


# Zero to Sixty with Oracle Application Express

Partners Categories Videos Search About Home Feedback Log in/Sign Up Welcome

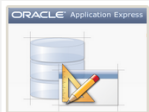


IntelIVideo

Settings


Partners

Order By




**BDB Software**

BRAD COVERS ORACLE APPLICATION EXPRESS (APEX) FROM THE GROUND UP THROUGH ADVANCED TOPICS...




**Brainetics**

HAVE FUN BECOMING A MATH GENIUS!...




**Colorado Golf Association**

PLEASE MAKE A DONATION!...




**Icon Lacrosse**

ICON LACROSSE WAS STARTED IN 2003 WHEN JOSH SIMS RECOGNIZED THE RAPID GROWTH OF THE GAME IN COLORADO AND THE OPPORTUNITY TO HELP YOUNG ATHLETES DISCOV...




**IntelIVideo**

WELCOME TO INTELIVIDEO!  
INTELIVIDEO IS A PLATFORM THAT PROVIDES YOU WITH INSTANT ACCESS TO TRAINING AND HOW TO VIDEO CONTENT. SURF AROUND OUR SITE A...




**PD Plan 4 Life**

FALL CONFERENCE WAS A GREAT ONE... GROUCHO MARX OFTEN SAID HE DID NOT WANT TO BE PART OF ANY CLUB THAT WOULD HAVE HIM AS A MEMBER. UNFORTUNATELY, WE SO...



**SoSmart**

KID'S VIDEOS FOR SMART KIDS AND PARENTS!...



**Transparent Health**

TRANSPARENT HEALTH WAS FOUNDED BY VETERAN HEALTH CARE PRACTITIONERS, EDUCATORS AND SAFETY EXPERTS. ...

**Partners**

- ✦ BDB Software
- ✦ Brainetics
- ✦ Colorado Golf Association
- ✦ Icon Lacrosse
- ✦ IntelIVideo
- ✦ PD Plan 4 Life
- ✦ SoSmart
- ✦ Transparent Health

**Categories**

- ★ BDB Software
- ★ Baby's Beginnings
- ★ Baby's First-Word Stories
- ★ Brainetics
- ★ Evans Scholar
- ★ Icon Lacrosse
- ★ IntelIVideo Education
- ★ King Otis' and the Kingdom of Goods
- ★ PD Plan 4 Life
- ★ Transparent Health

Bradley D. Brown, [brad@intellivideo.com](mailto:brad@intellivideo.com)

IntelIVideo, CTO

# Agenda

- Who am I?
- What we could, but aren't going to talk about
- My assumptions and expectations
- What we'll talk about today
- What we'll do/develop today
- What you're going to do tomorrow



# What we're not going to talk about (too much)

- History of Apex
- Product Positioning
- Great/Bad for x, y, z
- Installation
- Configuration
- Architecture, Scale
- Integration
- Web Services (brief)
- Advanced Topics
- The good news is I have Apex presentations on all of these topics and a whole lot more
  - Go to [www.tusc.com](http://www.tusc.com) to download

# Assumptions and Expectations

- You know some SQL and PL/SQL, but you'll be OK if you don't (for now)
- You came here because you think Apex might be good for your company (or startup)
- Why are you here?
- Hoping today will get you excited about what you can do with Apex
- You understand that Apex is a rapid development tool
  - Developing app
  - Designing databases
- You also get that Apex can be used for large scale production applications
- Let's check out:
  - <http://Intelivideo.com>

# Oracle Application Express for ClearSale

CS ClearSale Logout

Queue | Tasks In | Task Out | Assign | Maintenance | Search

Dev Environment - Version 2.18

Settings

Custom Calculation of Days Between

Queue

Go    Rows 15

Customer	Customer Project	Property	Property Owner	Overall Status	Overall Status Age	Borrower Outreach Status	BO Status Age	Bank Relations Status	BR Status Age	Closing Control Status	CC Status Age	Borrower Outreach Rep	Bank Relations Rep	Closing Control Rep
JP Morgan Chase	Project 1	100 S University Dr Unit 8, Denver, CO 80209	Tom Dinglewonk	Recovery Calculator In Progress	85	Not Started	39	Not Started	-	Not Started	-	Martin Glastetter	Joy Clark	Shannon Callis
Aurora Loan Servicing	-	1443 S Vinta Ct, Denver, CO 80231	-	Recovery Calculator In Progress	38	Not Started	39	Correct BRS	12	Not Started	-	Armand Massie	Armand Massie	Armand Massie
Aurora Loan Servicing	-	3930 Carlock Dr, boulder, co 80305	-	Recovery Calculator In Progress	46	Not Started	39	Not Started	-	Not Started	-	Armand Massie	Armand Massie	Armand Massie
Aurora Loan Servicing	-	4090 old westbury ct, boulder, co 80301	-	Recovery Calculator In Progress	46	Not Started	39	Not Started	-	Not Started	-	Armand Massie	Armand Massie	Armand Massie
Aurora Loan Servicing	-	1109 S Blaine Ave, Sioux Falls, SD 57104	-	Recovery Calculator In Progress	62	Not Started	39	Not Started	-	Not Started	-	Melissa Christianson	Armand Massie	Armand Massie
Citibank	-	9611 N Highland Ave, Los Angeles, CA 90033	-	Recovery Calculator In Progress	82	Not Started	39	Not Started	-	Not Started	-	Melissa Christianson	Charles Kelly	Armand Massie
JP Morgan Chase	Project 1	1234 iroc, ,	-	Recovery Calculator In Progress	82	Not Started	39	Not Started	-	Not Started	-	Armand Massie	Armand Massie	Armand Massie
Aurora Loan Servicing	-	7291 MacKenzie Lane, Portage, MI 49024	-	Recovery Calculator In Progress	65	Not Started	39	Not Started	-	Not Started	-	Armand Massie	Armand Massie	Armand Massie
JP Morgan Chase	Project 1	2222 test, ,	-	Recovery Calculator In Progress	78	Not Started	39	Not Started	-	Not Started	-	Armand Massie	Armand Massie	Armand Massie
Aurora Loan Servicing	-	4941 nassau cir, englewood, co 80111	-	Recovery Calculator In Progress	46	Not Started	39	Not Started	-	Not Started	-	Armand Massie	Bill Lewkow	Armand Massie
JP Morgan Chase	-	1148 S Highland, Los Angeles, CA 90019	David Badal, Julia Flynn	Recovery Calculator In Progress	82	Door Knock Ordered	39	Not Started	34	Correct CC Admin	45	Jason Byrne	Armand Massie	Armand Massie

# Find Feature

Logout

# IntelliReal™

Find My Work Advanced Search Admin Loader iMVI

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## Find Subject Property by Address

