



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?

User Experience (UX)

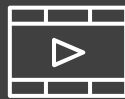
Creating successful business solutions today requires visual design and positive user experience!

About DataFlex

- The DataFlex software development platform is used by independent software vendors and corporate development teams.
- DataFlex solutions are known for being reliable and offering high security and scalability.
- The development framework is designed to provide robust and adaptable solutions quickly.
- It is the choice of tool in a result-driven IT management environment, providing a quick return of investment.

We think it matters how things look
in software development.

Data Access provides services in the field of
graphic design, web development and video productions.



play video

Multimedia is the most powerful tool of communication - it brings the story to life.

90% of information transmitted to the brain is **visual** and **40%** will respond better to **visual information** rather than Plain Text.

Why not make **your highly functional
applications** look great?

create a brand position | sense of trust | professional look and feel | stand out | create impact



3 YEARS, 8 MONTHS AND 5 DAYS
since the **first DataFlex theme** was created.

Windows
Like

[illegible]



Modern
Sky

[illegible]



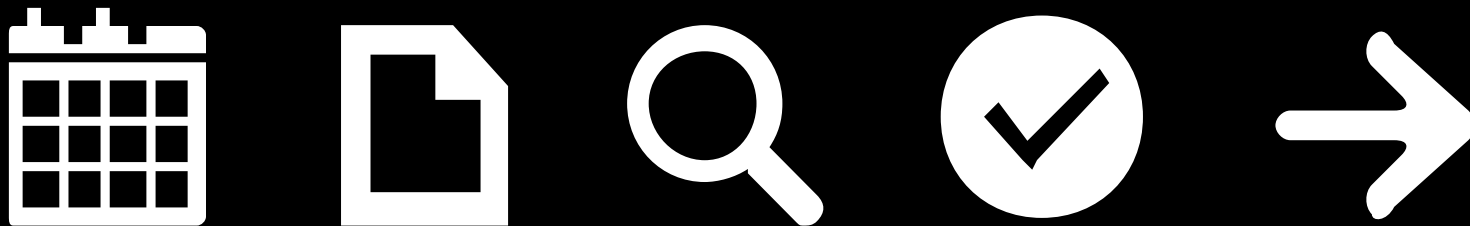
Web
Creme

[illegible]



High Contrast

[illegible]



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

And a **new theme** has been added – Flat Touch.

Currently available in DataFlex 18.1 Alpha 2

Where to start

It all **starts with these four 'easy' steps...**

1

Set the scope and create a project plan

e.g. client requests, deadlines, budget, approach, goals

2

Understand how the Framework works

e.g. controls are the building blocks, column layout system

3

Setup workspace and run the tools

e.g. localhost or test server, developer tool

4

Be inspired and get creative!

become a graphic designer

...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. In the center of the red screen, the words "BAD IDEA!" are written in a large, 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 to its left and bottom. The overall style is clean and modern.

BAD IDEA!

