



PRESENTED BY DATA PROJECT

# Styling Web Applications

Presented by **Roel Fermont**

As Graphic Designer at Data Access, I have helped many developers **making well-running applications look great.** I'll show you what great results can be achieved by using some of the latest techniques that are available on today's web to make your web application stand out from the rest.

Are you ready to take your web application to the next level?

Your goal: How to make your  
highly functional applications look great!



it has been

**3 YEARS, 4 MONTHS AND 6 DAYS**

since the **first DataFlex theme** was created.

Windows  
Like

[illegible]



Modern Sky

The screenshot shows a web application interface for 'Order Entry'. At the top, there is a navigation bar with links: File, Views, Reports, Demo, and Themes. Below this is a toolbar with icons for navigation and actions: Clear/Add, Clear all, Save, and Delete. The main form area is titled 'Order Entry' and contains several input fields with search icons (magnifying glass) for: Order Number, Customer Number, Order Date (with a calendar icon), Customer Name, Street Address, City, Zip, Ordered By, State (dropdown), Salesperson, Terms (dropdown), and Ship Via (dropdown). Below the form is a table with the following columns: Item ID, Description, Unit Price, Price, Quantity, and Total. The table has a scrollable body with one row visible, showing values: Item ID (with a search icon), Description, Unit Price (€0,00), Price (€0,00), Quantity (1), and Total (€0,00). At the bottom right of the table area, there is a summary row labeled 'Order Total:' with a value of '€0,00'.



Web Creme

[illegible]

High  
Contrast

File Views Reports Demo Themes

Clear/Add Clear all Save Delete

### Order Entry

Order Number:  Customer Number:  Order Date:

Customer Name:

Street Address:

City:  Zip:  Ordered By:

State:  Salesperson:

Terms:  Ship Via:

Item ID	Description	Unit Price	Price	Quantity	Total
<input type="text"/>		€0,00	€0,00	1	€0,00

Order Total:  €0,00



\*NEW\*

Outlook  
2013 HD

**Order Entry**

Order Number:  Customer Number:  Order Date:

Customer Name:

Street Address:

City:  Zip:  Ordered By:

State:  Salesperson:

Terms:  Ship Via:

Item ID	Description	Unit Price	Price	Quantity	Total
<input type="text"/>		€0,00	€0,00	1	€0,00

