

# Exploring WebUI Features



**AIMMS**

Optimization Technology

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# Outline

> WebUI Overview

> WebUI Components

- Page
- Widgets
- CSS
- Data management

> Demos and Examples

# Internet, Web, Mobile ...



# Data, Information ...

## Mobile Phones Account for 17% of Global Web Usage

Percentage of page views coming from mobile devices\*



\* StatCounter defines mobile as a pocket-sized computing device



### PEOPLE JUDGE THE CREDIBILITY OF A BUSINESS BASED ON ITS

Studies show that 75 percent of people judge the credibility of a business based on the design of its website.

Credibility has a direct relation to how likely people are to make a purchase.

# 75%

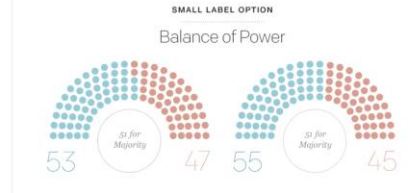
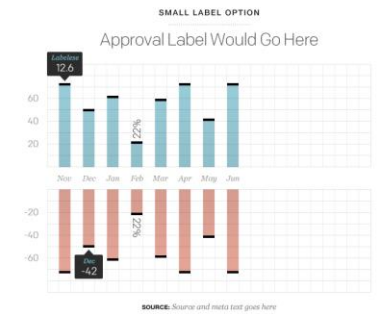
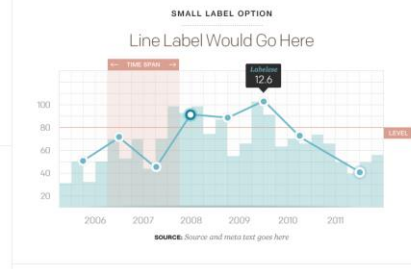
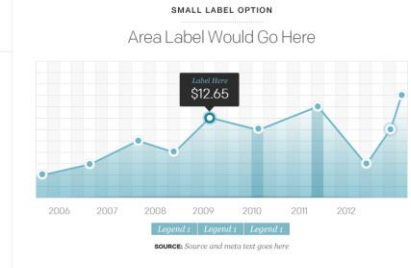
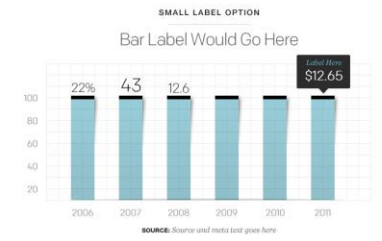
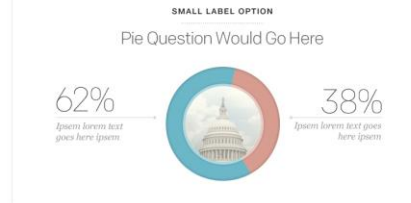
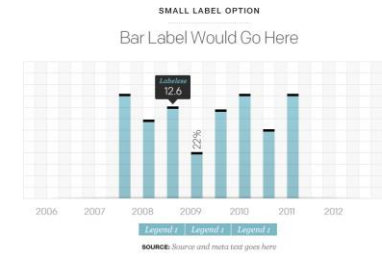
55% of Americans said they'd used a mobile device to access the internet in 2012.

45%

123.14 145.37 164.12 184.54

Web design has a direct relation to how likely people are to make a purchase. Changing simply the design of a website can increase conversion.

