We favor a compact code base to ensure easy customization. Changing the behavior of the generated application is easy, using *Code On Time Designer* and *Designer Spreadsheet*. All the code is accessible and can easily be edited with your favorite editor. *Code On Time* supports multi-core code generation to produce code with lightning speed, making customization quick and painless. *Iron Speed Designer* is not the fastest horse in the stable.

## Intelligently designed pages

*Iron Speed Designer* creates "task" oriented pages (separate pages for editing, searching, adding records, etc). We create multi-functional pages to improve user experience and simplify maintenance. A database of ten tables will translate into ten *Code On Time* pages. *Iron Speed Designer* will create more than 40 pages to do the same. Several *Code On Time* customers were able to create and maintain web applications with more than 300 tables. Google "[iron speed review](#)" and you will find many reviewers stating the difficulty *Iron Speed Designer* has in handling larger applications.



The screenshot shows a web browser window displaying a web application for "MyCompany". The page title is "Customers". The browser address bar shows "http://localhost:52122/Pages/Customers.aspx". The page has a navigation menu with options like "Home", "Customers", "Employees", "Categories", "Customer Demographics", "Region", "Reports", and "Membership". A sidebar on the left contains a "Summary" section with fields for "Customer#", "Company Name", "Contact Name", "Address", and "About". The main content area displays a table of customers with columns: Customer#, Company Name, Contact Name, Contact Title, Address, City, Region, Postal Code, Country, and Phone. A search filter is applied, showing "A filter has been applied. Any field contains a." A dropdown menu is open over the "Country" column, listing countries like Argentina, Austria, Belgium, Brazil, Canada, Denmark, and Finland. The table contains several rows of customer data, including "ANATR" (Ana Trujillo Emparedada) and "BOLID" (Bólido Comidas preparadas).

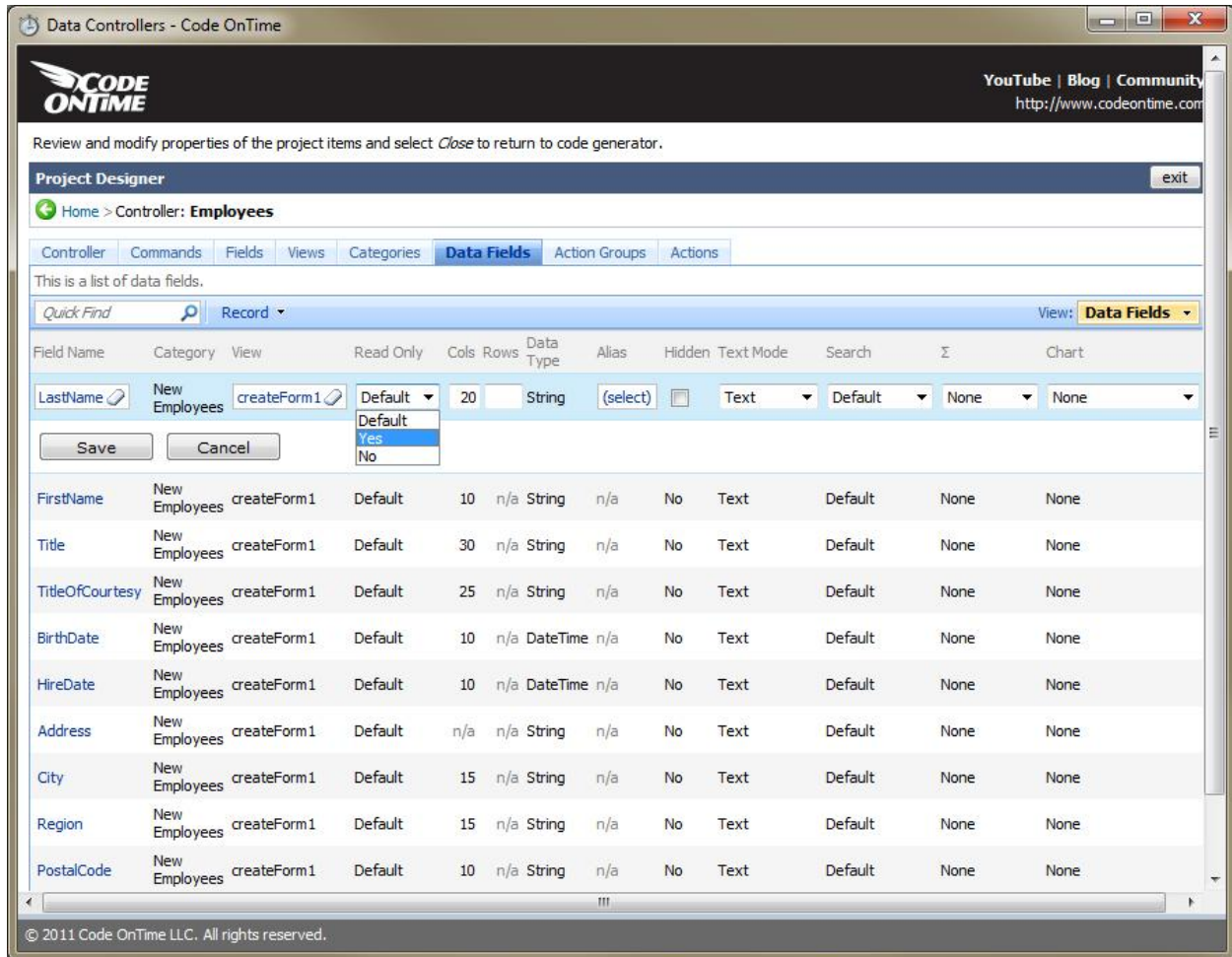
| Customer# | Company Name              | Contact Name       | Contact Title        | Address               | City     | Region | Postal Code | Country | Phone          |
|-----------|---------------------------|--------------------|----------------------|-----------------------|----------|--------|-------------|---------|----------------|
| ALFKI     | Alfreds Futterkiste       | Maria Anders       | Sales Representative | Obere Str. 57         | Berlin   |        |             |         | 030-0074321    |
| ANATR     | Ana Trujillo Emparedada   | Ana Trujillo       | Owner                | Avda. de la Constituc | México   |        |             |         | (5) 555-4729   |
| ANTON     | Antonio Moreno Taquería   | Antonio Moreno     | Owner                | Mataderos 2312        | México D |        |             |         | (5) 555-3932   |
| AROUT     | Around the Horn           | Thomas Hardy       | Sales Representative | 120 Hanover Sq.       | London   |        |             |         | (171) 555-7788 |
| BERGS     | Berglunds snabbköp        | Christina Berglund | Order Administrator  | Berguvsvägen 8        | Luleå    |        |             |         | 0921-12 34 65  |
| BLAUS     | Blauer See Delikatessen   | Hanna Moos         | Sales Representative | Forsterstr. 57        | Mannhei  |        |             |         | 0621-08460     |
| BLONP     | Blondesdsl père et fils   | Frédérique Citeaux | Marketing Manager    | 24, place Kléber      | Strasbou |        |             |         | 88.60.15.31    |
| BOLID     | Bólido Comidas preparadas | Martin Sommer      | Owner                | C/ Araquil, 67        | Madrid   | n/a    | 28023       | Spain   | (91) 555 22 82 |

## No proprietary DLLs

Code generated by *Code On Time* does not rely on proprietary DLLs. For example, *Azure Factory* code generation project available with *Code On Time* will produce a web application ready for deployment to *Windows Azure*. *Windows Azure Cloud* requires a web application deployment package to include everything needed for its execution to ensure that application will scale up and down.