Find the right approach

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

1st
option

Build > Design

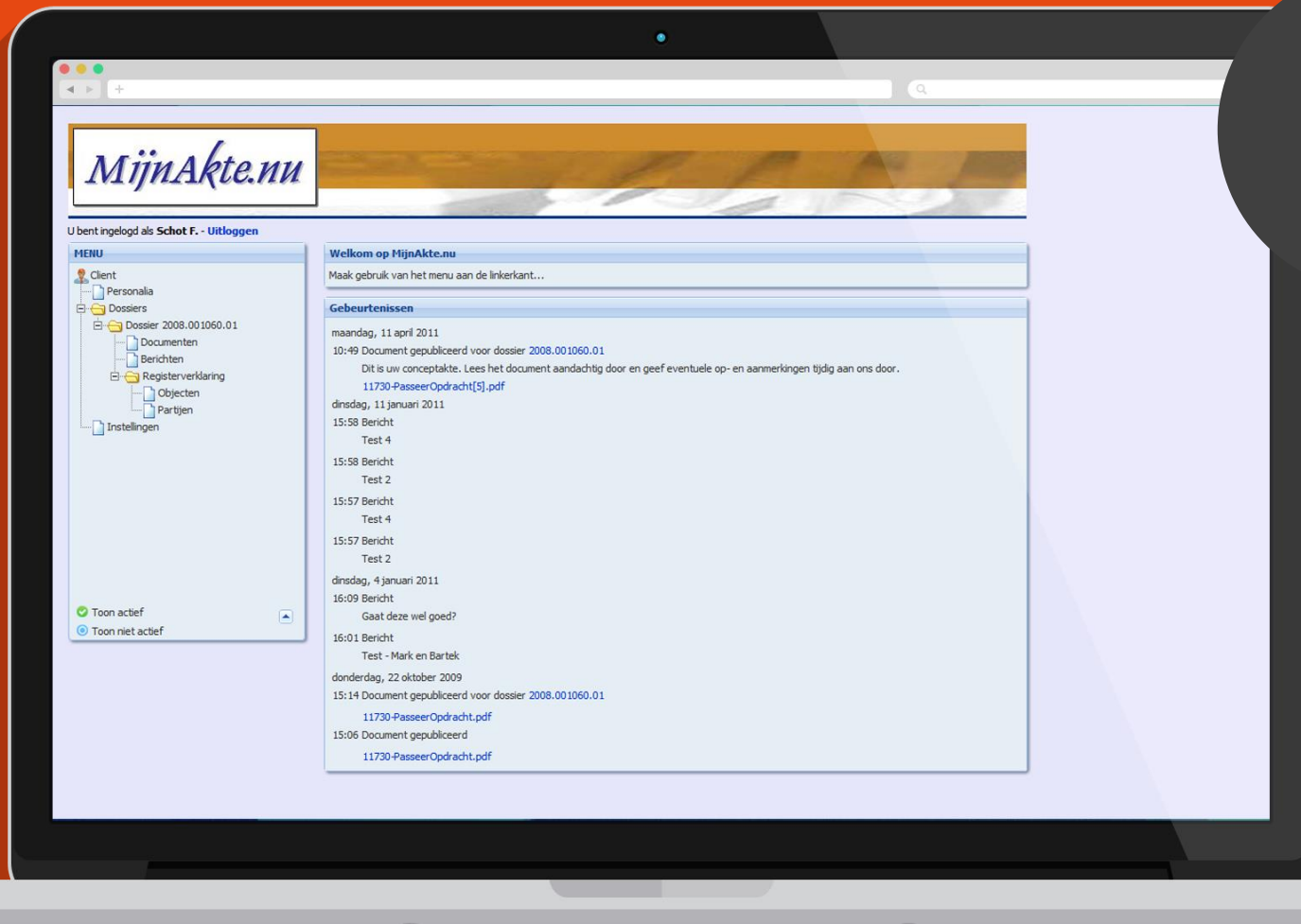
- ↳ Use an existing theme or modify a theme
- ↳ Use the functionality the framework offers
- ↳ The easiest approach to get quick results but **nothing spectacular**

2nd
option


Design > Build

- ↳ Create your own UI/theme
- ↳ Most likely you'll need custom controls
- ↳ You'll need a graphic designer (become one, hire one or call us)
- ↳ Time consuming but the best approach to **get spectacular results**

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
[levb01_akt_rg_levering bedrijfs registergoed11.pdf](#)

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[163606-PasseerOpdracht171.pdf](#)

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



POS
(after)

[illegible]

Dossiers

Dossiernummer: 20070006 Zaaknaam: Clip/Advies

Toevoegnummer: Zaakfactor: 1,0000 Indeling: Algemeen

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

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: Decl.code:

Rechtsgebied: OND Ondern.praktijk/verrn.sch.recht

Financieel:

Budget: 0 Btw Code: 3A 21.00 Afspraken: Type afspraak: Vast tarief dossier

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

The screenshot displays a POS system interface with a grid of buttons for transactions, items, and payments, along with a summary section at the bottom.