Find property by

Address

City  State  or Zip

Report Type

Intelligent Market Volatility Index  Recent Sales  GeoSearch

Abbreviated Property Report  Intelligent Property Report  Custom Property Report

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▶ **Advanced Criteria**

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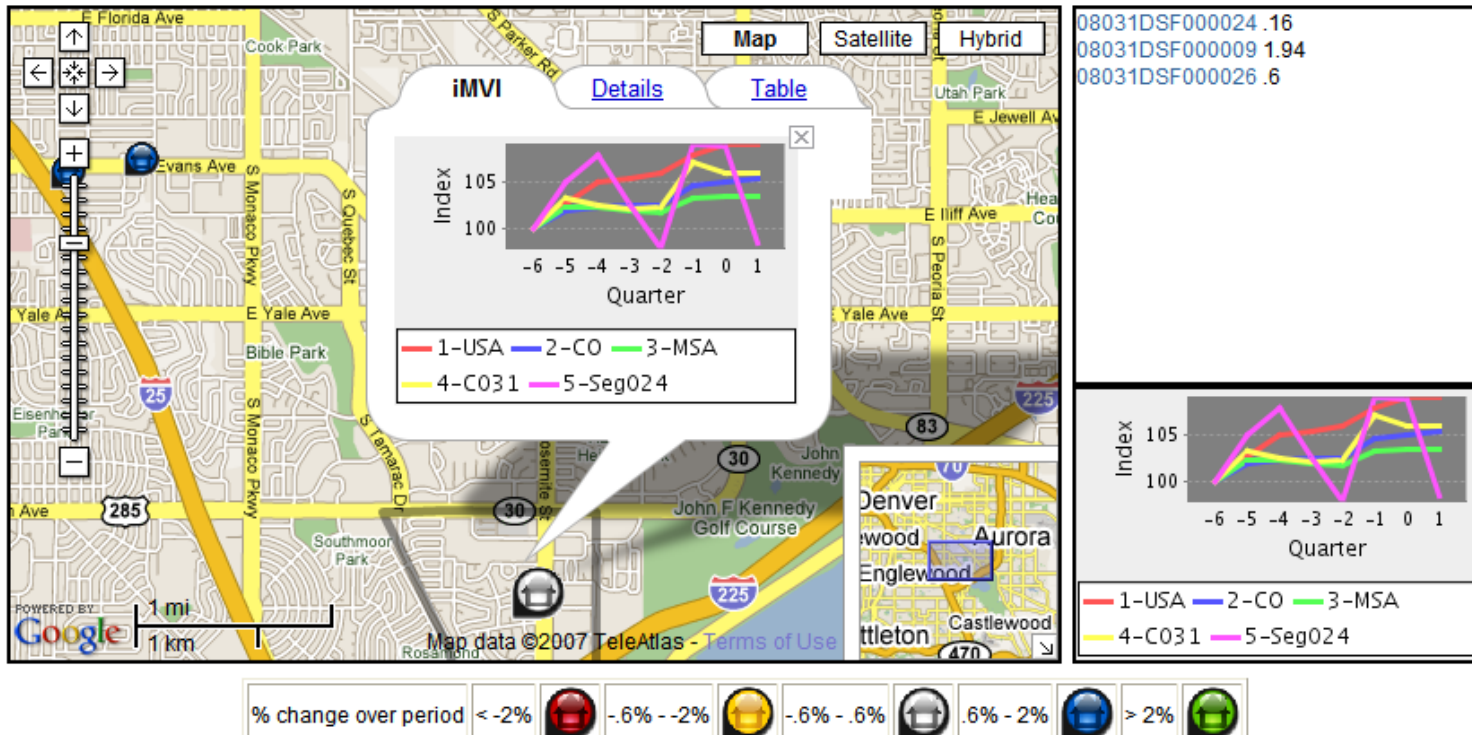
IntelliReal™ BROWNB@TUSC.COM(Test Company) - 1

# iMVI for Property

## Directions

Double-click a flag to zoom in 1 level on the map.

## Visual iMVI





# Recent Sales

## Add a New Comp Property

Cancel

Find By  Address  MLS Listing Number  Recent Area Sales

Enter Address  City  State

Search

## Area Recent Sales

Add Selected Comps

Add	Listing Num	Address	Mls Sale Date ▼	Sale Price	Days On Market	Prop Type	Prop Style	Main Sqft	Bedrooms	Baths
<input type="checkbox"/>	434928	8375 E PRINCETON AVE ,DENVER CO, 80237-1739	07-MAR-07	\$295,000	127	DSF	4L	2125	4	3
<input type="checkbox"/>	441794	4132 S VERBENA ST ,DENVER CO, 80237-1747	27-FEB-07	\$285,000	170	DSF	BI	1261	3	2
<input type="checkbox"/>	464955	4091 S UINTA ST ,DENVER CO, 80237-1716	05-FEB-07	\$261,000	3	DSF	R	1437	3	3
<input type="checkbox"/>	420495	4072 S UINTA ST ,DENVER CO, 80237-1716	27-DEC-06	\$230,000	99	DSF	R	1379	2	2
<input type="checkbox"/>	407414	4021 S WABASH ST ,DENVER CO, 80237-1754	25-OCT-06	\$345,000	35	DSF	4L	2422	4	3
<input type="checkbox"/>	407408	8583 E NASSAU AVE ,DENVER CO, 80237-1706	24-OCT-06	\$343,000	42	DSF	2S	2224	5	4
<input type="checkbox"/>	326948	4049 S WISTERIA WAY ,DENVER CO, 80237-1713	20-JUN-06	\$320,000	43	DSF	2S	1908	5	4
<input type="checkbox"/>	353751	4140 S VINCENNES CT ,DENVER CO, 80237-1752	05-JUN-06	\$283,000	9	DSF	4L	1921	4	3
<input type="checkbox"/>	334563	4074 S WISTERIA WAY ,DENVER CO, 80237-1714	12-MAY-06	\$300,000	82	DSF	4L	1778	4	3
<input type="checkbox"/>	335510	8365 E PRINCETON AVE ,DENVER CO, 80237-1739	05-MAY-06	\$288,100	32	DSF	5L	2125	3	3
<input type="checkbox"/>	345319	3944 S WHITING WAY ,DENVER CO, 80237-1758	28-APR-06	\$263,000	344	DSF	4L	2408	4	3

# Custom Report

[Return](#)
[Make Property & Comp Selection Adjustments](#)
[View Full Custom Report](#)
[Switch to One Page Report](#)


8375 E PRINCETON AVE  
 DENVER CO, 80237-1739  
**\$296,348 as of 15-MAR-07 (3 comps) ES**  
[TO EMAIL THIS VALUATION, CLICK HERE](#)

## Click on Report Section to View

Subject Property	Comps/MLS	Graphs	Misc
<a href="#">MLS Detail</a>	<a href="#">Comp Property Details</a>	<a href="#">Price psf by SqFt Graph</a>	<a href="#">Custom Property Files</a>
<a href="#">MLS Listing History</a>	<a href="#">Comp Property Adjustments</a>	<a href="#">Sales Trends Graph</a>	<a href="#">Finance and Rate Costs</a>
<a href="#">Subject Property Sales History</a>	<a href="#">MLS detail for Matching Comps</a>	<a href="#">Neighborhood Sales Detail Graph</a>	<a href="#">Repair Cost Worksheet</a>
<a href="#">Subject Property Details</a>	<a href="#">Active MLS for Neighborhood (List)</a>	<a href="#">Main SqFt/Selling Price by Age Graph</a>	<a href="#">Saturation Report</a>
<a href="#">Market Volatility Graph</a>	<a href="#">Active MLS for Neighborhood (Detail)</a>	<a href="#">Norm Price by SqFt Graph</a>	
<a href="#">Map</a>	<a href="#">Neighborhood Comparison</a>	<a href="#">Price psf by Date Graph</a>	
	<a href="#">MLS detail for Non-Matching Comps</a>	<a href="#">Sales History Graph</a>	
	<a href="#">Comparable Statistics</a>	<a href="#">Price by SqFt Graph</a>	
	<a href="#">Detail for Non-Matching Comps</a>		
	<a href="#">Neighborhood Sales</a>		

See Nearby  Choose Category

# APR / IPR

Subject: 8375 E Princeton Ave , Denver, CO  
 Date: 03/20/2007  
 Client: na  
 Client Order No: na  
 Order No: na

### Subject Intel

**Estimated Value** **\$296,348**

**Subject Confidence Score** **85%**

Low High

\$247,246 **Range** \$345,450

Confidence Level 80%

The probability that the subject will sell in this range.