## Customize your web app with ease

The number of customization requests that you receive after deployment is critical to fully appreciate the quality of the produced application. Web applications created with *Code On Time* generator will shine in this department. *Code On Time* web apps allow easy extension with business logic classes and custom user controls. *Iron Speed Designer* is not designed with code customization in mind. *Iron Speed Designer* mixes user interface code with business logic making customization extremely difficult.



## No need to modify your database

We will automatically “de-normalize” your database without touching your relational data structures through smart queries. *Iron Speed* frequently recommends changing your database design to accomplish certain tasks.

Powerful user-friendly data lookups, search with auto-completion, automatic filtering, paging and sorting are done by your database server in a *Code On Time* web application. *Iron Speed Designer* follows another path. The code generated by *Iron Speed Designer* loads your data into in-memory data tables and does sorting, paging, and filtering on the data table. This means that if you have 100,000 records in a table, then the code generated by *Iron Speed Designer* will read all of them from the database, filter them, sort them, and then retrieve the 10 records that need to be displayed. *Iron Speed*

Designer does offer an alternative – stored procedures, which are difficult to set up and require considerable understanding of database servers and SQL.

## Excel-style record editing

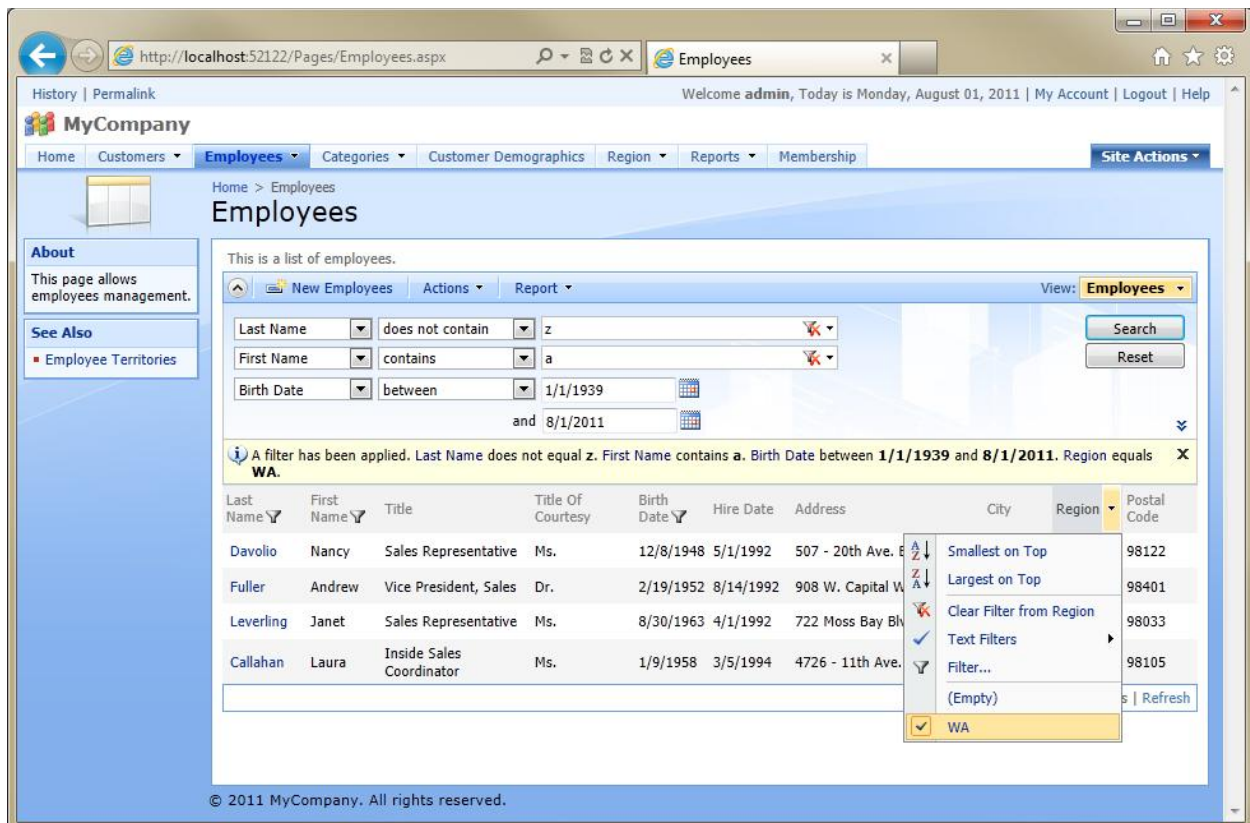
What would you say if your users were able to edit data in a web browser as if it were *Microsoft Access* or *Microsoft Excel*? Surely that would be great. Only *Code On Time* offers an innovative [Data Sheet View](#) that works in major browsers and requires no plugins. *Iron Speed Designer* produces web applications with awkward editing of records in sprawling grid views.

The screenshot shows a web browser window displaying a 'Customers' page. The page has a navigation menu with 'Customers' selected. A sidebar on the left provides a 'Summary' for the selected customer, ANATR, including details like 'Company Name', 'Contact Name', 'Address', and 'About'. The main content area displays a table of customers with the following data:

| Customer# | Company Name               | Contact Name       | Contact Title        | Address                       | City        | Region | Postal Code | Country | Phone          |
|-----------|----------------------------|--------------------|----------------------|-------------------------------|-------------|--------|-------------|---------|----------------|
| ALFKI     | Alfreds Futterkiste        | Maria Anders       | Sales Representative | Obere Str. 57                 | Berlin      | n/a    | 12209       | Germany | 030-0074321    |
| ANATR     | Ana Trujillo Emparedada    | Ana Trujillo       | Owner                | Avda. de la Constitución 2222 | México D.F. | n/a    | 05021       | USA     | (5) 555-4729   |
| ANTON     | Antonio Moreno Taquería    | Antonio Moreno     | Owner                | Mataderos 2312                | México D.F. | n/a    | 05023       | Mexico  | (5) 555-3932   |
| AROUT     | Around the Horn            | Thomas Hardy       | Sales Representative | 120 Hanover Sq.               | London      | n/a    | WA1 1DP     | UK      | (171) 555-7788 |
| BERGS     | Berglunds snabbköp         | Christina Berglund | Order Administrator  | Berguvsvägen 8                | Luleå       | n/a    | 5-958 22    | Sweden  | 0921-12 34 65  |
| BLAUS     | Blauer See Delikatessen    | Hanna Moos         | Sales Representative | Forsterstr. 57                | Mannheim    | n/a    | 68306       | Germany | 0621-08460     |
| BLONP     | Blondesdsl père et fils    | Frédérique Citeaux | Marketing Manager    | 24, place Kléber              | Strasbourg  | n/a    | 67000       | France  | 88.60.15.31    |
| BOLID     | Bóolido Comidas preparadas | Martín Sommer      | Owner                | C/ Araquil, 67                | Madrid      | n/a    | 28023       | Spain   | (91) 555 22 82 |
| BONAP     | Bon app'                   | Laurence Lebihan   | Owner                | 12, rue des Bouchers          | Marseille   | n/a    | 13008       | France  | 91.24.45.40    |
| BOTTM     | Bottom-Dollar Markets      | Elizabeth Lincoln  | Accounting Manager   | 23 Tsawassen Blvd.            | Tsawassen   | BC     | T2F 8M4     | Canada  | (604) 555-4729 |

## Find everything you need without customization

Our philosophy is simple - if you have data then there should be a way to find it. Why does one have to define any specific set of fields that users of the application can search by? How about letting your users to search for their data using any combination of field they desire. Read about [searching](#) in *Code On Time* applications. Quick Find, automatic search bars, and adaptive filtering are a part of every data grid. *Iron Speed* applications will require customization every time a new search request on a different combination of fields is coming to your inbox. If you are using *Iron Speed Designer* to create an application that manages ten objects then you will have to invent ten search screens to find each type of data. *Iron Speed Designer* cannot match the unlimited search capabilities available to end users of *Code On Time* applications.



This is a list of employees.

New Employees Actions Report View: Employees

Last Name does not contain z  
First Name contains a  
Birth Date between 1/1/1939 and 8/1/2011

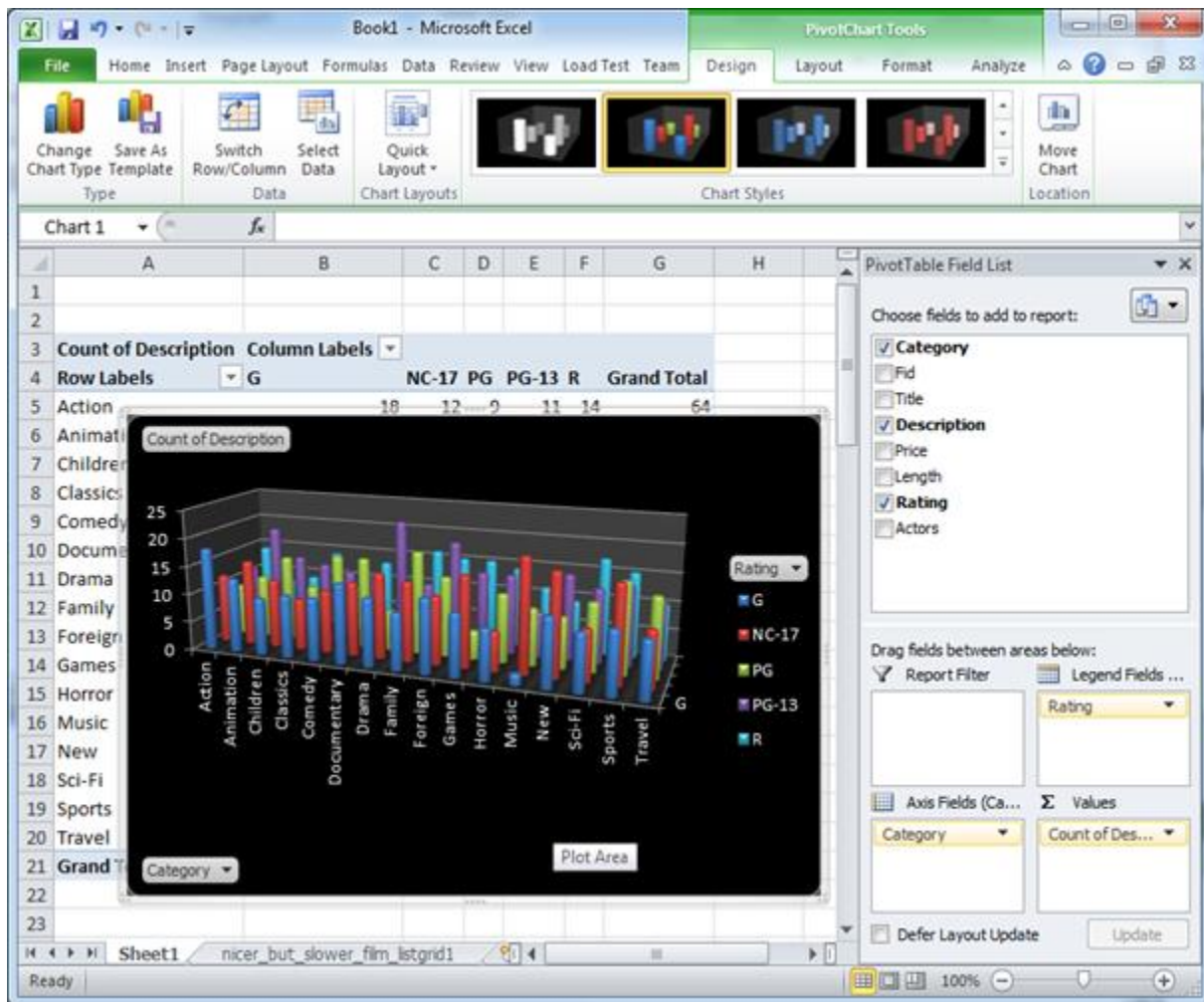
A filter has been applied. Last Name does not equal z. First Name contains a. Birth Date between 1/1/1939 and 8/1/2011. Region equals WA.

| Last Name | First Name | Title                    | Title Of Courtesy | Birth Date | Hire Date | Address           | City | Region | Postal Code |
|-----------|------------|--------------------------|-------------------|------------|-----------|-------------------|------|--------|-------------|
| Davolio   | Nancy      | Sales Representative     | Ms.               | 12/8/1948  | 5/1/1992  | 507 - 20th Ave. E |      |        | 98122       |
| Fuller    | Andrew     | Vice President, Sales    | Dr.               | 2/19/1952  | 8/14/1992 | 908 W. Capital W  |      |        | 98401       |
| Leverling | Janet      | Sales Representative     | Ms.               | 8/30/1963  | 4/1/1992  | 722 Moss Bay Bk   |      |        | 98033       |
| Callahan  | Laura      | Inside Sales Coordinator | Ms.               | 1/9/1958   | 3/5/1994  | 4726 - 11th Ave.  |      |        | 98105       |

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## Export your data, the way you want to

