A Deep Dive into APEX JET Charts

1

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What is Oracle JET

5

APEX JET Charts

Demonstration

6

7

Let's start with a chart

Demonstration

8

Bring your charts to life

- Use Dynamic Actions to change JET options

```
$("#bar_jet").ojChart({stack: 'off'});
```

- Use localStorage to remember options

```
myStorage.setItem("stack", "off");
```

- Use JavaScript code to activate remembered options

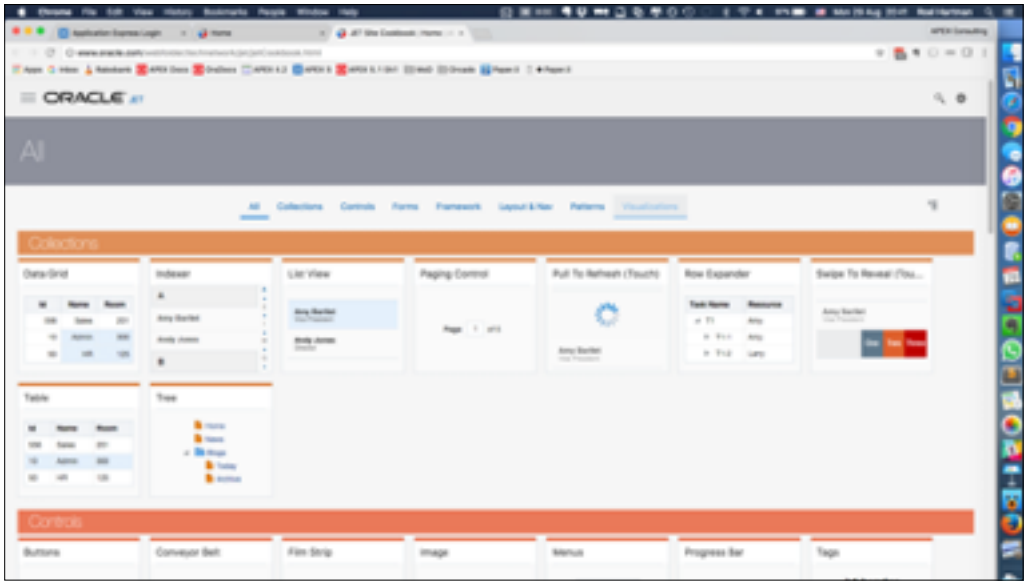
```
function( options ){
   options.stack = myStorage.getItem("stack");
   return options;
}
```

9

But wait…there's more

Plugins to the rescue!

10



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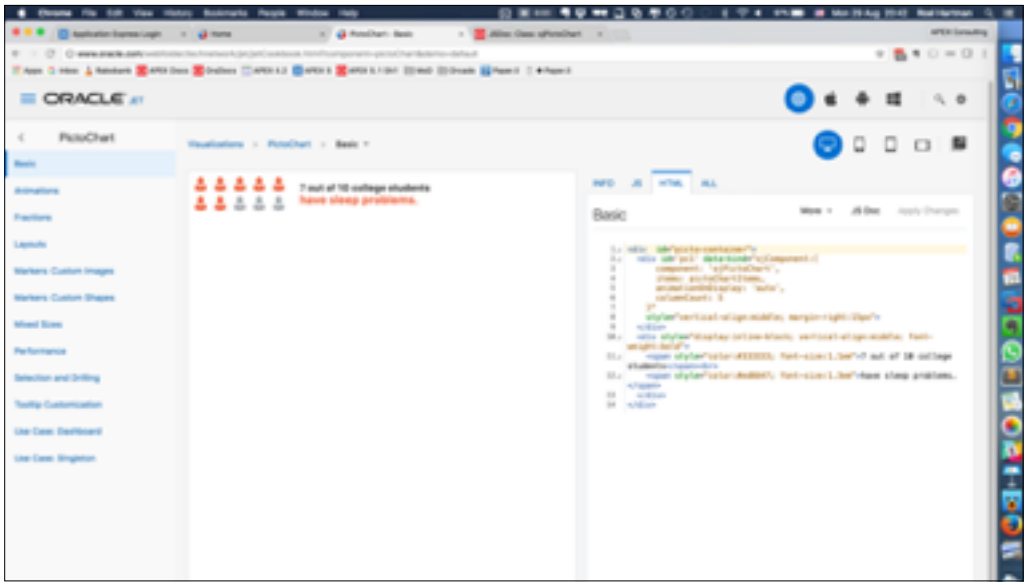
12



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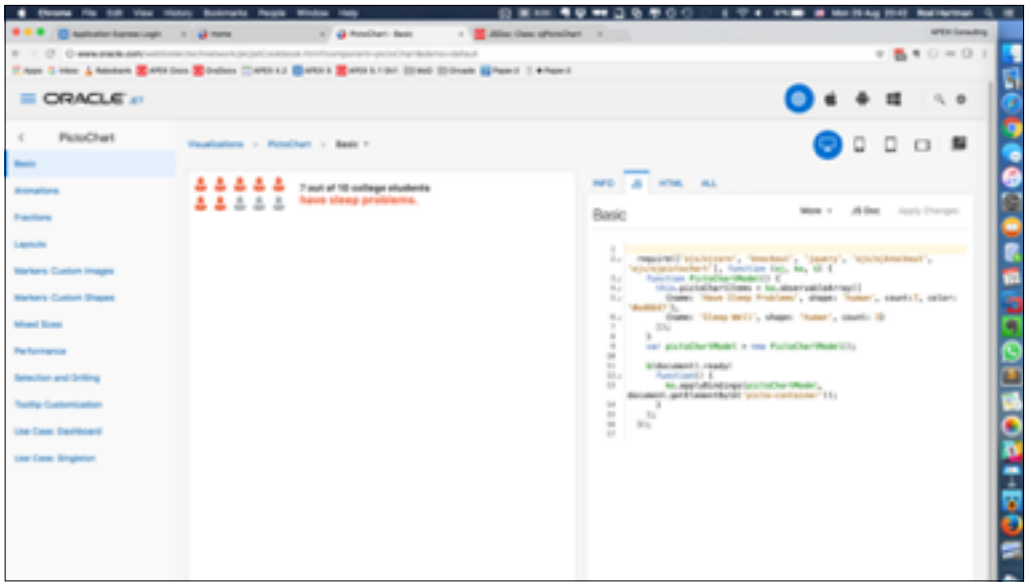