Expected Standard Deviation 12%

68% of all valuations within subject segment fall within this range.

### Area Intel

**Total Property Count** 4887

Property sales count (DSF) 3163

**Area Confidence Score** 92%

**Average Recorded Sale Price** \$240,449

**Sales Volume(12mo's)** 234

■ Other Sales ○ Subject

### Neighborhood Analysis

	Subject	Min	Max
Sale Price	\$294,000	\$140,000	\$554,200
Main Sq Ft	2125	761	4189
Year Built	1970	1946	2006
Lot Area	.2	.12	.57
PSF	\$138.35	\$82.97	\$601.74

### Comparable Sales

**Subject**

8375 E Princeton Ave  
 Denver, CO 80237  
 Denver County  
 MLS# -434928

**Closest and Most Similar Comparable Sales**

	4132	8583	4091
S Verbena St	E Nassau Ave	S Uinta St	
Distance .05	Distance .2	Distance .2	
MLS# -441794	MLS# -407408	MLS# -464955	
Comparable 1	Comparable 2	Comparable 3	

**Legend**

Comparables Analyzed 10  
 Max Distance .85 miles

### Value History

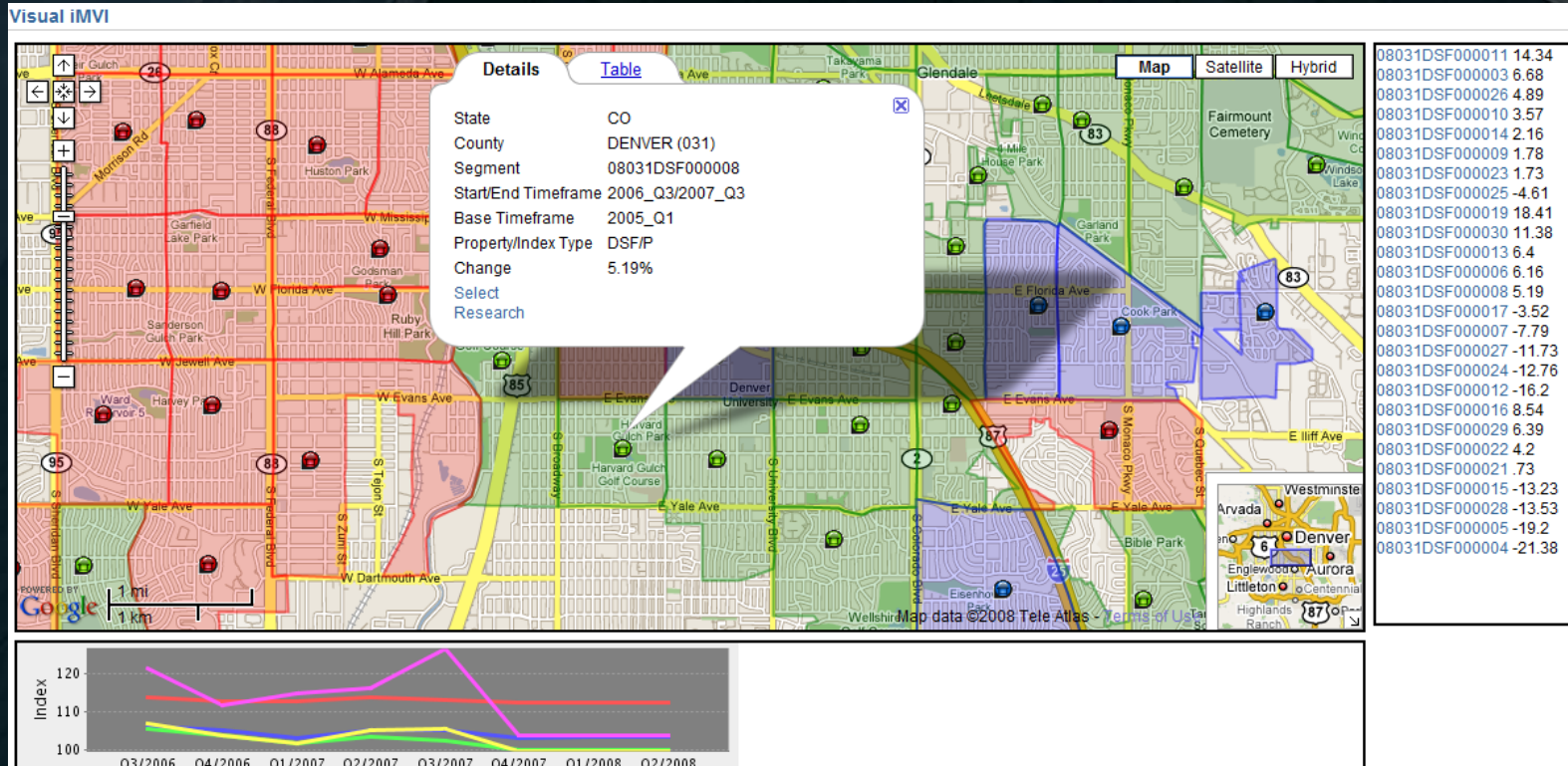
Sold Price	\$294,000	\$279,558	\$343,000	\$259,700
Sold Date	03/07/2007	02/27/2007	11/14/2006	02/05/2007
Prior Sold Price	\$240,000	\$98,000	na	\$225,000
Prior Sold Date	07/12/2006	06/21/1989	na	09/18/2000
Adjustments		\$16,790	\$2,841	\$27,302
Assessor Value	Tax Value \$19,460	\$19,210	\$23,480	\$18,520
Year	2006	2006	2006	2006
Land Value	\$4,378	\$4,378	\$4,378	\$4,378
Improvements Value	\$15,082	\$14,832	\$19,102	\$14,142
PSF	\$138.35(sale) \$143.53(list)	\$150.71	\$154.23	\$205.95
Days on Mkt	127	170	42	3

### Property Details

Style	Design Style	Tri-level w/basement	Bi Level	Two Story	Ranch
Stories		1	1	2	1
Manufact. Home?		No	No	No	No
Number of Units		na	na	na	na
Property Type		DSF	DSF	DSF	DSF
Interior	Square Feet	2125	1855	2224	1281
	Basement SqFt	1175	652	971	1281
	Bsmt Finished SqFt	705	652	465	1281
	Bedrooms	4	3	4	3
	Bathrooms	3	2	2	3
Exterior	Lot Size	.2	.2	.26	.23
	Roof Material	na	na	Shake	na
Heating/Cooling	Heating	na	na	na	na
	Cooling	na	na	na	na
Amenities	Fireplace	1	1	1	1
	Pool	No	No	No	No
Garage	Garage Units	2	2	2	2
	Garage Sq. Ft.	361	599	451	409
	Garage Type	ATT GAR	ATT GAR	na	ATT GAR
Year Built		1970	1970	1972	1989
Owner		Brown Bradley D	Aragon Gary P & Carol T	Martinez Judy M	Rose Ernest F