Order Total: €0,00



# Where to start

It all **starts here...**

1

**Set a goal** (client requests, deadlines, budget, etc.)

2

**Make a decision and come up with a plan**

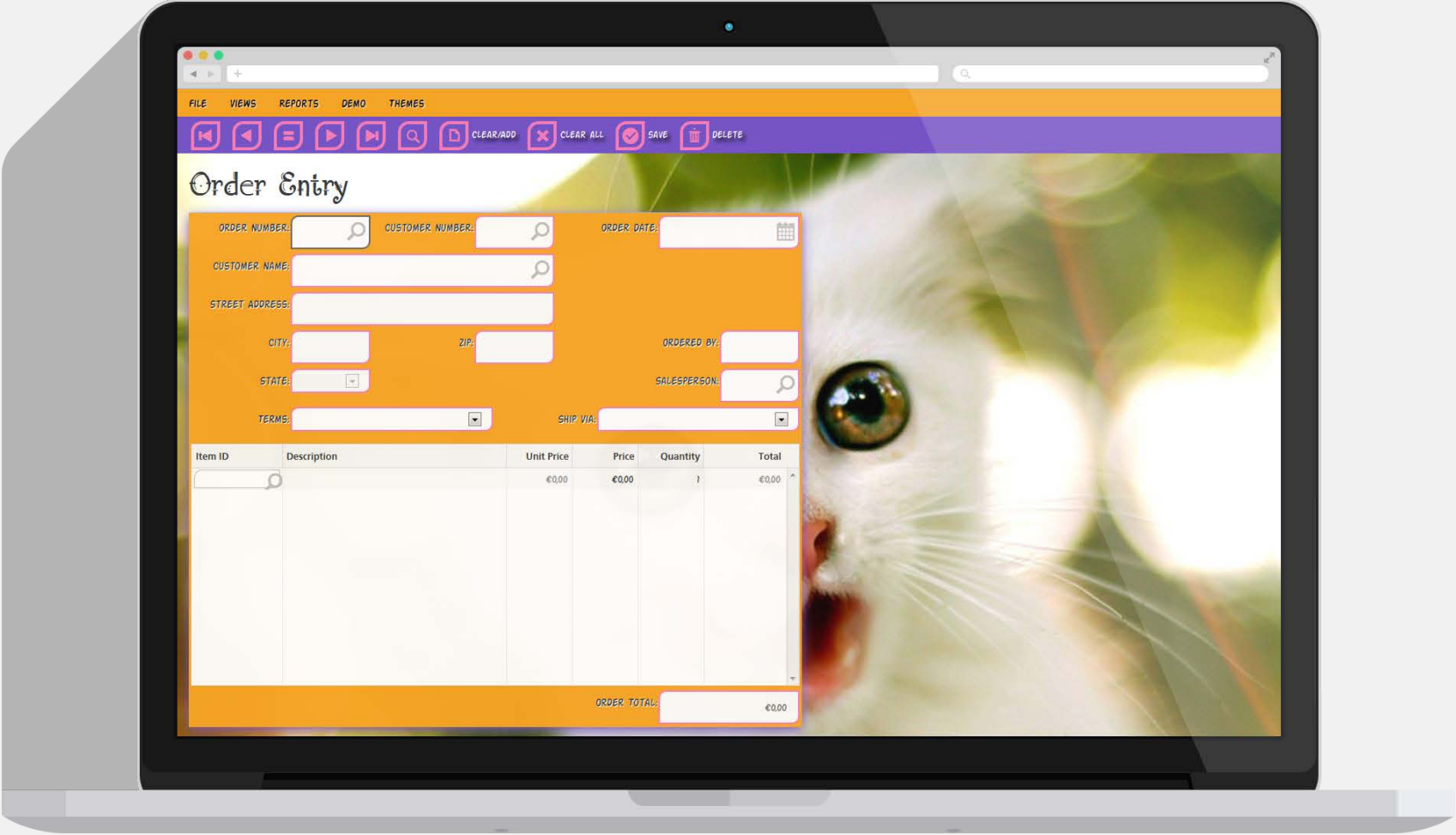
3

**Setup your workspace and run the right tools**

4

**Be inspired, get creative!**

...but what happens if  
you don't have a plan?



A stylized illustration of a laptop. The laptop is light gray with a black bezel around the screen. The screen itself is a solid, vibrant red. Centered on the red screen is the text "BAD IDEA!" in a bold, white, sans-serif font. The text is all in uppercase. The laptop is shown from a slightly elevated front angle, with a soft gray shadow cast behind it to the left and bottom, giving it a three-dimensional appearance.

**BAD IDEA!**

# Find the right approach

There are various ways of **approaching the styling process**

1<sup>st</sup>  
option

## Build > Design

- ↳ Use an **existing** theme or **modify** a theme
- ↳ Use the functionality the framework offers
- ↳ The easiest approach to get quick results but **nothing spectacular**