14

UNDERDOCUMENTED
FEATURE

15

16

```
/*
 * render - function to create placeholder div tag, and initialise the  component
 */
 function render
( p_region               in  apex_plugin.t_region
, p_plugin               in  apex_plugin.t_plugin
, p_is_printer_friendly  in  boolean
) return apex_plugin.t_region_render_result
is
  c_region_static_id     constant varchar2(255)  := apex_escape.html_attribute( p_region.static_id );
begin
  -- Add placeholder div
  sys.htp.p (
     '<div class="a-JET-PictoChart" id="' || c_region_static_id || '_region">' ||
      '<div class="a-JET-PictoChart-container" id="' || c_region_static_id || '_chart"></div>' ||
     '</div>' );

  -- Initialize the chart
  apex_javascript.add_onload_code
  ( p_code => 'jet.picto.init('||
                '"#'||c_region_static_id||'_chart", '          || -- pRegionId
                '"' || apex_plugin.get_ajax_identifier ||'"'   || -- pApexAjaxIdentifier
               ')'
  );

  return null;
end render;
```

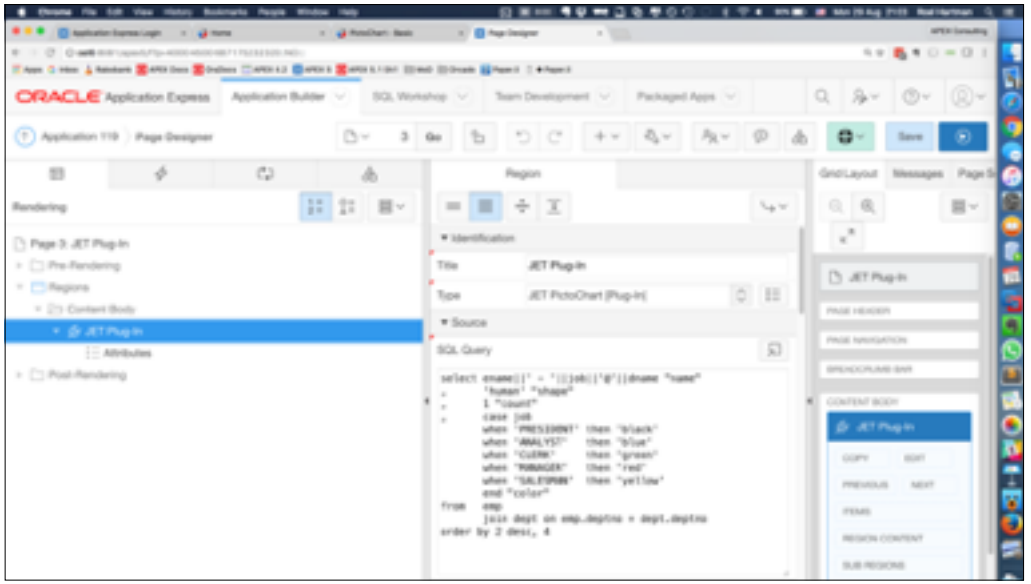
17

```
/*
 * ajax - function to process SQL query, and output JSON data for legend
 */
function ajax
( p_region    in  apex_plugin.t_region
, p_plugin    in  apex_plugin.t_plugin
) return apex_plugin.t_region_ajax_result
is
  c       sys_refcursor;
  l_query varchar2(32767);
begin
  l_query := p_region.source;
  open c for l_query;
  apex_json.open_object;
  apex_json.write('items', c);

  -- add settings
  apex_json.write('animationOnDisplay' , p_region.attribute_01);
  apex_json.write('columnCount'        , p_region.attribute_02);
  apex_json.write('layout'             , p_region.attribute_03);

  apex_json.close_object;
  return null;
end ajax;
```

18

```
! function (jet, $, server, util, debug) {
    "use strict";

    jet.picto = {
        init: function (pRegionId, pApexAjaxIdentifier) {
            require(["ojs/ojcore", "jquery", "ojs/ojpictochart"], function (oj, $) {
                server.plugin(pApexAjaxIdentifier, {}, {
                    success: function (pData) {
                        $(pRegionId)
                            .ojPictoChart(pData);
                    }
                });
            });
        }
    }
}(window.jet = window.jet || {}, apex.jQuery, apex.server, apex.util, apex.debug);
```

19



20

21

A JET Charts Plugin : Building Blocks

- A simple PL/SQL render function
- A simple PL/SQL ajax function
- A simple JavaScript call
- A simple SQL query

22

Read / Set JET Chart data

Use a JET Chart as an input item

23

Read / Set JET Chart data

- Disable the readonly option
- Use the ojoptionchange event to listen to changes
- Use the data payload to find the new value

24

CONCLUSIONS

- Enhance JET Chart
- Create a JET Chart Plugin
- Use JET Chart as an input item

25

Q & A

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26

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27