# Heat Maps

- A look at different neighborhood trends in home values



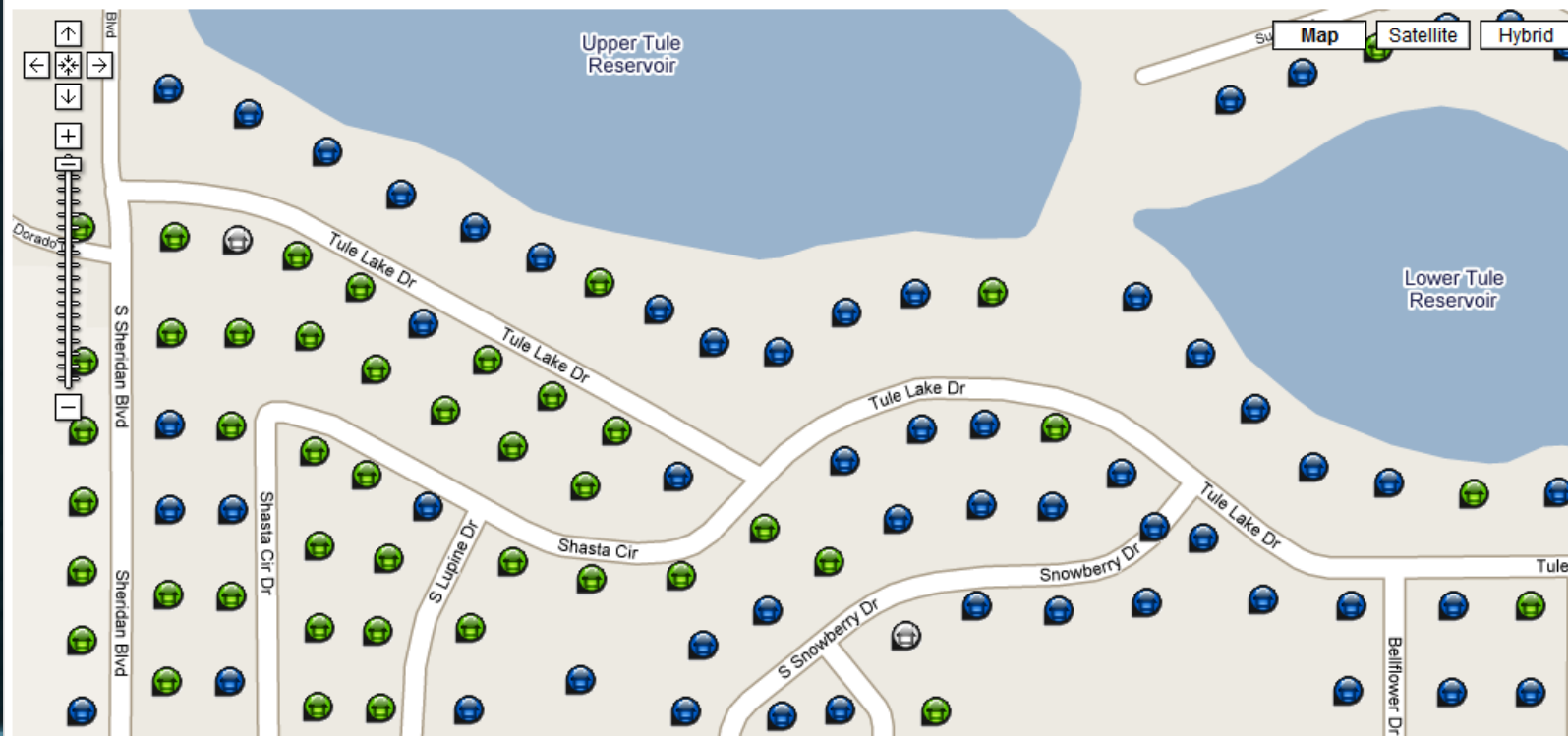
# GeoSearch

- Grouping of properties
- Colorized and customizable

## Map Mining

[Return](#)

NOTE: If Properties only show on the bottom of the map, open the parameter section below and increase the value for "Property Limit per Move"