© 2012 Infographics designed by ArtVorsion

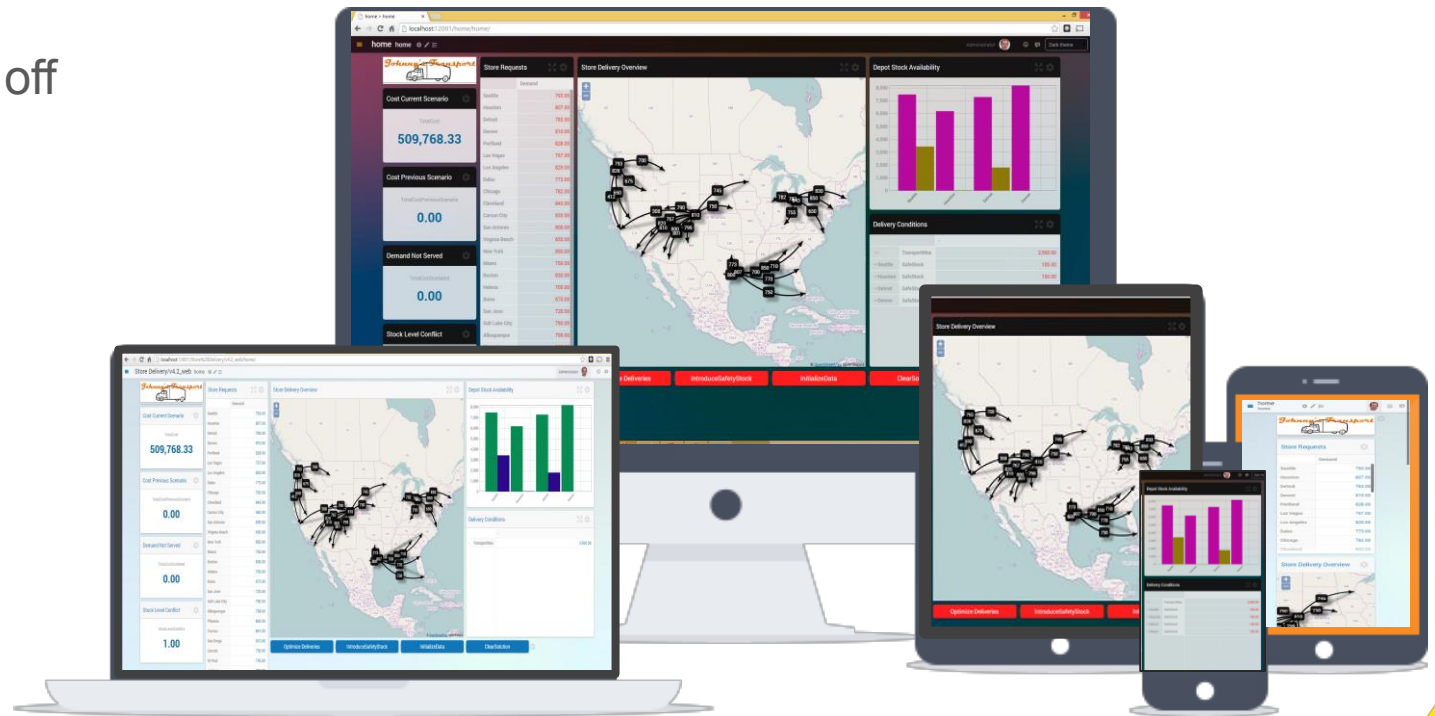


# WebUI - Bring Optimization to Any Device



# WebUI - Bring Optimization to Any Device

- > Share - instantly available when published on PRO
- > Responsive - scales to the size of browser or device
- > Pivoting - presents data in tables and charts
- > Personalized - add, remove, modify from default views
- > Handoff - pick up where the user left off



# Outline

> AIMMS and WebUI Overview

> WebUI Components

- Page
- Widgets
- CSS
- Data management

> Examples

# WebUI Page

planning > home | AI x  
localhost:12001/planning/home/

Menu AIMMS HOME

HOME 1.INPUT 2.OPTIMIZATION 3.RESULT 4.WHAT-IF

Plant Warehouse Warehouse Warehouse Warehouse Warehouse Warehouse Warehouse

Plant Warehouse Warehouse Warehouse Warehouse Warehouse Warehouse Warehouse

Plant Warehouse Warehouse Warehouse Warehouse Warehouse Warehouse Warehouse

What is the optimal production and transportation plan to minimize total cost?