2<sup>nd</sup>  
option

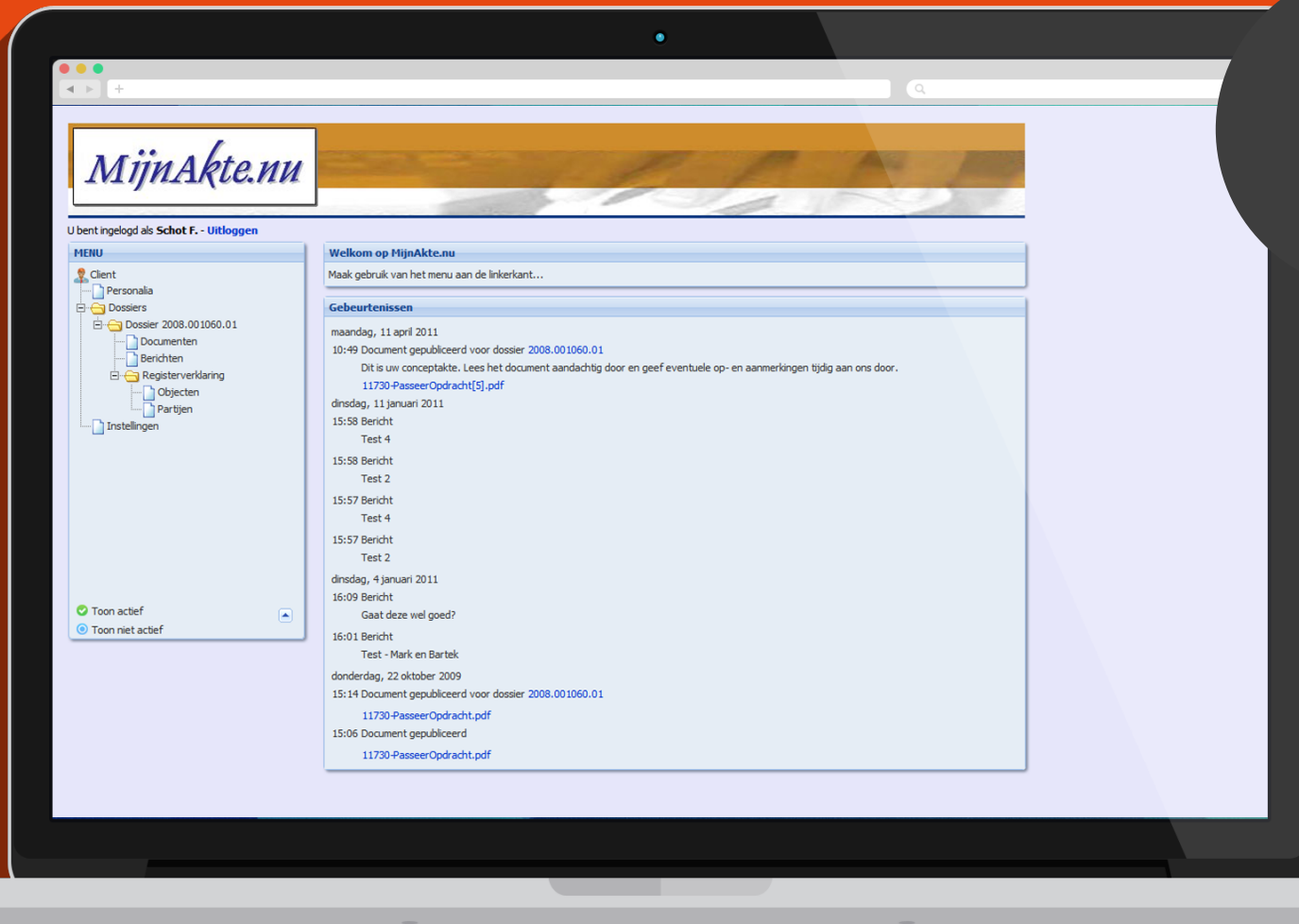
## Design > Build

- ↳ Create your own UI/theme
- ↳ Most likely you'll need custom controls
- ↳ You'll need a graphic designer (this could be me 😊)
- ↳ Time consuming but the **best approach to get spectacular results**




Before and After

Quantaris  
( before )



Quantaris  
( after )

U bent ingelogd als Schot F. 

Dashboard Dossiers Personalia Instellingen

**TODO'S** 1

Gaarne vragenlijst invullen


**GEBEURTENISSEN**


V


W


M


A

 dinsdag, 26 maart 2013 - 11:46 uur  
Gaarne vragenlijst invullen

 woensdag, 11 januari 2012 - 17:21 uur  
Document gepubliceerd in dossier 2008.001060.01  
doc levb01\_akt\_rg\_levering bedrijfs registergoed.pdf, dossier 2008.001060.01, ontvangen Verhoeven en Schot  
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doc 163606-Beschrijving Auditfile.pdf, dossier 2008.001060.01, ontvangen Schot  
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Berendsen  
Service  
Online  
( before )

ServiceOnLine Order Registers Reports Other

**BERENDSEN**

Registers: Employees Logged in as: OVAKO HOFORS

Empl.no  First name  Last name

Del.addr.no.  Name  **Delivery address register**

Department  Locker  Compartment  ☒ Only show available

Earl. dep.  Earl. lock.  Earl. comp.