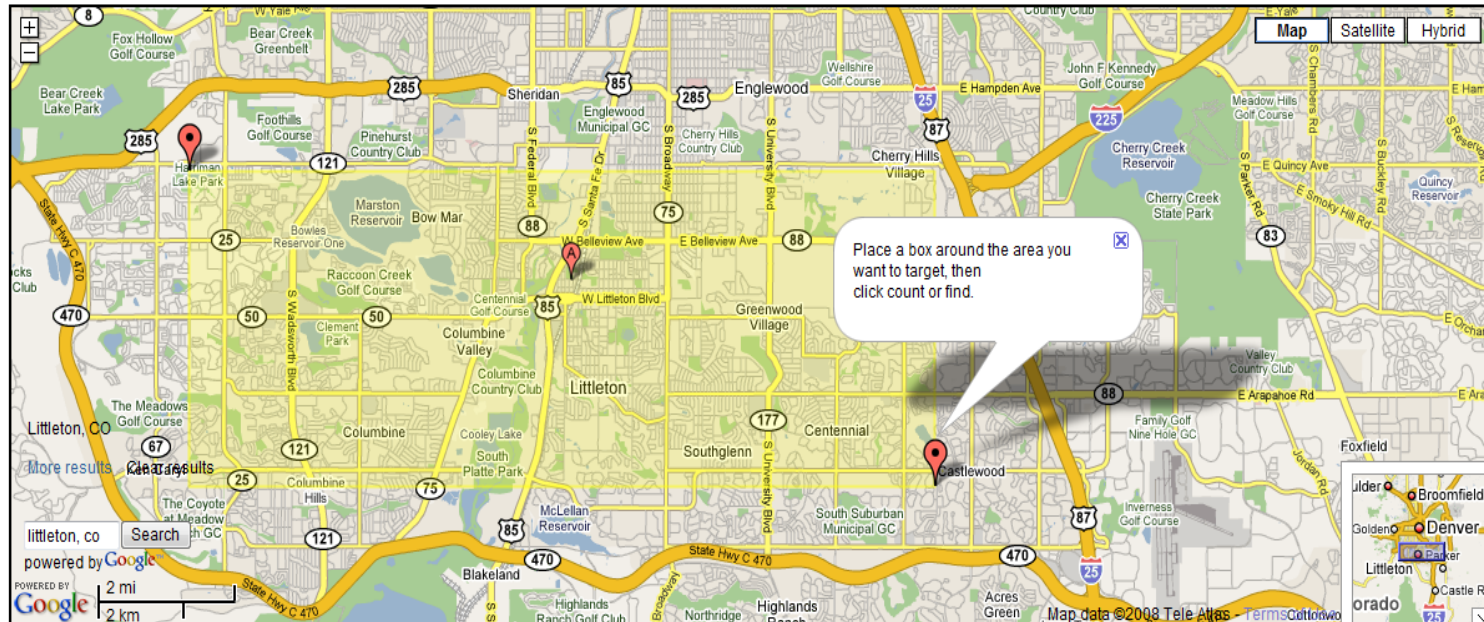
# Highlight and Visual Search

- Highlight it
- Build your search, see it

## Search Map

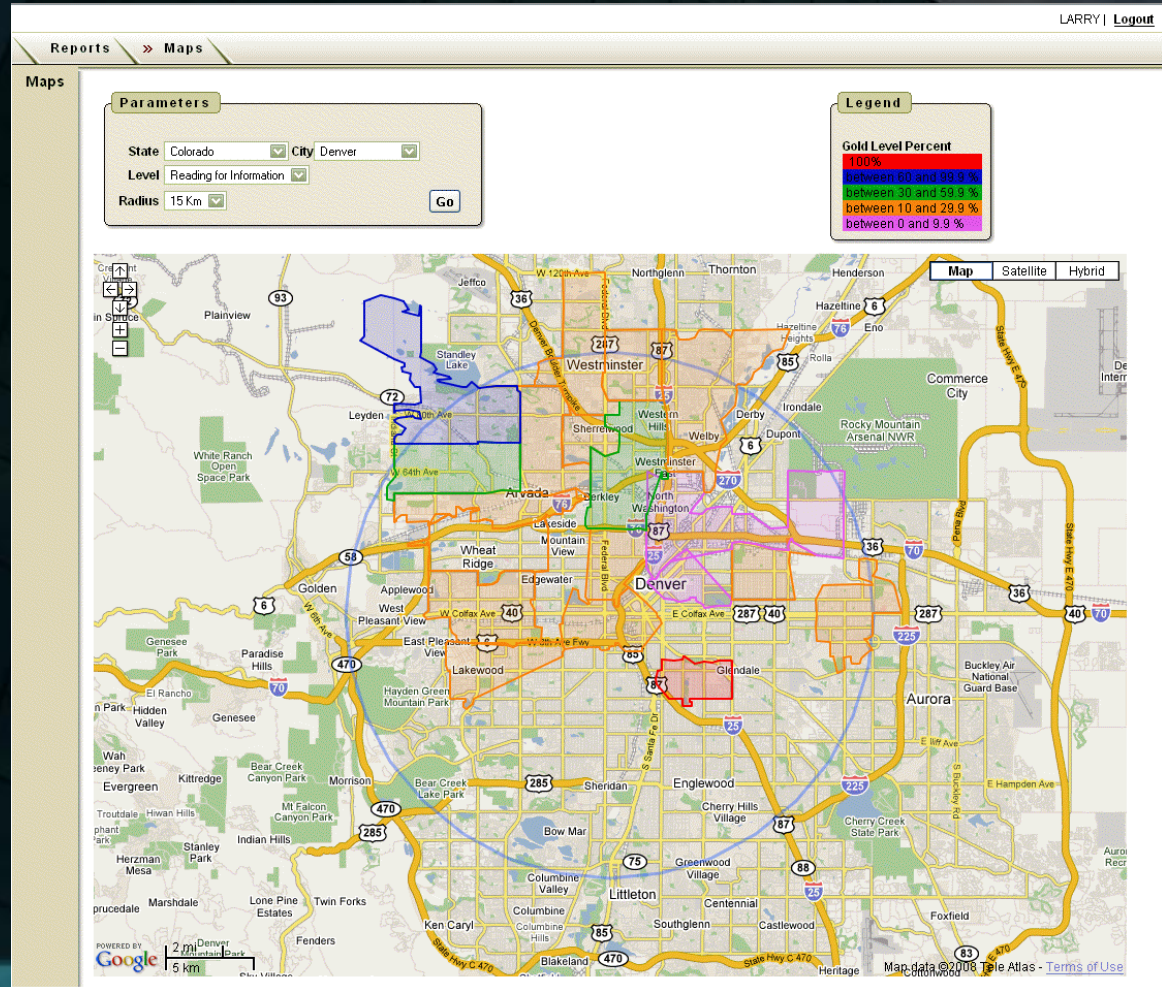
You may enter a starting address (or city) in the "Search the Map" section below, then click "Search." Double click the map to drill in. You can zoom in and out using the + and - on the map. When you're ready, click on the "Highlighter" to draw your boundaries on the map. When you're finished, press the "Next" button.

Markers on  
Highlighter



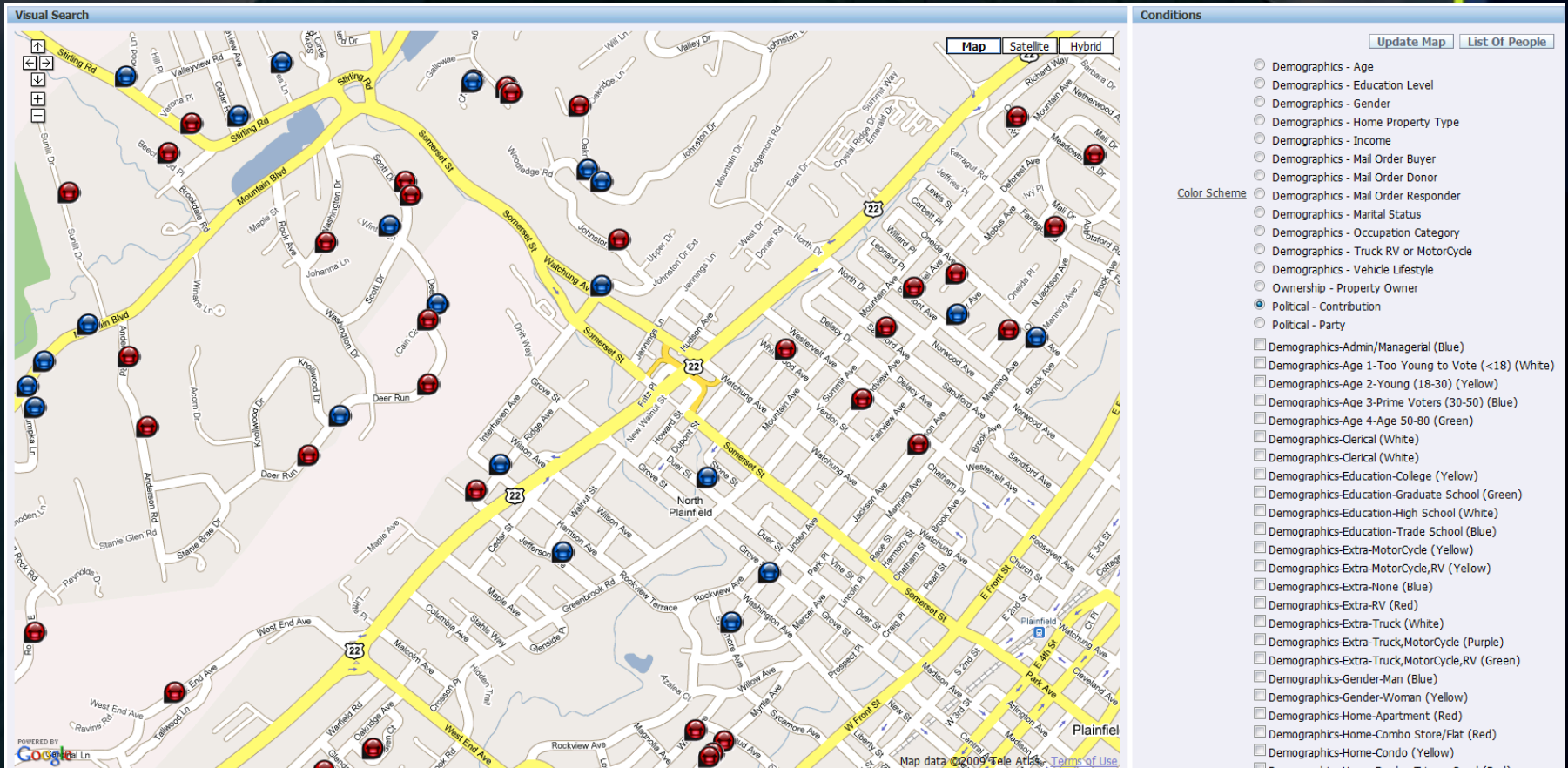
# Test Scores within a radius

- Visual results



# Political contributors in NJ

- Contributors by party contributed to...