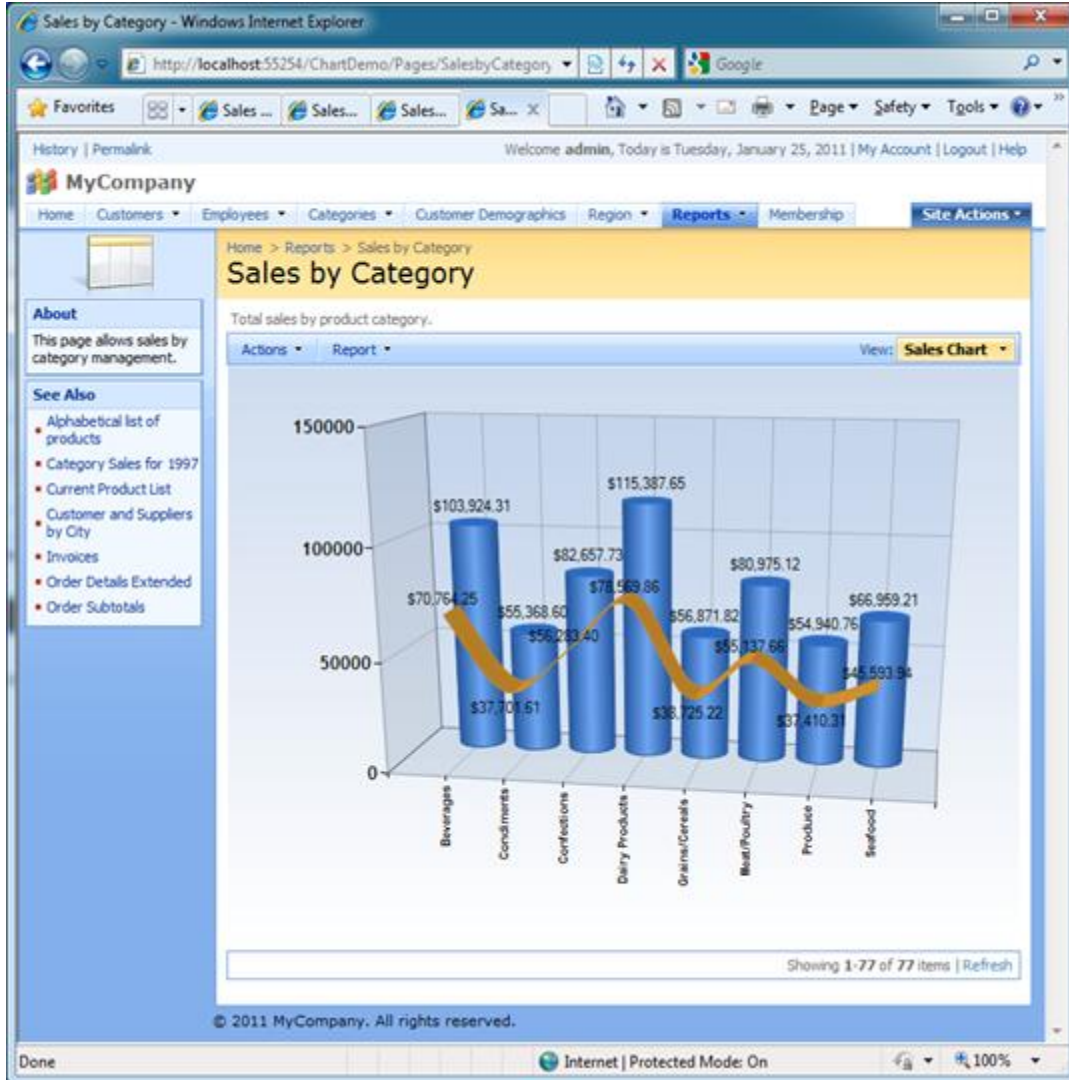
With *Code On Time* web apps, you have the ability to create unlimited live RSS Feeds with custom user-defined filters that may eliminate the need to write email notifications, which is simply not possible if you are an *Iron Speed Designer* developer. *Code On Time* also makes business data analysis easy. In *Iron Speed Designer*, this is not possible without application customization. All *Code On Time* web app pages support a live "Export to Spreadsheet" option with secure user identity verification. Business users can quickly create custom digital dashboards and work with the data without even being required to log in to the website. Being able to take data offline is critical in today's world. *Code On Time* makes it possible.





## Complex charting capability

Learn about [charting support](#) in generated web applications. Can you do something like in the picture below using *Iron Speed Designer*? Definitely not with the same elegance, speed, and user interface finesse.



## Order Form Sample

The screen shot shows a sample *Order Form* created with *Code On Time*. You will have a hard time creating a layout of a page as refined as the one in the picture if you try that with Iron Speed.

The screenshot shows a web browser window titled "Order Form - Windows Internet Explorer". The address bar shows "http://localhost:8719/OrderFormSample/Pages/OrderForm.aspx". The page content includes a navigation menu for "MyCompany" with options like Home, Order Form, Customers, Employees, Categories, Customer Demographics, Region, Reports, and Membership. The main content area is titled "Order Form" and contains a form for reviewing orders. The form includes fields for Customer (Rattlesnake Canyon Grocery), Address (2817 Milton Dr.), City (Albuquerque), Region (NM), Postal Code (87110), and Ship Country (USA). It also shows order dates (5/6/1998) and required dates (6/3/1998). A table of products is displayed with columns for Product Name, Unit Price, Quantity, Discount, Product Category Name, Product Supplier Company Name, and Extended Price. The table lists three items: Grandma's Boysenberry Spread, Uncle Bob's Organic Dried Pears, and Northwoods Cranberry Sauce. The subtotal is \$1,255.72, freight is \$8.53, and the total is \$1,264.25. The page footer includes "© 2010 MyCompany. All rights reserved."

[Order Form Sample](#) (6,172K) - download a step-by-step guide that explains how to build the form in the screen shot. Learn more and watch video tutorials at <http://blog.codeontime.com/2010/11/order-form-sample.html>.