Load Input

[Demo](#)



# WebUI Widget

- > Table, Charts, Map, Selection, ...
- > Options for each widget
- > Switch views between widgets
- > Size and relative position
- > Style and CSS

# CSS(Cascading Style Sheets)

describes how HTML elements are to be displayed

```
index.html
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <!--<link type="text/css" rel
   ="stylesheet" href="stylesheet.css"/>-->
5     <title>Result</title>
6   </head>
7   <body>
8     <h1> CSS Example </h1>
9     <p> The style is controlled by css
   "p" selector. </p>
10  </body>
11 </html>
```



Example from codecademy

# CSS Format

Selector: {attribute: value;}

```
stylesheet.css
1 p {
2   color: green;
3   font-size: 40px;
4 }
```

```
index.html
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link type="text/css" rel="stylesheet" href="stylesheet.css"/>
5     <title>Result</title>
6   </head>
7   <body>
8     <h1> CSS Example </h1>
9     <p>The style is controlled by css
10    "p" selector.</p>
11   </body>
12 </html>
```

**CSS Example**

The style is controlled by css "p" selector.

Example from codecademy

# WebUI CSS

`.theme-yourthemename .classname >childname {attribute:value;}`

```
sample.html x
1
2 </head>
3 <body>
4   <header class="aimms-widget"
5     data-aimms.widget.type='literal:"application"'
6     data-widget.uri='application'
7   >>/header>
8
9   <aside class="aimms-widget"
10    data-aimms.widget.type='literal:"sidebar"'
11  >>/aside>
12
13  <div class="aimms-widget"
14    data-aimms.widget.type='literal:"user"'
15  >>/div>
16
17  <div class="aimms-widget"
18    data-aimms.widget.type='literal:"model-dialog-request-handler"'
19    id="model_dialog_request_handler"
20  >>/div>
21 </body>
22 </html>
23
24
```

```
dark.css x
9   border-color: #999;
10  }
11  .theme-dark .app-section {
12    color: #fff;
13  }
14  .theme-dark .page-section {
15    color: #eee;
16  }
17  .theme-dark header .homebutton {
18    color: #b71;
19  }
20  .theme-dark .widgetdiv {
21    border-radius: 5px;
22    background: rgba(255, 255, 255, 0.8);
23  }
24  .theme-dark .widgetdiv.widgetdiv-noborder{background:none;}
25
26  .theme-dark .widgetdiv.active-widget {
27    box-shadow: 0px 0px 20px #B9B9B9;
28  }
29  .theme-dark .aimms-widget > .ui-button {
30    background-color: #ff1d1d;
31  }
32  .theme-dark .aimms-widget > .ui-button:hover {
33    background-color: #ff5050;
34  }
```

# Add CSS To WebUI

- > Add “resources” folder to your WebUI project folder
- > Download “theme-switch-addon” to “resources\javascript” folder
- > Add “resources\css\themes\yourthemename” folder to your WebUI project folder
- > Add “yourthemename.css” to that folder
- > Add “images” folder if necessary
- > Edit js file to add your theme to theme switch
- > Edit yourthemename.css

# WebUI CSS Examples

- > Add Background
- > Change Color
- > Change Color Pallet
- > Adjust Font Size
- > Change Column Width
- > Hide 0s

# WebUI CSS

- > Use Sample CSS: <https://github.com/aimms/WebUI-Examples>
- > Use “Inspect” feature of Chrome
- > CSS Reference: <http://www.w3schools.com>

# Data Management

- > Save/Load
- > Compare
- > Share



# Some Other WebUI Features

## > Locking editor for certain users

PRO User Group: WebUI\_Cannot\_Change\_UI

## > Model Depended Style

1. Add additional identifier to model
2. model automatically generate html classes
3. create rules for those classes in css

## > Using Forms to Add and Edit Data

## > JavaScript Add-ons

# Available Resources

- > Examples - <https://github.com/aimms/WebUI-Examples>
- > Discussions - <https://groups.google.com/forum/#!forum/aimms>
- > AIMMS Tech Blog - <http://techblog.aimms.com/>
- > Documents - <http://aimms.com/english/developers/product-info/aimms-web-ui/>

# Announcement of next webinar

The next webinar in this series will be on how to “***Make Predictions of the Future with the AIMMS Forecasting library***” and will be presented by Chris Kuip, AIMMS Optimization Specialist at AIMMS.

Join us – April 20, 2016:

- 5 PM CET / 11 AM EDT / 8AM PDT

<http://aimms.com/english/community/customers/training>

# Questions



Contact AIMMS support at [support@aimms.com](mailto:support@aimms.com)

if you have any further questions.

# Thank You!