Cst.  Title  Placement  Quitting

Max garments  Embl. mod.  Markings  Note

**New Save Delete Order Move Copy**

**Garments** Borrowed garments Orders

Garment id	Article no	Description	Last wash	Size	Type	Marked	Mark.	Select
D0086AD69C	100621	PIKÉTRÖJA RÖD P/B BF	2012-06-21	M	HYRGODS	<input checked="" type="checkbox"/>		
D0086B3523	100621	PIKÉTRÖJA RÖD P/B BF	2012-06-21	M	HYRGODS	<input type="checkbox"/>		
D008A1A4A3	102984	JACKA FODRAD MBLÅ POL	2012-12-05	S	KUNDÄGT	<input type="checkbox"/>		
D0085B21A8	107196	JACKA 900 MBLÅ/RÖD/BLÅ P/B	2012-06-21	M	HYRGODS	<input type="checkbox"/>		
D0087B6DAE	107198	BYXA 900 MBLÅ/RÖD/BLÅ P/B BF	2012-07-11	146	HYRGODS	<input type="checkbox"/>		
D0087BC732	107198	BYXA 900 MBLÅ/RÖD/BLÅ P/B BF	2012-07-11	146	HYRGODS	<input type="checkbox"/>		
D0087BF292	107198	BYXA 900 MBLÅ/RÖD/BLÅ P/B BF	2012-07-11	146	HYRGODS	<input type="checkbox"/>		

Garment id Article no. Description Last wash Addition Size Regret

Berendsen  
Service  
Online  
( after )

[illegible]

**Dossiers**

Dossiernummer: 20070006    Zaaknaam: Clip/Advies

Toevoegnummer:    Zaakfactor: 1,0000    Indeling: Algemeen

Ingekomen dd: 22-01-2007    Verantw Medew: HDO

Onderwerp: Advies algemeen

(Afdruk) Naam: Clip/Advies test

Word

Uren    Kosten    Verschotten    Voorschotten

☒ Basisgegevens    ☒ Uitgebreide gegevens    ☒ Wvft    ☒ Faillissement    ☒ Gelden Derden    ☒ Declaraties    ☒ Toevoeging    ☒ Status    ☒ Aantekeningen

Contactpersoon:   

Rechtsgebied: OND    Ondern.praktijk/venn.sch.recht    Decl.code:   

Financieel:

Budget: 0    Btw Code: 3A 21.00

Kantoorkosten: 7,50%    ☒ Declarabel    ☒ Spec. printen

Afspraken:

Type afspraak: Vast tarief dossier

Vaste prijs: 0,00    Vast Uurtarief: 180,00

Zaaktypes:

Code	Omschrijving

Bron medewerker:   

Clip  
Consultancy  
( before )

Clip  
Consultancy  
( after )

Relaties (particulieren) > Particulier (Baantjer)

**MAIN MENU**

- Dossiers
- Uren
- Particulieren**
- Rechtspersonen
- Relatie informatie
- Rapporten
- Onderhoud

**PARTICULIER (BAANTJER)**

Adres: [Adres] Naam: Baantjer ☐ Niet actief

gemeen Correspondentie Contacten Financieel **Persoonsgegevens** Aantekeningen Tabellen

Geslacht: Man Geb. Plaats: Geb. Datum: Relatie van: Peter Relatie sinds: 03-11-2008 Nationaliteit: Datum inname ID: Ingenomen door: ☐ Relatie is aangemeld op de portal

Opmerkingen:

Gewijzigd: 12-08-2013 Gewijzigd door: Clip

Verwijderen OK

POS  
( before )

TRANS NO

KEYED

TAKE AWAY

VOID

GARRY

ACCOUNT - WALK - IN

TABLES

COURSE

Sale

SEND

NEW ORDER

ITEM	QTY	EXT PRICE

COFFEE REG 3.80

ADMIN

BREAK FAST

CAKES

CHOCS

COFFEE DI IN

COFFEE REG CHAI 4.00

COLD DRINKS

COOKIES BISCUITS

FRUIT

GOURMET

MERCH ANDISE

COFFEE REG L/ M 4.20

NON GST

SLICES

SOFT DRINKS

TAKE AWAY COFFEE

TAWAY JUICE + H2O

COFFEE 1 SHOT LRG 4.40

TEA

VOUCHER

WATER FREE GLASS

COFFEE LRG 4.80

COFFEE LRG CHAI 5.00

COFFEE LRG LM 5.20

RECEIPT OFF

RECEIPT

PAYMENT

SURCHARGE

0.00

OPEN DRAWER

PRINT LAST RECEIPT

CONFIRM

TOTAL

0.00

SETTINGS

PREVIEW RECEIPT

REMOVE ITEM

TENDERED

0.00

CHANGE

0.00

BACK

DOWN

1

UP

MODIFY

POS  
( after )