# What We Are Going to Talk About Today

- **Major Components**

- SQL Workshop
- Utilities
- Application Builder
  - Workspaces
  - Applications
  - Regions

- **Components**

- Shared
- Items
- Processes
- Buttons
- Branches
- ....

# Wanna Do This Yourself?

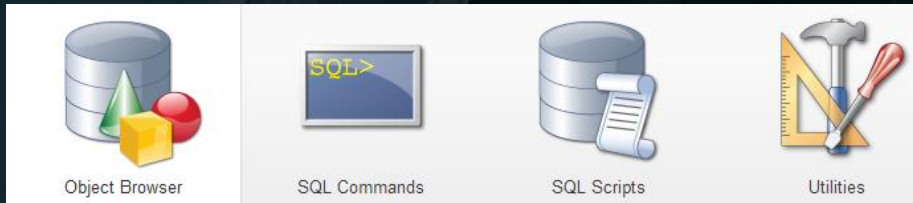
- <http://apex.oracle.com>

- Sign Up
- First and Last Name, Email
- Workspace
- Schema and Space Allocation
- Short Survey
- Explain why – Because Brad suggested it... 😊
- Accept the Terms



# Major Components

## Application Builder



## SQL Workshop

## Teamwork



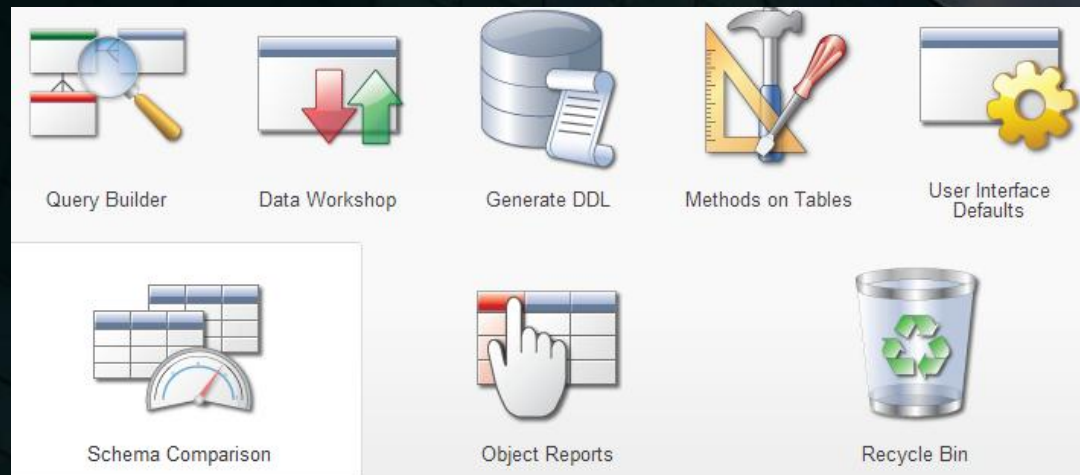
## Administration

# SQL Workshop

- **Object Browser**
  - Look at emp table and all of the tabs
  - Create lookup
  - Select other object types – views, ...
  - Other schemas
  - Create objects too
- **SQL Commands**
  - `select * from emp where deptno = :deptno`
  - Show explain plan, history and saved SQL
- **SQL Scripts**
- **Utilities**
  - Query Builder
  - Data Workshop
  - Generate DDL
  - ...

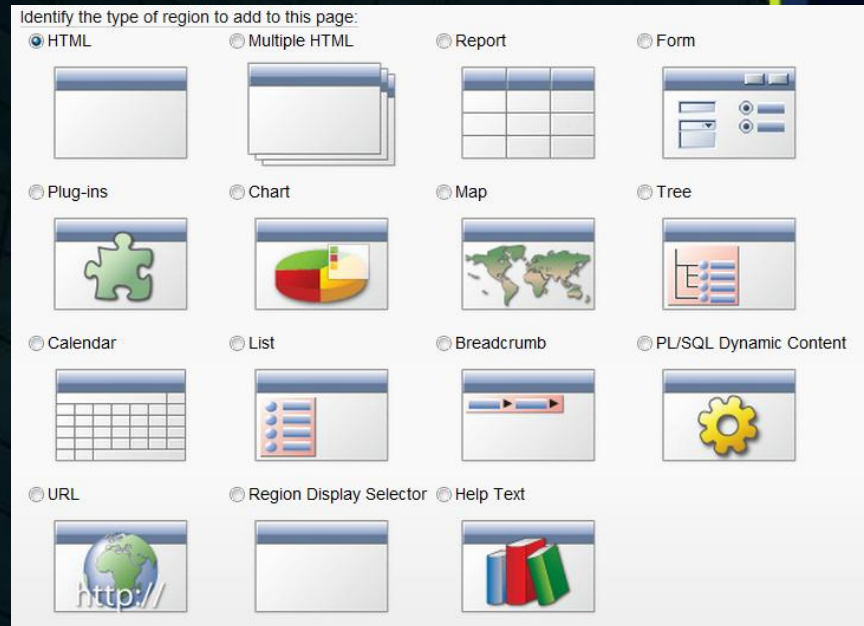
# Utilities

- Build a Query
- Let's load a file
- Methods
- UI Defaults
- Comparisons



# Application Builder

- Types of Apps
  - Database
  - Websheet
- Apps have pages
- Pages have regions
- Regions are
  - HTML, Reports, Forms, Charts, Maps, Trees, Calendars, Lists and more



