

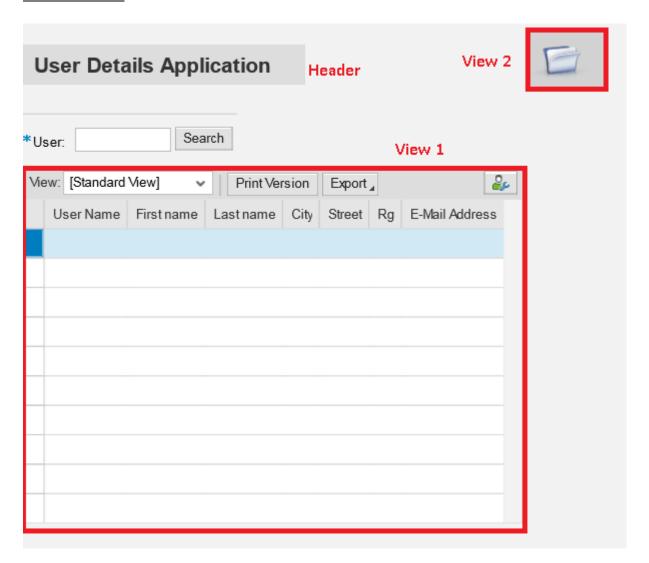
Version 1.0

Date 27.06.2016 Status In Development

Number 2

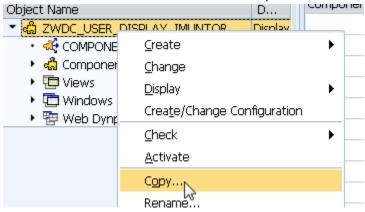
Initial version by Igor Muntoreanu

Exercise Review:



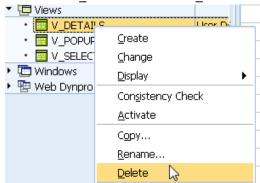
Practical Guide:

1) Save the last finished exercise to a new component:

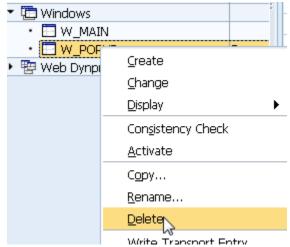


Just choose a name of you like and save it. Just to have as backup.

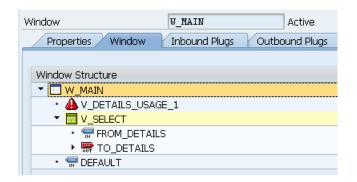
- **2)** Deleting useless stuff:
 - a. Delete the V_DETAILS and the V_POPUP Views



- **b.** Activate
- c. Delete the W_POPUP



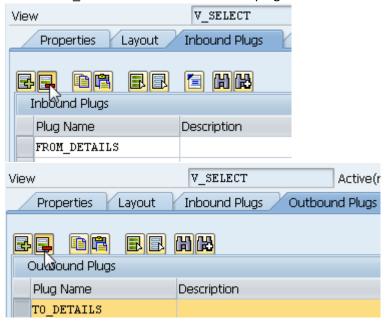
- d. Activate
- **e.** Go go the W_MAIN window, it will look like that:



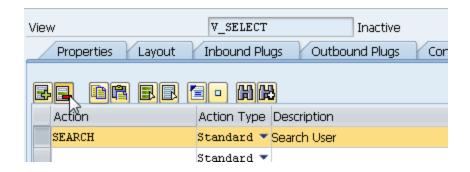
Delete the V_DETAILS_USAGE_1



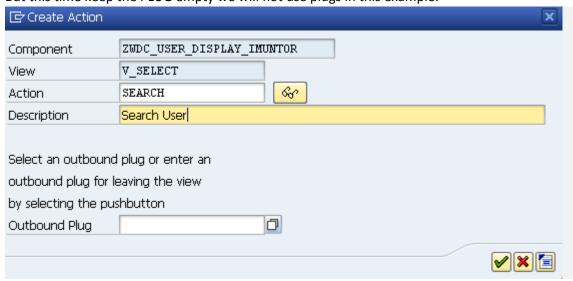
f. Go to the V_SELECT view and remove the plugs



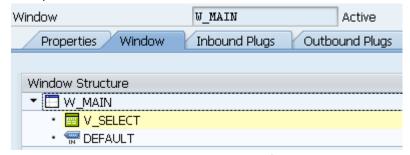
g. Delete the Action



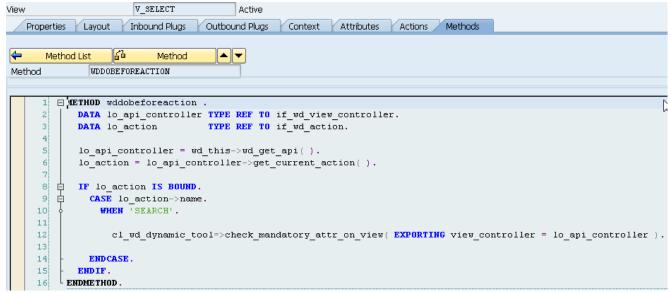
3) Create an action for the SEARCH button again:
But this time keep the PLUG empty we will not use plugs in this example.