2:57 pm | 2014-10-23

Search for products

<

Cakes

Break Fast

Soft drinks

Coffee Shot Large

Water free glass

Non GST

Slices

Fruit

Coffee Shot Large

Voucher

Tea

Take away coffee

Gourmet special

Coffee Shot Large

Cookies biscuits

Cookies biscuits

Specials

Something strange

Coffee Shot Large

Cookies biscuits

Cookies biscuits

Daily offer

Coffee Shot Large

MODIFY

COURSE

TABLES

SEND

ORDER #45231

Open drawer

Receipt

Customer information panel

Item	Quantity	Price
✕ Break Fast	⊖ 1 ⊕	5.95
✕ Coffee Extra sugar Extra milk	⊖ 2 ⊕	7.60
✕ Coffee Shot Large	⊖ 1 ⊕	4.40
✕ Cookie biscuits	⊖ 4 ⊕	9.99
Surcharge		0.00
Total		27.94
Tendered		50.00
Change		22.06

VOID

PAY

# But first understand how the framework works

Things you should know before you **start styling your web application**



Controls are the building blocks

- ↳ Forms
- ↳ Buttons
- ↳ Lists



Controls are wrapped in containers

- ↳ Views
- ↳ Panels
- ↳ Tab pages
- ↳ Groups

# Column Layout CSS



Uses percentages



Be cautious when adding margins, paddings and borders



Sets inline styles on controls



CSS Properties



float



clear



margin-left



width

Column 0		Column 1		Column 2	
Order Number:	<input type="text" value="133"/>	Customer Number:	<input type="text" value="94"/>	Order Date:	<input type="text" value="29-04-2004"/>
Customer Name:	<input type="text" value="Union Enterprise of Seminole"/>			Ordered By:	<input type="text"/>
Street Address:	<input type="text" value="4183 Central Park Circle"/>			Salesperson ID:	<input type="text" value="CM"/>
City:	<input type="text" value="Stanford"/>	Zip:	<input type="text" value="32771"/>		
State:	<input type="text" value="FL"/>				
Terms:	<input type="text" value="COD"/>	Ship Via:	<input type="text" value="Federal Express"/>		
Item ID	Description	Unit Price	Price	Quantity	Total
CASE	Understanding Case Technology	€39,00	€39,00	1	€39,00
DT	The Database Programmer's Tool	€179,00	€179,00	1	€179,00



# Inline CSS by DataFlex Properties



pbVisible -> visibility: hidden



pbRender -> display: none



piHeight -> height: 200px



psTextColor -> color: #003300;



psBackgroundColor -> background: #CCCCDD;



pbFillHeight -> height: 345px

Don't use positioning or CSS hacks e.g. !important

# CSS Selectors

- ✓ Start with the control classname  
(e.g. WebCommandBar, WebControl, WebForm)
- ✓ Never use ID's within themes
- ✓ It's best to start with an existing theme
- ✓ Avoid inline styles
- ✓ Use inspector tool to determine selectors
- ✓ Remember precedence
  - ↳ ID's are stronger than classnames
  - ↳ Classnames are stronger than tagnames

ID's must be unique where a CLASS can be applied to many things

# CSS Structure

## Theme CSS

(designer)

- Global styles for the controls defined in CSS file
- Switch using psTheme property on oWebApp
- *AppHtml\CssThemes\<psTheme>\Theme.css*

## Custom CSS Classes

(developer & designer)

- Application specific CSS declarations
- Assigned using psCSSClass or psHtmlId
- *AppHtml\CssStyle\Application.css*

## DataFlex Properties

(developer)

- Properties on DataFlex classes
- Inline styles set by JavaScript engine

## System CSS

(framework)

- CSS required for functioning of controls
- *AppHtml\DfEngine\System.css*

# Setup your workspace

Before we can begin **make sure all the files are present**



C:\...\DataFlex 18.1 Examples\WebOrder\AppHTML\CssThemes

# The styling part

Things you'll need to **create or modify a theme**

1 Ask your client for a **color chart** or create a **color scheme** yourself using Adobe Kuler or colorschemedesigner.com)