# Comparison Matrix

## Code On Time vs. Iron Speed

### Level of Support

| Owner Benefits   | Code On Time | Iron Speed     |
|--|--------------|----------------|
| <b>Single Developer License</b><br>The same activation code can be used on a computer at work and on another computer at home but not at the same time.  | <b>Yes</b>   | <b>Yes</b>     |
| <b>Multiple Developer License</b><br>Up to 5 developers can register the same activation code.   | <b>Yes</b>   | <b>No</b>      |
| <b>Community and Ticket-based Technical Support</b> <a href="#">community site</a> <a href="#">support site</a>  | <b>Yes</b>   | <b>Partial</b> |
| <b>Unlimited Updates</b>   | <b>Yes</b>   | <b>Partial</b> |
| <b>Source Code</b><br>Complete access to all code generation templates included in product edition.  | <b>Yes</b>   | <b>Partial</b> |
| <b>.NET Framework 4.0</b><br>Support for the latest version of Microsoft .NET Framework 4.0  | <b>Yes</b>   | <b>No</b>      |
| <b>Multi-Core Code Generation</b><br>Use the full power of your computer. Lightning fast code generation is a trademark feature of our web application code generator. We utilize all logical cores of your computer's processor to perform code generation.   | <b>Yes</b>   | <b>Partial</b> |
| Application Development  | Code On Time | Iron Speed     |
| <b>Project Designer</b><br>Visually change properties of the project elements in the project design database. Sophisticated user interface allows searching, browsing and editing project definitions in a point-and-click fashion.  | <b>Yes</b>   | <b>Yes</b>     |
| <b>Project Spreadsheet (Microsoft Excel)</b><br>Modify properties of project elements such as fields, views, categories, controllers, and much more in a <i>Microsoft Excel</i> spreadsheet. <a href="#">Tutorial</a>  | <b>Yes</b>   | <b>No</b>      |
| <b>Point-and-Click Development</b><br>No programming experience is required. Web applications with sophisticated user interface and features are automatically generated based on the project settings. Intuitive project designer will make you productive in no time.  | <b>Yes</b>   | <b>Partial</b> |
| <b>Customization in Visual Studio</b><br>Enhance your projects in <i>Microsoft Visual Studio</i> through multiple code generation iterations without losing your changes. Project changes must be done in the project designer or project spreadsheet. Smart partitioning of generated files and custom modifications is accomplished through the use of business rules classes and ASP.NET user controls. <a href="#">Conversion and Validation of User Input</a> | <b>Yes</b>   | <b>Partial</b> |
| <b>Compact Output</b><br>Most real-world projects require some sort of customization. Generated applications are extremely compact and well organized, which assists greatly when customization is needed.   | <b>Yes</b>   | <b>No</b>      |
| <b>All-Inclusive</b><br>There are no "black-box" DLLs or runtime components that are needed to run a generated application. Every single bit of an application is produced in the source code form.  | <b>Yes</b>   | <b>No</b>      |
| <b>Multi-Functional Pages</b><br>The same page may present data of master and detail records in master-detail layouts of unlimited complexity. Each page allows browsing, searching, filtering, updating, inserting, and deleting of master and detail records. <a href="#">Demo End User Guide</a>  | <b>Yes</b>   | <b>No</b>      |

|  |            |                |
|--|------------|----------------|
| <p><b>Native Data Filtering and Paging</b><br/>All filtering and paging expressions are embedded into SELECT SQL statements for maximum efficiency and speed. We avoid buffering unnecessary data and retrieve precisely the number of records needed for presentation.</p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Advanced Data Visualization (Charts)</b><br/>Developers can configure advanced chart views to enable effective data visualization without writing a single line of code. Full customization of the generated data visualizations is also supported.<br/><a href="#">Article</a></p>  | <b>Yes</b> | <b>Partial</b> |
| <p><b>File Upload / Download</b><br/>Extended processing of Binary Large Objects allows automatic capturing of File Name, Content Type, and File Size of files stored in the database. Externalized storage of BLOB content is also supported via business rules.<br/><a href="#">Article</a></p>  | <b>Yes</b> | <b>Yes</b>     |
| <b>Web Application Types</b>   |            |                |
| <p><b>Web Site Factory</b><br/>Create an ASP.NET/AJAX web site with navigation system, role-based security, membership manager, built-in data export and reporting, adaptive filtering, advanced search options, and much more. The generated project is managed via the file system folder structure.<br/><a href="#">Demo</a></p>  | <b>Yes</b> | <b>Partial</b> |
| <p><b>Web App Factory</b><br/>Creates an ASP.NET/AJAX solution composed of a web application project and class library implementing a web site with navigation system, role-based security, membership manager, built-in data export and reporting, adaptive filtering, advanced search options, and much more.<br/><a href="#">Demo</a></p>   | <b>Yes</b> | <b>Partial</b> |
| <p><b>Azure Factory</b><br/>Create an Azure Cloud solution from your SQL Azure database. Includes a Web Role and class library implementing a web site with navigation system, role-based security, membership manager, built-in data export, reporting, and much more. Have it online in 15 minutes.<br/><a href="#">Tutorial</a> <a href="#">Article</a> <a href="#">Introduction</a> <a href="#">Demo</a></p> | <b>Yes</b> | <b>No</b>      |
| <b>Upcoming Web Application Types</b>  |            |                |
| <p><b>DotNetNuke Factory</b><br/><i>Available August, 2011</i></p>   | <b>Yes</b> | <b>No</b>      |
| <p><b>SharePoint Factory</b><br/><i>Available August, 2011</i></p>   | <b>Yes</b> | <b>No</b>      |
| <b>EASE (Enterprise Application Services Engine)</b>   |            |                |
| <p><b>"My Account"</b><br/>Enable automatic linking of a database table record to a user account. A user without a link is instructed to create "My Account" association when signing in the application for the first time. Integrates with ASP.NET Membership.<br/><i>Available August, 2011</i></p>   | <b>Yes</b> | <b>No</b>      |
| <p><b>Access Control Rules</b><br/>Create declarative access control rules applied uniformly to all data views. Access control rules can be conditional and based on time, user role, or any other criteria. Shared rules can be applied to all business objects.<br/><a href="#">Tutorial</a></p>   | <b>Yes</b> | <b>No</b>      |
| <p><b>Dynamic Access Control List</b><br/>Create dynamic access control rules stored in application database at runtime. Administrative user interface is provided.<br/><i>Available August, 2011</i></p>  | <b>Yes</b> | <b>No</b>      |