# ApEx Environment contains Workspaces

## ApEx Environment



# Workspaces contain Applications

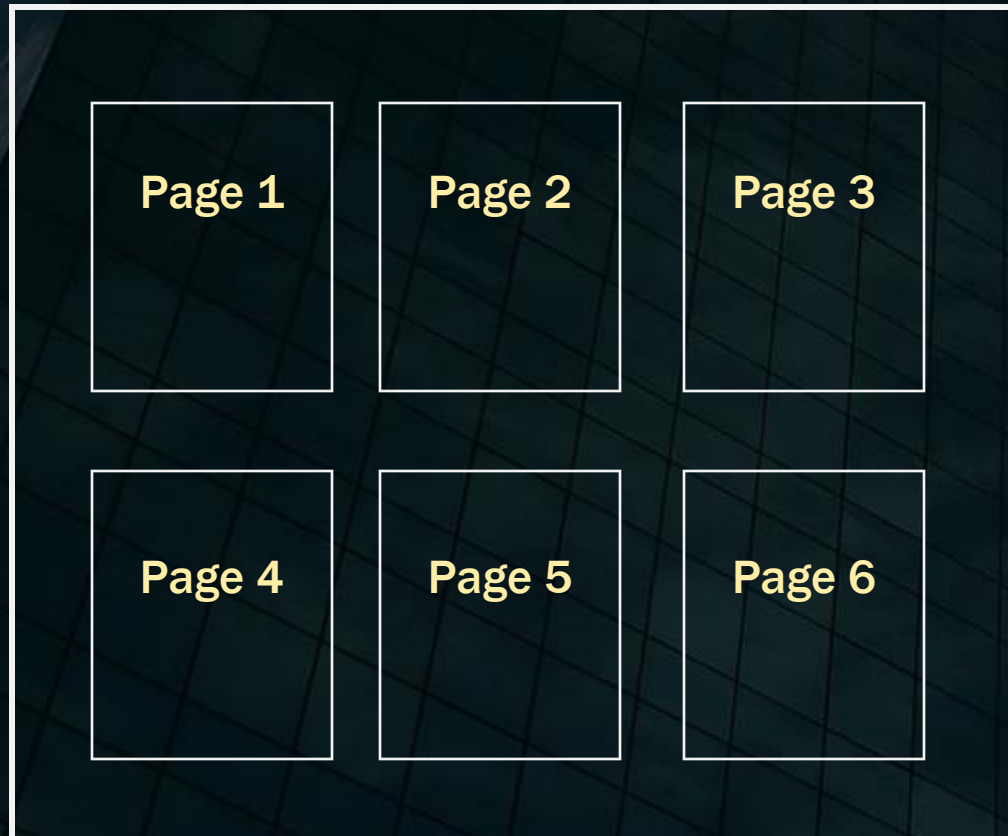
## HR Workspace



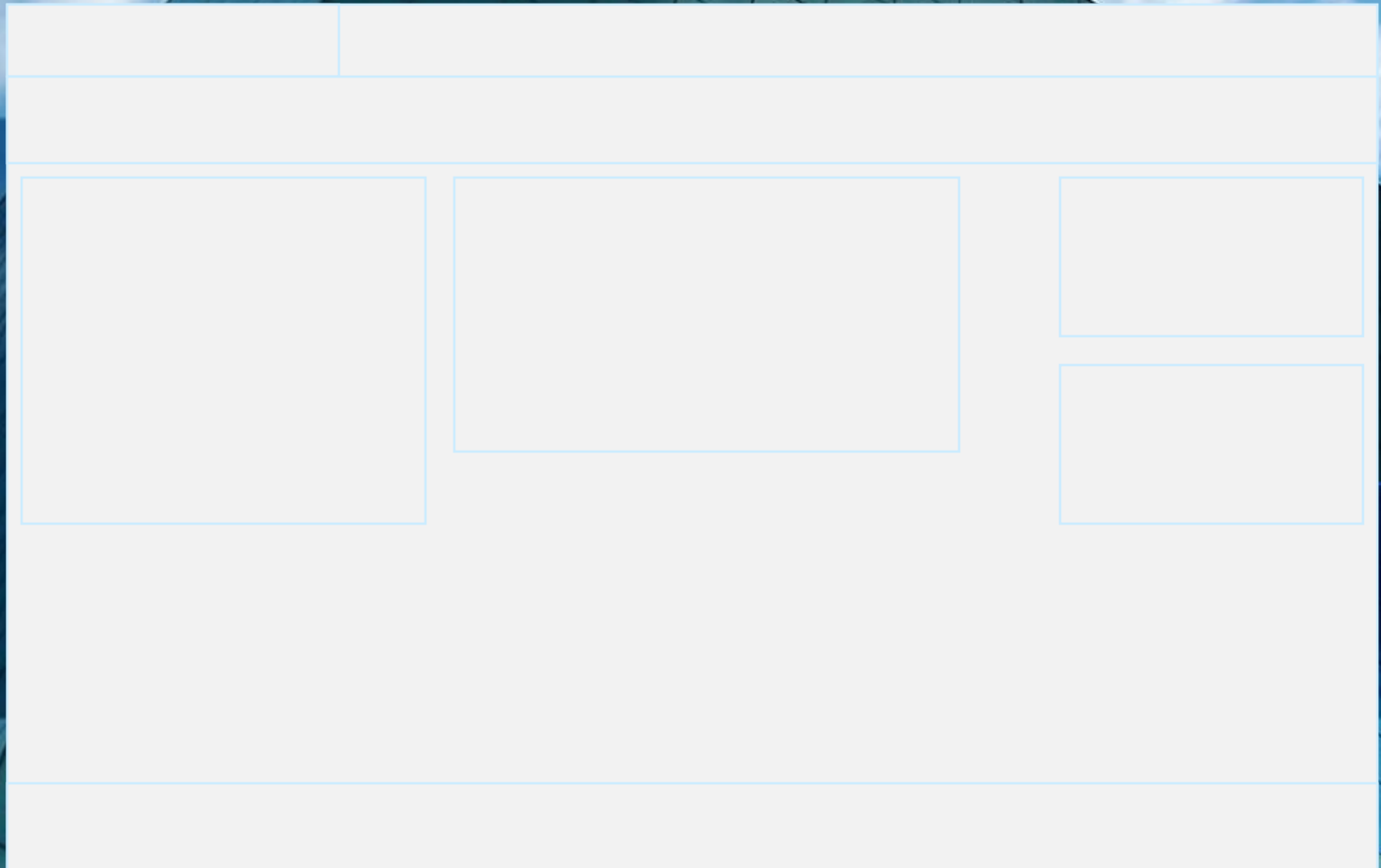


# Applications contain Pages

## Application 1



# Pages have Regions & Shared Components



# Pages have Regions & Shared Components

ORACLE Application Express  
*Sample Application*

DEMO [Print](#) [LOGOUT](#)

Home

Customers

Products

Orders

Charts

Home

## My Quota



## My Top Orders

	Order #	Customer Name	Order Date	Order Total
	7	LaGuardia, Fiorello	11-OCT-05	\$3,800.00
	3	Hartsfield, William	31-OCT-05	\$1,999.00
	1	Dulles, John	10-NOV-05	\$1,200.00
	4	Logan, Edward	26-OCT-05	\$750.00
	2	Hartsfield, William	05-NOV-05	\$599.00

## Sample Application v2.0

Welcome to the HTML DB Sample Application v2.0. This application is designed to highlight the features of HTML DB.

## Tasks

- ▶ [About this Application](#)
- ▶ [Enter a New Order](#)
- ▶ [Add a New Customer](#)
- ▶ [Add a New Product](#)

# Application Builder Terminology

ORACLE Application Express  
Sample Application

DEMO Print LOGOUT

Home Customers Products Orders Charts

Home > Customers

### Customers

Search  **Go** **New Customer**

	Customer Name	Address	City	State	ZIP Code
	Dulles, John	45020 Aviation Drive	Sterling	VA	20166
	Hartsfield, William	6000 North Terminal Parkway	Atlanta	GA	30320
	Logan, Edward	1 Harborside Drive	East Boston	MA	02128
	OHare, Edward "Butch"	10000 West OHare	Chicago	IL	60666
	LaGuardia, Fiorello	Hangar Center, Third Floor	Flushing	NY	11371
	Lambert, Albert	10701 Lambert International Blvd.	St. Louis	MO	63145
	Bradley, Eugene	Schoephoester Road	Windsor Locks	CT	06096

### Top Customers

LaGuardia, Fiorello	\$3,800.00
Hartsfield, William	\$2,598.00
Dulles, John	\$1,200.00
Logan, Edward	\$790.00
Bradley, Eugene	\$500.00
Lambert, Albert	\$490.00
OHare, Edward "Butch"	\$250.00

