Atlas Sherpa

A CRM Developer's Chrome Extension

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TITLE

Asst. Dir. Development Technology Systems

NON-PROFIT EXPERIENCE

Ten years

HOMETOWN

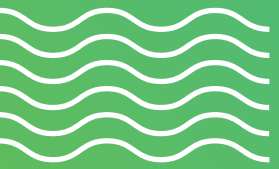
Boston, MA

ABOUT ME

- Born in France
- Love to cook
- Left tech to work in non-profits

Agenda

- Sherpa Who?
- Demo
- Chrome Extensions 101
- How did you do that?
- What else can we do?



SHERPA WHO?

A quick introduction to Altas Sherpa and Chrome Extensions

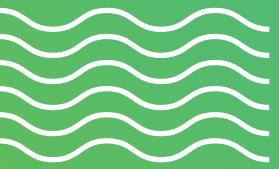
What is Atlas Sherpa?

A Chrome Extension to help navigate and develop for the BBCRM platform

- Browser history visualization
- Environment navigation
- BBCRM interface enhancement

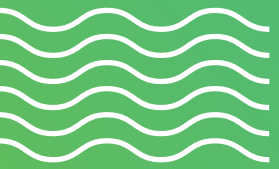
Why use a Chrome Extension?

- Navigating multi-database environments
- Overlay CRM interface
- Prior experience with Chrome extensions
- It’s cool!



DEMO

I swear it worked yesterday…



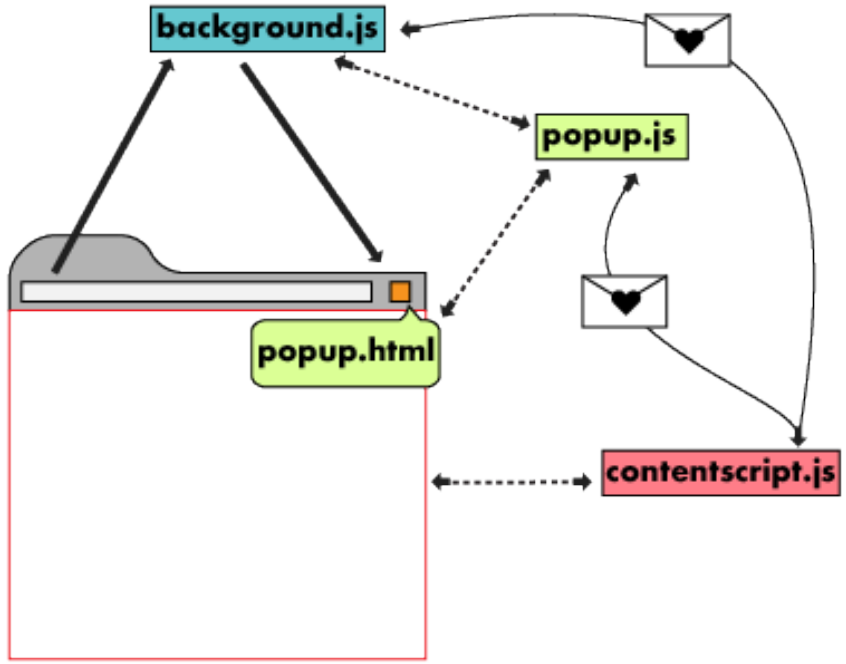
CHROME EXTENSIONS 101

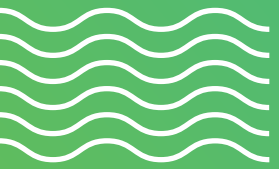
Chrome Extension Development

- Languages
  - HTML
  - CSS
  - Javascript
- Visual Studio project template
- Unpacked Extensions
- Chrome Web Store

Chrome Extension Architecture

- Manifest
  - Configuration & Permissions
- Popup
  - Extension UI
- Content
  - Page injection
- Background
  - Runs continuously





HOW DID YOU DO THAT?

Trials & Tribulations

SOAP & Asynchronous Structure

- The Problem
  - Popup loads slowly when waiting for SOAP call
- The Solution
  - Make SOAP calls in Background script
  - Pull results into Popup from Background

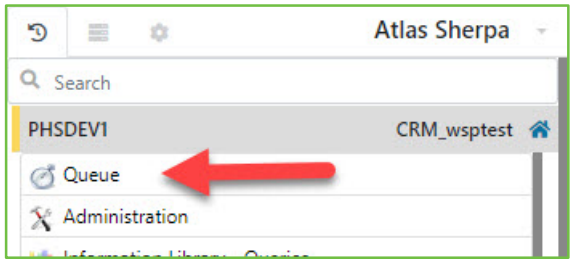
Working with the CRM DOM: Document Loaded

```
17  // Wait until the page is actually loaded
18  var waitCounter = 0;
19  var checkExist = setInterval(function () {
20      waitCounter++;
21      // Check if header has populated yet
22      if ($('.bbui-pages-header').children().length > 0) {
23          // Stop checking
24          clearInterval(checkExist);
25          // Load content
26          afterPageLoad();
27      }
28      // If it take more than 20 cycles (2 seconds) then bail
29      if (waitCounter >= 20) {
30          console.log("Timeout waiting for page to load...");
31      }
32  }, 100); // check every 100ms
```