|   |            |                |
|---|------------|----------------|
| <p><b>Custom Membership and Role Providers</b><br/>Have your own tables as source of users and roles for custom ASP.NET Membership and Role providers in your application.<br/><i>Available August, 2011</i></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>URL Hashing</b><br/>Enforce automatic encryption of data controller URL parameters.<br/><a href="#">About URL Parameters</a><br/><i>Available August, 2011</i></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Status Transitions</b><br/>Implement sophisticated status transitions for your business objects without writing any code.<br/><i>Available September, 2011</i></p>  | <b>Yes</b> | <b>No</b>      |
| <b>Page Layouts</b>   |            |                |
| <p><b>Simple</b><br/>Provides a single data view on each page. A field summary of the selected record is displayed on the side bar.<br/><a href="#">Demo 1</a> <a href="#">Demo 2</a></p>   | <b>Yes</b> | <b>Partial</b> |
| <p><b>Tabbed</b><br/>This master-detail layout will place each data view on a dedicated tab so that only one data view is visible at any time. The details of the selected master record are automatically displayed on the side bar.<br/><a href="#">Demo</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Classic</b><br/>This master-detail layout will place master view at the top of the page and all children at the bottom of the page. Each child will be placed on a dedicated tab so that only master and one child data views are visible at any time. The details of the selected master record are automatically displayed on the side bar and stay visible even if the page is scrolled. <a href="#">Demo</a></p>  | <b>Yes</b> | <b>Yes</b>     |
| <p><b>Inline</b><br/>This master-detail layout is similar to the tabbed layout with one exception. The tabs are not displayed. A set of tasks named after each data view is displayed at the top of the side bar instead. The details of the selected master record are automatically displayed on the side bar.<br/><a href="#">Demo</a></p>   | <b>Yes</b> | <b>No</b>      |
| <p><b>Stacked</b><br/>This master-detail layout lists all data views. This allows simultaneous access to all master and child records. The details of the selected master record are automatically displayed on the side bar. Stacked pages are usually longer than the height of the window. The side bar summary automatically keeps itself in the view when browser window content is scrolled. <a href="#">Demo</a></p>   | <b>Yes</b> | <b>Partial</b> |
| <b>End-User Features of Generated Apps</b>  |            |                |
| <p><b>Ajax-Enabled User Interface</b><br/>The application user interface is rendered entirely in the client browser. Generated web applications are responsive and provide a fluid end-user experience equal to those of traditional desktop apps.</p>  | <b>Yes</b> | <b>Partial</b> |
| <p><b>Data Sheet View</b><br/>Users can edit data in a spread-sheet fashion using the same key strokes that are supported in Microsoft Excel and Microsoft Access. The data sheet view is compatible with all major browsers and requires no plugins. The menu item under Actions option in action bar of each list view allows switching between standard and data sheet modes. <a href="#">Article</a> <a href="#">Demo 1</a> <a href="#">Demo 2</a> <a href="#">Tutorial</a></p> | <b>Yes</b> | <b>No</b>      |
| <p><b>Modal Form Views</b><br/>Modal data views without details and detail data views automatically present forms in modal popup panels.<br/><a href="#">Article</a> <a href="#">Demo</a></p>   | <b>Yes</b> | <b>Partial</b> |

|   |            |                |
|---|------------|----------------|
| <p><b>Sorting and Paging</b><br/>Quickly sort and page data sets of any size. The application data access layer efficiently retrieves the exact amount of data needed for display at the moment.</p>  | <b>Yes</b> | <b>Partial</b> |
| <p><b>Automatic Search Bars</b><br/>Automatic search bar is available in all multi-record data views. Users can search data using multiple field combinations with type-ahead and data type sensitive search functions, such as Next Week, Last Year, Ends With, etc.<br/><a href="#">Article Demo</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Adaptive Filtering</b><br/>Adaptive filtering allows efficient narrowing of the data scope by selecting available data samples in fly-over menus of column headers.<br/><a href="#">Tutorial Article</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Multiple Value Filtering</b><br/>The form of adaptive filtering that allows multiple filtering values applied to any column in a grid view. Requires zero programming.<br/><a href="#">Article</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Quick Find</b><br/>Multi-column <i>quick find</i> feature reduces the time needed to locate a record.<br/><a href="#">Demo</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Quick Find With Multiple Words</b><br/>Enhanced multi-column <i>quick find</i> feature allows finding records that match each word in a search sample.<br/><a href="#">Demo Tutorial</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>History (MRU)</b><br/>Interactive history of most recent used data objects allows users to work with several objects by instantly switching between them to adjust the workflow.<br/><a href="#">Tutorial</a></p>   | <b>Yes</b> | <b>No</b>      |
| <p><b>Permalinks</b><br/>Users can instantly create data bookmarks (permalinks), which can be stored and exchanged for secure access to the bookmarked master records. Multi-functional pages of your application will automatically detect permalinks and adjust their behavior accordingly to select the master record when requested.<br/><a href="#">Tutorial</a></p> | <b>Yes</b> | <b>No</b>      |
| <p><b>Conditional CSS Styling</b><br/>Define declarative rules to assign conditional CSS styles to individual data rows displayed in grid views. <a href="#">Tutorial 1</a> <a href="#">Tutorial 2</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Dynamic Lookups</b><br/>Unique implementation of lookups presents users with optional AJAX-enabled popup modal panels that offer <i>quick find</i>, paging, sorting, and <i>adaptive filtering</i> to speed up data selection.<br/><a href="#">Tutorial 1</a> <a href="#">Tutorial 2</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Cascading Lookups</b><br/>Configure sophisticated cascading lookup scenarios without writing a single line of code with full support for numerous styles of lookup fields, including auto-complete and dynamic lookup windows. <a href="#">Article</a></p>  | <b>Yes</b> | <b>Partial</b> |
| <p><b>Global Annotations</b><br/>Global annotations allow end-users to associate multiple text notes and file attachments with any data record. No database changes are required. This feature can be optionally enabled on individual data sets. <a href="#">Demo</a></p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Multiple Row Selection</b><br/>Users can select multiple rows in grid views. The selection spans multiple pages of records. The default operation supported with multiple row selection is <i>Delete</i>. Custom actions can take advantage of multiple row selection.</p>  | <b>Yes</b> | <b>Partial</b> |

|   |            |                |
|---|------------|----------------|
| <p><b>In-Place Row Editing</b><br/>Users can edit grid view rows in-place with grid cells automatically adjusted to fit to the current available space on the page creating a desktop-like experience.<br/><a href="#">Demo</a></p>   | <b>Yes</b> | <b>Partial</b> |
| <p><b>In-Place Row Creation</b><br/>Users can insert new grid view rows in-place without losing the view of existing records visible in the grid at the moment.<br/><a href="#">Demo</a></p>  | <b>Yes</b> | <b>Partial</b> |
| <p><b>Batch Editing</b><br/>Batch (mass) editing allows changing properties of multiple records based on one edit sample. Requires multiple row selection to be enabled.<br/><a href="#">Demo</a></p>   | <b>Yes</b> | <b>No</b>      |
| <p><b>Aggregates</b><br/>Aggregates such as SUM, COUNT, AVERAGE, are automatically executed and displayed in a dedicated grid row when requested. All aggregates are sensitive to the user-defined adaptive filters.<br/><a href="#">Tutorial</a></p>   | <b>Yes</b> | <b>No</b>      |
| <p><b>Data Summary</b><br/>Side bar displays a summary of a selected record. If the page scrolls then the summary stays visible, which allows users to know the context of a selected record at all times. The summary is also displayed if selected record is located on an invisible tab.</p>             | <b>Yes</b> | <b>No</b>      |
| <p><b>Relationship Explorer</b><br/>Lookup fields provide automatic intelligent links that will navigate end user to the multi-functional pages and select the referenced master record.</p>  | <b>Yes</b> | <b>No</b>      |
| <p><b>Automatic Reports</b><br/>Automatically generated Report option is available on the action bar of data views. Print data reports in PDF, Excel, and TIFF format. Reports automatically take into account all user defined filters and sort order.<br/><a href="#">Demo</a></p>                        | <b>Yes</b> | <b>Yes</b>     |
| <p><b>CSV Export</b><br/>Users can export records presented in any data view in CSV format by selecting <i>Download</i> option from the <i>Actions</i> menu on the view's action bar.<br/><a href="#">Demo</a></p>  | <b>Yes</b> | <b>Yes</b>     |
| <p><b>RSS Data Feeds</b><br/>Users can create an RSS feed of any recordset by selecting a menu option in <i>Actions</i> menu. The RSS feed reader will automatically notify end users when data has changed. The link to the live data is included into each RSS item.<br/><a href="#">Demo</a></p>         | <b>Yes</b> | <b>No</b>      |
| <p><b>Bulk Import</b><br/>Import records in bulk from CSV, XLS, and XLSX files. Import dialog allows end-user driven field mapping and downloadable import file template. Import process automatically matches foreign key IDs to their text representation<br/><a href="#">Article</a></p>                 | <b>Yes</b> | <b>Partial</b> |
| <p><b>Form Navigator</b><br/>Users can navigate to next and previous records in form views without being required to return to the page with the list of records. Form navigator automatically uses the same filters and sort order that are applied to the list view.<br/><a href="#">Article Demo</a></p> | <b>Yes</b> | <b>No</b>      |
| <p><b>Rich Text</b><br/>Extensible rich text editing can be enabled with a single setting on any field.<br/><a href="#">Article</a></p>   | <b>Yes</b> | <b>Partial</b> |