Transaction Buttons:

- TRANS NO
- KEYED
- TAKE AWAY
- VOID
- GARRY
- ACCOUNT - WALK - IN
- TABLES
- COURSE
- Sale
- SEND
- NEW ORDER

Item Grid:

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					

Summary Section:

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

Navigation Buttons:

- 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

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:	Union Enterprise of Seminole			Ordered By:	<input type="text"/>
Street Address:	4183 Central Park Circle			Salesperson ID:	<input type="text" value="CM"/>
City:	Stanford	Zip:	32771		
State:	FL	Ship Via:	Federal Express		
Terms:	<input type="text" value="COD"/>				
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



psBackgroundColor -> background: #CCCCDD;



pbRender -> display: none



pbFillHeight -> height: 345px



piHeight -> height: 200px



psTextColor -> color: #003300;

Address	Balances	Comments
Street Address: 1400 NW 190 Ave		
City / State / Zip: Miami		Florida
		33176-6017

Address	Balances	Comments
City / State / Zip: Miami		
		Florida
		33176-6017

Address	Balances	Comments
City / State / Zip: Miami		
		Florida
		33176-6017

CSS Selectors



Start with the control classname
(e.g. WebCommandBar, WebControl, WebForm)



Never use ID's within themes
(Okay for custom controls)



It's best to start with an existing theme



Avoid inline styles



Use inspector tool to determine
selectors



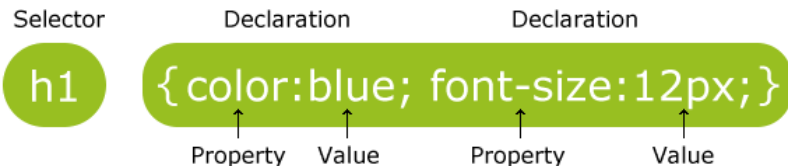
Remember precedence



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 (The Cascade)

System CSS

(framework)

- CSS required for functioning of controls
- **AppHtml\DfEngine\System.css** (*external style sheet*)

Theme CSS

(designer)

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

Custom CSS Classes

(developer & designer)

- Application specific CSS declarations
- Assigned using psCSSClass or psHtmlId
- **AppHtml\CssStyle\Application.css** (*external style sheet*)

DataFlex Properties

(developer)

- Properties on DataFlex classes
- **Inline styles** set by JavaScript engine (*inline styles*)

You've set the scope, you have your project plan,
and you understand how the framework works.

What's next?

Become a designer

Things you'll need to **create or modify your own theme**

- ✓ Setup your **workspace and set psTheme**
C:\...\DataFlex 18.1 Examples\WebOrder\AppHTML\CssThemes
- ✓ Color chart or create your own color scheme using **color.adobe.com** or **colorscamedesigner.com**
 - ↳ Take one **primary** color, one **secondary** color, one **contrast** color, one **fill** color
- ✓ Use the right tools and (online) resources
 - ↳ Developer tool (Chrome or Firefox)
 - ↳ CSS3 generator
- ✓ CSS skills, practice and patience



Developer tool

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

- ✓ Inspect elements
- ✓ Preview images and colors
- ✓ Changing padding/margins/borders
- ✓ Cycle through CSS properties
- ✓ CSS pseudo-classes
- ✓ Disabled styles temporarily
- ✓ See changes (events) highlighted
- ✓ Edit your styles instantly

Modern 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 icons

```
@font-face { font-family: 'roboto_condensedbold';  
content: 'y';
```

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

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

```
.WebSaveMenuItem > div > span.WebItm_Icon:before {  
  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 application we use)



Fontello



IcoMoon

Fontastic

Fontello

Thank you for your time!

We're looking forward seeing great designs from you!



Need a professional theme,
web application or video?

Contact Data Access Europe
info@dataaccess.eu