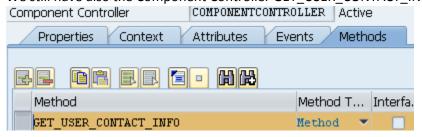
- 4) Make sure
 - **a.** That your window is like shown below:



b. We still have the method mapped in case of empty entry.



c. We still have also the Component Controller GET_USER_CONTACT_INFO:



```
DATA: lo nd user contact TYPE REF TO if wd context node,
          lo el user contact TYPE REF TO if wd context element.
  DATA: lv username TYPE REF TO wd this->element user contact-username.
  DATA: ls address TYPE bapiaddr3,
          lt return TYPE TABLE OF bapiret2.
  DATA: Is user contact TYPE wd this->element user contact.
  " Read the selected user name into context:
  lo nd user contact = wd context->get child node( name = wd this-
>wdctx user contact ).
  lo el user contact = lo nd user contact->get element().
  lv username ?= lo el user contact->get attribute ref('USERNAME').
  " Lookup the user's contact information:
  CALL FUNCTION 'BAPI USER GET DETAIL'
    EXPORTING
       username = lv username->*
     IMPORTING
       address = ls address
     TABLES
       return = lt return.
  " Copy the results to a structure and bind it to the context:
 ls_user_contact-username
ls_user_contact-firstname
ls_user_contact-lastname
ls_user_contact-street
ls_user_contact-city
ls_user_contact-region
ls_user_contact-e_mail
= lv_username->*.

= ls_address-firstname.

= ls_address-lastname.

= ls_address-street.

= ls_address-city.

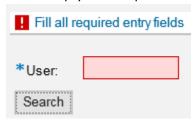
= ls_address-region.

= ls_address-e_mail.
  " Bind it to the context
  lo_el_user_contact->set_static_attributes( ls_user_contact ).
```

- **5)** Taking a look how the programs works now:
 - **a.** When SEARCH is pressed nothing happens:



b. When empty value is pressed an error message appears:



6) Creating the ALV:

a. The first thing we need to understand is that you can use the same View to create N containers.

In our case, we are going to use the V_SELECT view to create two more containers inside it, the VIEWC1 and the VIEWC2. The VIEWC1, we will use to display an image.

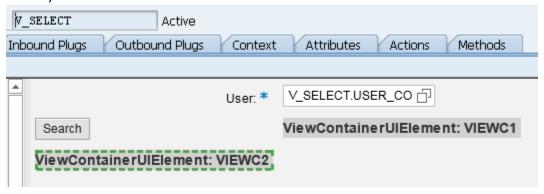


In the VIEWC2, we will use to display the ALV.

b. Creating the Elements ViewContainers in the V_SELECT view.



Your layout will be like this:



It is messed up but don't about it yet.

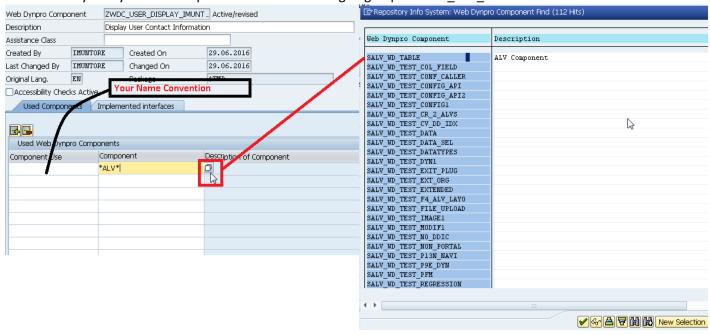
7) Webdynpro ALV Component

An important concept in WebDynpro is the Component. WD is OO and Components oriented, that means you can use working tools such as ALV and Select-Options to aggregate your Aplication, they are reusable solutions. See the image below:

Click 2x in your WD Component:



SAP has many ready-to-use components to use. We are going to pick SALV_WD_TABLE for this exercise:





We will not use Assistance Class in this example.