| Globalization and Localization   | Code On Time Iron Speed |                |
|--|-------------------------|----------------|
| <b>Globalization</b><br>Full support for world cultures including date and time, calendar, numeric, and currency formats. Your application code may use one culture for the server side business logic and a different culture for presentation.<br><a href="#">Tutorial</a>                   | <b>Yes</b>              | <b>Partial</b> |
| <b>Localization</b><br>Automatic localization of all standard application resources in your local language. Elegant localization system requires minimal maintenance.<br><a href="#">Tutorial</a>  | <b>Yes</b>              | <b>Partial</b> |
| <b>Multiple Cultures / Languages</b><br>Support any number of languages with the same code base. The application framework offers easy-to-use localization of static resources and simple API to render localized messages produced by your custom business rules.<br><a href="#">Tutorial</a> | <b>Yes</b>              | <b>Partial</b> |
| <b>Automatic Translation</b><br>Wrap localization brackets around any text. Web application code generator will perform full translation in all languages supported by your application.<br><a href="#">Tutorial</a>   | <b>Yes</b>              | <b>No</b>      |
| <b>Language Detection</b><br>Automatic detection of supported culture/language. If the client browser culture is supported by your app then the appropriate localized resources are utilized to render the pages without user involvement.<br><a href="#">Tutorial</a>                         | <b>Yes</b>              | <b>Partial</b> |
| <b>Language Selector</b><br>Membership bar offers a list of languages supported in your application with native names presented to application users. User selection is automatically memorized and maintained with a sliding expiration.<br><a href="#">Tutorial</a>                          | <b>Yes</b>              | <b>Partial</b> |
| Browser Support  | Code On Time Iron Speed |                |
| <b>Internet Explorer 7</b>   | <b>Yes</b>              | <b>Yes</b>     |
| <b>Internet Explorer 8</b>   | <b>Yes</b>              | <b>Partial</b> |
| <b>Internet Explorer 9</b>   | <b>Yes</b>              | <b>Partial</b> |
| <b>Firefox</b>   | <b>Yes</b>              | <b>Partial</b> |
| <b>Safari</b>  | <b>Yes</b>              | <b>Partial</b> |
| <b>Chrome</b>  | <b>Yes</b>              | <b>Partial</b> |
| <b>Opera</b>   | <b>Yes</b>              | <b>Partial</b> |
| Membership / User Management   | Code On Time Iron Speed |                |
| <b>ASP.NET Membership</b><br>Integrated ASP.NET Membership can be enabled in most projects.<br><a href="#">Demo</a>  | <b>Yes</b>              | <b>No</b>      |
| <b>Standalone ASP.NET Membership Database</b><br>Point-and-click configuration of a dedicated ASP.NET Membership database for your applications. <a href="#">Tutorial</a>  | <b>Yes</b>              | <b>No</b>      |



|  |              |                |
|--|--------------|----------------|
| <p><b>Membership Bar</b><br/>Unique AJAX-enabled membership bar offers fly-over login dialog, logout link, login status information, and access to integrated help system.</p>   | <b>Yes</b>   | <b>No</b>      |
| <p><b>User/Role Manager</b><br/>Advanced user and role management tool with high performance user interface allows easy management of site membership. Works on top of ASP.NET Membership.</p>   | <b>Yes</b>   | <b>Partial</b> |
| <p><b>Dedicated Login Page</b><br/>You can elect to use a dedicated login page instead of the fly-over login dialog on the membership bar.<br/><a href="#">Tutorial</a></p>  | <b>Yes</b>   | <b>Partial</b> |
| <p><b>"Remember Me" Option</b><br/>Login dialog offers optional "Remember me" option to speed up login process for frequent users of your web application.</p>   | <b>Yes</b>   | <b>Yes</b>     |
| <p><b>Password Recovery</b><br/>Optional password recovery based on ASP.NET Membership is offered to end users of your application to handle lost/forgotten passwords.</p>   | <b>Yes</b>   | <b>Partial</b> |
| <p><b>Self Sign-Up</b><br/>Optional self sign-up can be offered to the end users of your applications. Users will request creation of their own accounts. Administrator can subscribe to an RSS feed of accounts waiting approval and issue approval upon receiving a notification.</p>                                | <b>Yes</b>   | <b>No</b>      |
| <p><b>"My Account" Option</b><br/>Optional "My Account" dialog is accessible from any application page through a link on a membership bar. Users can reset their password, change email, and password recovery question.</p>   | <b>Yes</b>   | <b>Partial</b> |
| <b>Declarative Security</b>  |              |                |
|  | Code On Time | Iron Speed     |
| <p><b>Pages</b><br/>Secure access to the pages of generated applications is controlled by standard ASP.NET security infrastructure based on roles.<br/><a href="#">Tutorial</a></p>  | <b>Yes</b>   | <b>Yes</b>     |
| <p><b>Fields</b><br/>Standard ASP.NET roles are used to control who is allowed to read/write field values in data views. If "read" or "write" role(s) are specified then a field is automatically hidden from presentation or becomes read-only when presented to unauthorized users.<br/><a href="#">Tutorial</a></p> | <b>Yes</b>   | <b>No</b>      |
| <p><b>Actions</b><br/>Standard ASP.NET roles are controlling availability of user interface actions presented as links, menu options, push buttons, tool bar buttons, etc.<br/><a href="#">Tutorial</a></p>  | <b>Yes</b>   | <b>No</b>      |
| <p><b>Idle User Detection</b><br/>Declare an <i>idle user timeout</i> and a semi-transparent screen with a login prompt will be placed automatically over any website page of your application if an authenticated user has not been using mouse or keyboard in the browser window longer than the timeout value.</p>  | <b>Yes</b>   | <b>No</b>      |
| <b>Business Rules</b>  |              |                |
|  | Code On Time | Iron Speed     |
| <p><b>Global Logging</b><br/>Shared Business Rules class can provide a single point of logging of application-wide events including row-level data insertion, updates, and deletion. You can also implement automatic markup of record-level access and modification. <a href="#">Tutorial</a></p>                     | <b>Yes</b>   | <b>No</b>      |
| <p><b>Many-to-Many Fields</b><br/>Point-and-click implementation of many-to-many fields without writing a single line of code.<br/><a href="#">Tutorial 1</a> <a href="#">Tutorial 2</a> <a href="#">Tutorial 3</a></p>  | <b>Yes</b>   | <b>No</b>      |