Navigation Bar

Tabs

Breadcrumbs

Item

Region

Button

# What We're Going to Develop (and Do) Today

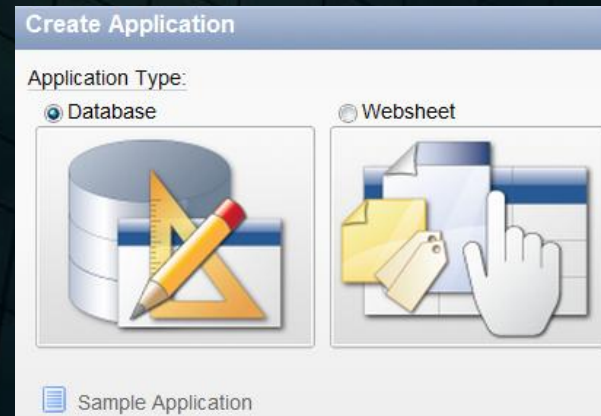
- **An Application from a Comma Delimited File**
- **An Application from Scratch**
  - Interactive report
  - Graph
  - Form with a Report
- **Advanced topics**
  - Conditional display
  - Items
  - Session state
  - Templates
  - Processes
  - Security
- **Monitoring activity**

# My Sample App

- Let's try out the application
  - Interactive reporting
    - Filters
    - Sorting
    - Download data
    - Paging
  - Reports, Graphs (Analyze)

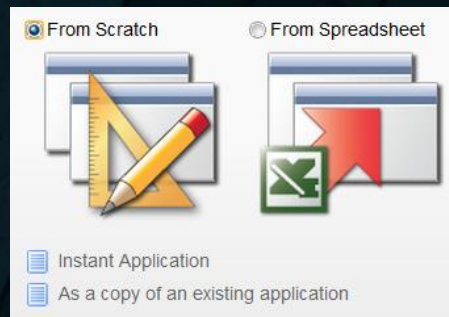
# Create an Application from a CSV File

- Use a CSV file
- Home / App Builder
  - Create
    - From Spreadsheet
- Right side of page
  - Import, Tasks, Recent, Migrations
- View Icons, Report, Details
- Create from Spreadsheet
  - Builds an App
- Create Application
  - Build from Scratch
- Sample Application



# From Scratch

- Design up front
  - Data already exists or was loaded in table
  - Name it
  - From Scratch
  - Pick “base” schema
- Start adding pages
    - Blank
    - Report
      - Table / Query
      - Interactive / Classic
    - Form / Tabular
      - Table
    - Master Detail
    - Report and Form











# Adding Functionality

- Wizard or Scratch
- Click “Create”
  - Page
  - Region
  - Control
  - Shared Component
- Conditional Logic
- Regions
  - HTML
  - Report
  - Form
  - Chart
  - Breadcrumb
  - PL/SQL
  - Tree
  - URL

# Shared Components





## Logic



-  Application Items
-  Application Processes
-  Application Computations
-  Web Service References
-  Build Options
-  Data Loading





## Navigation



-  Tabs
-  Lists
-  Breadcrumbs
-  Navigation Bar Entries






## Security



-  Authentication Schemes
-  Authorization Schemes
-  Session State Protection
-  Security Attributes




## User Interface



-  Themes
-  Templates
-  Lists of Values
-  Shortcuts
-  Plug-ins




## Files



-  Cascading Style Sheets
-  Images
-  Static Files



## Globalization



-  Translate Application
-  Text Messages
-  Globalization Attributes

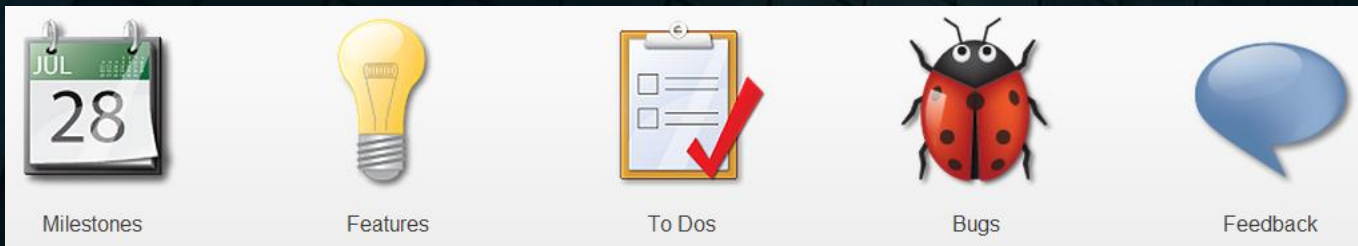
## Reports



-  Report Queries
-  Report Layouts

# Miscellaneous Functionality

- **Export / Import**
  - **Flashback (as of)**
- **Team Development**
- **Manage Service**
- **Manage Users/Groups**
- **Monitor Activity**
- **Dashboards**
- **Utilization Report**



# Referencing Items

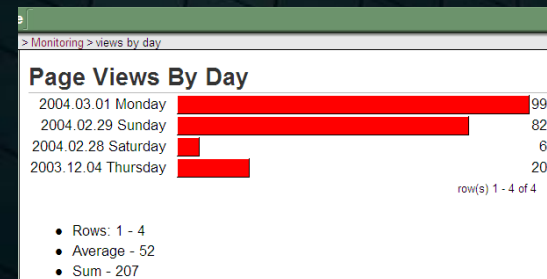
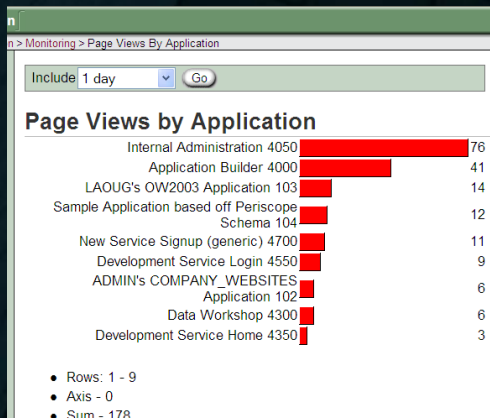
- **Substitution String**
  - #variableName#
- **Short Substitution String**
  - &variableName
- **PL/SQL**
  - v('variableName')
  - nv('numericValue')
- **Bind Variable**
  - :variableName
- **Items can be used to:**
  - Include a substitution string within a template
  - Create an item at the application or page level
  - Use built-in substitution strings to achieve a specific type of functionality

# Implicit Variables

- APP\_SESSION
- APP\_USER
- IMAGE\_PREFIX
- WORKSPACE\_IMAGES
- APP\_IMAGES
- BROWSER\_LANGUAGE
- PRINTER\_FRIENDLY
- HOME\_LINK
- PROXY SERVER
- REQUEST
- SYSDATE\_YYYYMMDD
- DEBUG
- APP\_ID
- APP\_PAGE\_ID
- APP SCHEMA OWNER
- SQLERRM
- AUTHENTICATED\_URL\_PREFIX
- LOGOUT\_URL
- PUBLIC\_URL\_PREFIX
- CURRENT\_PARENT\_TAB\_TEXT
- APP\_ALIAS
- APP\_UNIQUE\_PAGE\_ID

# Built-in Monitoring

- Chart activity by application
- Chart non internal user views
- Chart of developer activity
- Chart page views by day
- Chart page views by non internal users (with time filter)
- Monthly calendar report
- Page Views by Hour
- Page views report aggregated by workspace
- Recent page views (with optional workspace filter)
- Top Browsers
- Top External Sites
- Top Users
- Top Workspaces



# What You're Going to Do Tomorrow

- Sign up on [apex.oracle.com](http://apex.oracle.com) and build your first application
- Work on your laptop
- Attend advanced topics / presentations
- Watch my class on InteliVideo
- MaxApex also sells a production environment for as low as \$10/mo
- Read, learn, study, play with Apex
- Write a class and publish it on [InteliVideo.com](http://InteliVideo.com)!!!!
- Have fun!!!!

**maxapex**

Questions?





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