↳ Take one **primary** color, one **secondary** color, one **contrast** color, one **fill** color

2 Use the right tools and resources

↳ Web developer tools

↳ ColorPic

↳ CSS3 generator

3 **CSS skills, experience** with the Framework and **patience!**



# Developer tool

Why **the inspector tool is such a great tool**

- ✓ Inspect elements
- ✓ Preview icons, images, colors
- ✓ Changing padding/margins/heights
- ✓ Cycle through CSS properties
- ✓ CSS pseudo-classes
- ✓ Disabled styles temporarily
- ✓ See changes highlighted
- ✓ Edit your styles instantly



**Firefox<sup>®</sup>**  
*Developer Edition*

**USEFUL OR NOT?**

[www.mozilla.org/en-US/firefox/developer/](http://www.mozilla.org/en-US/firefox/developer/)

# CSS3 properties

Use these CSS techniques to get **great results**

Text selection `::selection {color: #FFFFFF; background: #0072C6;}`

RGBa `{background: rgba(200, 54, 54, 0.5);}`

Box shadows `{box-shadow: 0 0 5px 0 rgba(0,114,198,50);}`

Box shadow inset `{box-shadow:inset 0 1px 0 0 #272525;}`

Text shadows `{text-shadow: 1px 1px 0 #005899;}`

Rounded corners `{border-radius: 1px;}`

Transitions `{transition: all 0.5s ease;}`

Font Face `@font-face {font-family: 'roboto_condensedbold';}`

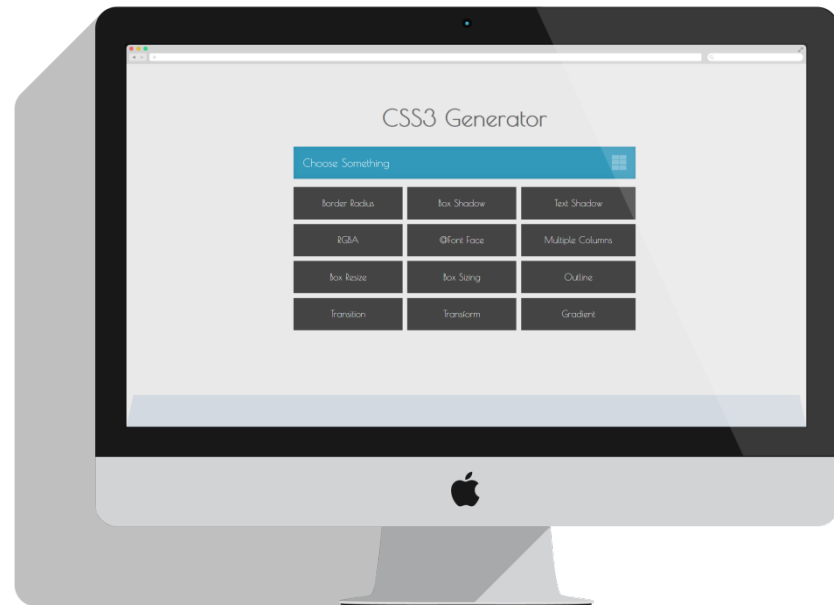
It's okay to have different experiences in different browsers - just make sure you have a fall back.



# CSS3 Generator ([css3generator.com](http://css3generator.com))

A great **time saver**

- ✓ Automatically generates CSS code
- ✓ Shows cross-browser support
- ✓ Easily select your CSS3 property
- ✓ Direct preview



develop using **modern web-browsers** that follow standards first,  
then tweak for buggy versions of Internet Explorer,  
not the other way around



df-safari, df-webkit



df-mozilla



df-ie, df-ie8, df-ie9



df-opera



df-chrome

# @font-face for typography

Use the @font-face selector to make your application **look awesome**



Custom fonts and **no more web safe fonts**  
like Arial, Times New Roman, etc.