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|--|--------------|----------------|
| <p><b>Universal Lookups</b><br/>If you have decided to replace multiple dedicated lookup tables with a universal lookup table(s) then you will find great support for such approach in our products.<br/><a href="#">Tutorial 1</a> <a href="#">Tutorial 2</a></p>   | <b>Yes</b>   | <b>Partial</b> |
| <p><b>Client-Side Validators</b><br/>Use client-side validators based on regular expressions to ensure correct data entry.<br/><a href="#">Tutorial</a></p>  | <b>Yes</b>   | <b>No</b>      |
| <p><b>Server-Side Calculated Fields</b><br/>Server-side calculations are triggered in response to the changes made to the fields presented in a web browser.<br/><a href="#">Tutorial</a></p>  | <b>Yes</b>   | <b>No</b>      |
| <p><b>Code Defaults</b><br/>Assign native code expressions to be executed on the server to produce default values when a new record is created to simplify data entry process for end users.<br/><a href="#">Tutorial</a></p>  | <b>Yes</b>   | <b>Partial</b> |
| <p><b>Multi-Field Lookup</b><br/>You can configure a multi-field lookup to copy several fields from the lookup view into the detail record. The same technique also works when a user creates a child record of a selected master.<br/><a href="#">Tutorial 1</a> <a href="#">Tutorial 2</a></p>   | <b>Yes</b>   | <b>No</b>      |
| <p><b>Declarative Code Formulas</b><br/>Declare code formulas to introduce AJAX-enabled just-in-time calculations without writing a business rule to support the server-side calculations in your ASP.NET web application. The code generator will automatically produce a business rule to incorporate your formula.<br/><a href="#">Tutorial 1</a> <a href="#">Tutorial 2</a></p>          | <b>Yes</b>   | <b>No</b>      |
| <p><b>Sort and Filter</b><br/>Use declarative sort and filter expressions on data views. This feature allows effecting just-in-time ORDER BY and WHERE clause automatically created by the application framework at runtime without the need to modify the command.<br/><a href="#">Tutorial</a></p>   | <b>Yes</b>   | <b>No</b>      |
| <p><b>Stored Procedures</b><br/>Configure data controller commands as stored procedures with parameters. Parameter values are derived from data objects selected in user interface or from properties of a business rules class. Specify command names as action arguments to define custom <i>insert</i>, <i>update</i>, and <i>delete</i> methods or to execute custom business logic.</p> | <b>Yes</b>   | <b>Yes</b>     |
| <p><b>Parameter Intelligence</b><br/>A single stored procedure can handle any number of usage scenarios with a different set of source data fields available. Intelligent value discovery for parameters dependent on the values of data fields presented in user interface will automatically find such values even if user interface presentation is not providing them.</p>               | <b>Yes</b>   | <b>No</b>      |
| <p><b>Parameter Business Rules</b><br/>A property of a business rules class can be specified as a source of value for a stored procedure parameter of command with code-less binding at runtime.</p>   | <b>Yes</b>   | <b>No</b>      |
| <b>Professional User Interface Themes</b>  | Code On Time | Iron Speed     |
| <p><b>Theme Collection</b><br/>Offers a collection of professionally designed user interface themes.</p>   | <b>Yes</b>   | <b>Partial</b> |
| <b>User Interface Customization</b>  | Code On Time | Iron Speed     |
| <p><b>Custom User Controls</b><br/>Enhance automatically generated pages with custom users controls that blend into the user interface themes<br/><a href="#">Tutorial</a></p>   | <b>Yes</b>   | <b>No</b>      |

|  |              |            |
|--|--------------|------------|
| <b>Tall And Wide Pages</b><br>Make your pages "tall" and "wide" when needed to maximize the use of page real estate.<br><a href="#">Tutorial</a>   | Yes          | No         |
| <b>Custom Form Templates</b><br>Create custom form templates to override the standard form layouts.<br><a href="#">Tutorial</a> <a href="#">Tutorial 2</a>   | Yes          | Yes        |
| <b>Custom Grid Templates</b><br>Define custom layout of grid rows to create form-style view of records edited in grids<br><a href="#">Tutorial</a>   | Yes          | No         |
| <b>3-rd Party Controls</b><br>Freely use controls from commercially available libraries. Requires Web.Config modification instructions.<br><a href="#">Tutorial</a>  | Yes          | Yes        |
| <b>Custom Search Bars</b><br>Create custom search bars displayed above grid views to provide custom search parameters.<br><a href="#">Tutorial</a>   | Yes          | Yes        |
| <b>ObjectDataSource</b><br>Automatically generated data access classes support ObjectDataSource architecture and allow using 3-rd party controls and standard ASP.NET components to build custom user interface forms.<br><a href="#">Tutorial</a> | Yes          | Yes        |
| <b>ControllerDataSource</b><br>ControllerDataSource is a data source component that provides extremely simplified configuration while offering the same features and benefits that available with ObjectDataSource.<br><a href="#">Tutorial</a>    | Yes          | Partial    |
| <b>Logo and Footer</b><br>Quickly customize logo and footer of a generated web application.<br><a href="#">Tutorial</a>  | Yes          | Yes        |
| <b>Site Navigation System</b><br>Extend and re-define the navigation system of generated applications. Unlimited number of menu levels is supported. Include links to external web sites and applications.<br><a href="#">Tutorial</a>             | Yes          | Partial    |
| <b>Reporting</b>   |              |            |
|  | Code On Time | Iron Speed |
| <b>Traditional Reports</b><br>Build reports with free-form SQL queries and link them to user interface actions. <a href="#">Tutorial</a>   | Yes          | Yes        |
| <b>Reports Based on Business Objects</b><br>Create ad-hoc reports based on business object layer of your application with ObjectDataSource component or light-weight ControllerDataSource component. <a href="#">Tutorial</a>                      | Yes          | No         |
| <b>Custom RDLC Report Templates</b><br>Create custom templates that automatically take advantage of adaptive filtering, quick search, and sorting to apply report template to the data sets presented in grid views. <a href="#">Tutorial</a>      | Yes          | No         |

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