Working with the CRM DOM: Positioning Elements

```
85          // Get the left and right header elements
86          var bbui_left = $('.bbui-pages-header-left');
87          var bbui_right = $('.bbui-pages-header-right');
88
89          // Set the height and width of space between the elements
90          var nav_left = bbui_left.position().left + bbui_left.outerWidth();
91          var nav_height = bbui_left.outerHeight();
92          var nav_width = bbui_right.position().left - nav_left - 40;
93
94          // Create a scaffolding for the space
95          var atlas_nav = `
96              <div id="atlas_nav">
97                  <div id="atlas_left"></div>
98                  <div id="atlas_middle"></div>
99                  <div id="atlas_right"></div>
100             </div>
101             `;
102         // Insert the scaffolding
103         atlas_nav = $(atlas_nav).appendTo("body");
104         // Set the calculated height & width
105         atlas_nav.css("left", nav_left);
106         atlas_nav.css("width", nav_width);
107         atlas_nav.css("height", nav_height);
```

CRM Icons

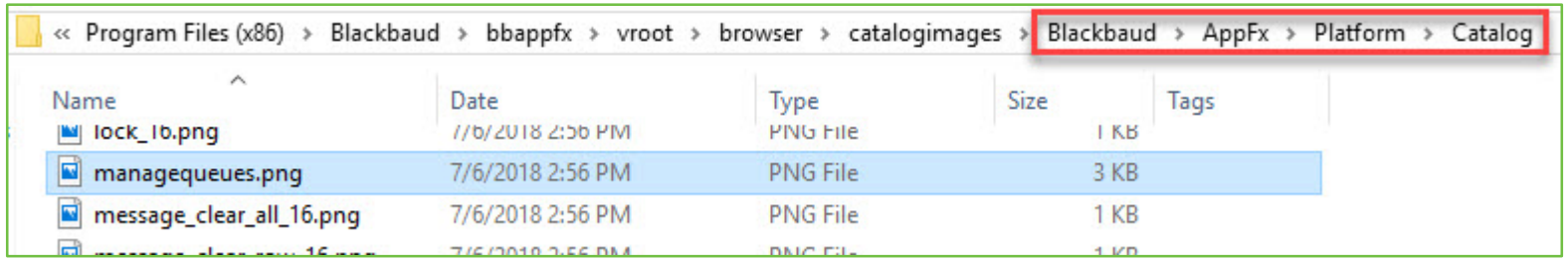



```
;with XMLNAMESPACES ('bb_appfx_pagedefinition' AS ns)
select
    P.ID
    , P.NAME
    , P.PAGEDEFINITIONSPEC.value(
        '(/ns:PageDefinitionSpec/ns:PageHeader/@ImageKey)[1]','varchar(max)'
    ) AS PageHeaderImageKey
from dbo.PAGEDEFINITIONCATALOG P
```

100 %

Results | Messages

	ID	NAME	PageHeaderImageKey
1	43F97DE3-D5AA-440C-A54B-14F71B2920E5	Catalog Browser	RES:Catalog_Browser_Large
2	86750C10-3669-4A8B-BFF5-EDDCCBB0E4DC	Sites	RES:fa_configuration
3	4587CBA9-9E76-4DB1-803F-66E98D0C62B0	KPI Dashboard Page	res:dashboard
4	A3D45719-D44F-40DD-9DB7-25F23CFE8F17	KPI Instance Page	RES:kpi
5	522131A2-6C73-4E74-9801-4ECB61B456B2	KPI Instances	RES:kpi
6	E5E73038-ED16-4AD4-929D-012DC6425EF0	Queue Process Page	RES:fa_batch
7	33AFA556-7588-4002-8F22-62CD2A44631E	Queue	CATALOG:Blackbaud.AppFx.Platform.Catalog,Blackbaud.AppFx.Platform.Catalog.managequeues.png
8	6CE66577-C6F9-47F3-8AA0-AB19A490CCE3	Export Process Page	RES:Query_Large
9	A523FE5F-8949-463E-B965-3AD53CD08214	Export	CATALOG:Blackbaud.AppFx.Platform.Catalog,Blackbaud.AppFx.Platform.Catalog.export_32_2.png
10	D7CA394E-3FA1-4B56-B6F8-96456D8C53D7	Query	RES:Query_Large
11	7CEC37B8-968D-4B5E-B171-BE2A43D2CB8A	Import Process Page	catalog:Blackbaud.AppFx.Platform.Catalog,Blackbaud.AppFx.Platform.Catalog.batchimport.png
12	927A2C70-173F-421D-86DA-C2F30AB63DD0	Import	catalog:Blackbaud.AppFx.Platform.Catalog,Blackbaud.AppFx.Platform.Catalog.batchimport.png
13	A9E01EED-56AA-4653-90E4-5829E9ADA3A9	Segments Page	CATALOG:Blackbaud.AppFx.Marketing.Catalog.dll,Blackbaud.AppFx.Marketing.Catalog.segments.png



What else can we do?

- Surface CRM forms
- Trigger CRM events
- Overlay help
- CSS overlay: Themes
- Integrate with 3rd party APIs
- Support Tickets

THANK YOU!

ATLAS
NAVIGATING OUR CONNECTIONS

Questions?

WPOZZAR@PARTNERS.ORG

GitHub https://github.com/wpozzarPHSDEV/AtlasSherpa

https://chrome.google.com/webstore/detail/atlas-sherpa/limpjfdjoiemnnklknhekiaenolbofkg