Customizable



Render in different colors



Apply font- and text-related CSS properties



Loading time increases with the amount of fonts

# DataFlex

# @font-face for typography

Use the @font-face selector to make your application **look awesome**

## HTML

```
<h1 class="title">My Title</h1>
```

## CSS

```
.title{  
  font-family: 'roboto_condensedbold', Arial, Helvetica, sans-serif;  
}  
  
@font-face {  
  font-family: 'roboto_condensedbold';  
  src: url('Fonts/RobotoCondensed-Bold-webfont.eot');  
  src: url('Fonts/RobotoCondensed-Bold-webfont.eot?#iefix') format('embedded-opentype'),  
       url('Fonts/RobotoCondensed-Bold-webfont.woff') format('woff'),  
       url('Fonts/RobotoCondensed-Bold-webfont.ttf') format('truetype'),  
       url('Fonts/RobotoCondensed-Bold-webfont.svg#roboto_condensedbold')  
  format('svg');  
  font-weight: normal;  
  font-style: normal;  
}
```

# @font-face typography generators

Use the @font-face selector to make your application **look awesome**



## Font Squirrel

(free fonts for commercial use and font-face generator)



## Google Font

(free fonts for commercial use, *@import* use)



## Fonts.com

(huge selection, free fonts but site badge required or paid subscription)



## MyFonts

(huge selection, paid fonts or paid subscription)

# @font-face for font-icons

Use the @font-face selector to make your application **look awesome**



Scalable



Customizable

- Render in different colors
- Apply font- and text-related CSS properties
- Make changes without opening Photoshop



Single color

- But you can add a `<div>` around your icon to set a background-color or border

CHARACTER MAPPING

↓	←	→	↑	▼	▶	◀
a	b	c	d	e	f	g
▲	▲	⏮	⏭	▶	◀	=
h	i	j	k	l	m	n
🔍	📍	🚫	❓	✅	⚠	📁
o	p	q	r	s	t	u
📁	✖	×	🔄	🔄	📄	📄
v	w	x	y	z	A	B
🖨	🗑	🔄	🔄	→]	[→	📅
C	D	E	F	G	H	I
×	📄					

# @font-face for font-icons

Use the @font-face selector to make your application **look awesome**

## HTML

```
<span href="#" class="WebItm_Icon">My Link</span>
```

## CSS

```
.WebItm_Icon {  
  font-family: "weborder-171" !important;  
  content: "d";  
  font-style: normal !important;  
  font-weight: normal !important;  
  font-variant: normal !important;  
  text-transform: none !important;  
  speak: none;  
  line-height: 1;  
  -webkit-font-smoothing: antialiased;  
  -moz-osx-font-smoothing: grayscale;  
  display: inline-block;  
}
```

```
@font-face {  
  font-family: "weborder-171";  
  src:url("fonts/weborder-171.eot");  
  src:url("fonts/weborder-171.eot?#iefix")  
  format("embedded-opentype"),  
  url("fonts/weborder-171.ttf")  
  format("truetype"),  
  url("fonts/weborder-171.svg#weborder-171")  
  format("svg"),  
  url("fonts/weborder-171.woff") format("woff");  
  font-weight: normal;  
  font-style: normal;  
}
```

The **::before pseudo-element** can be used to **insert content before** the content of an element.  
The **::after pseudo-element** can be used to **insert content after** the content of an element.

# @font-face icon generators

Some resources to generate your **own font icons**



**IcoMoon**



**Fontastic** (the one we use)



**Fontello**

Make sure to  
check the  
usage license

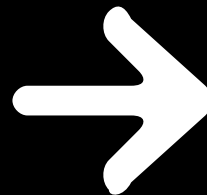
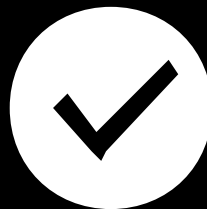
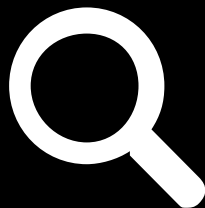
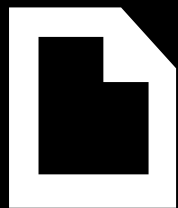
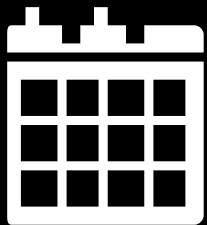


IcoMoon

Fontastic

Fontello





We've **updated the current themes** with font-icons  
for better performance and customization

# Thank you for your time!

We're looking forward seeing great designs from you!



Need a professional theme  
or web application?

Contact Data Access Europe  
[info@dataaccess.eu](mailto:info@dataaccess.eu)

# Questions?