As you can see the "Component Usages" tree now showed up.



The "INTERFACECONTROLLER_USAGE" contains the own context of the SALV_WD_TABLE Component, lets open it:



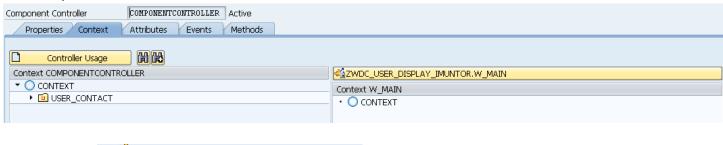
Now we have to integrate our Controller Nodes Attributes with the ALV Component. This way we will be able to work with both together. Press the button "Controller Usage":

COMPONENTCONTROLLER Active



Your Component Controller will look like this now:

Component Controller





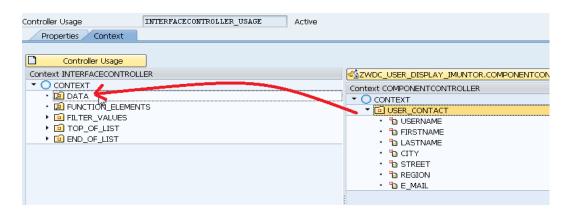
Click again in the Controller Usage:



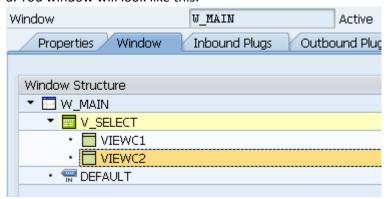
Select our component:



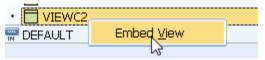
Now the component controller will open in the right side panel as shown below. Drag and drop the USER_CONTACT into the DATA node of the Interface Controller. This will declare a mapping. Meaning we have just declared which node is going to be displayed in the ALV.

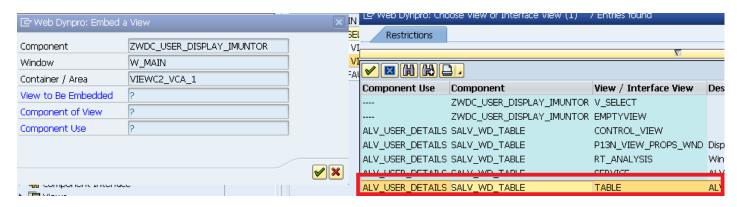


- 8) Changing the Window W_MAIN Structure
 - a. You window will look like this:

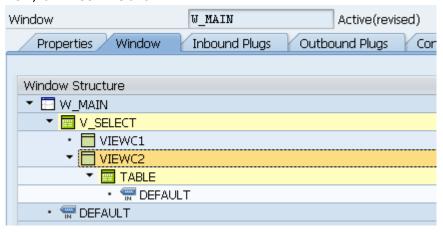


b. The ALV will be in VIEWC2, so lets EMBE it:





Now, it will look like this:



- 9) Save and Activate everything.
- 10) Coding the App
 - a. Go to the V_SELECT View and open the Search button action:



The first thing we need to do is to read the user through a BAPI. We already did that on the VOL1 of this training. So lets take advantage of that and use here:

After that, lets read the structure of the node created that we named "USER_CONTACT".

Press the Wizard Button:

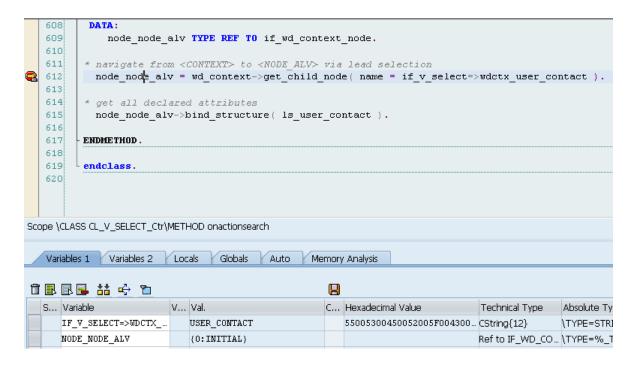


The following code will be generated:

```
" Wizard
 6
 7
       DATA lo_nd_user_contact TYPE REF TO if_wd_context_node.
 8
 9
       DATA lo_el_user_contact TYPE REF TO if_wd_context_element.
10
       DATA ls_user_contact TYPE wd_this->element_user_contact.
11
12
     * navigate from <CONTEXT> to <USER CONTACT> via lead selection
13
       lo_nd_user_contact = wd_context->get_child_node( name = wd_this->wdctx_user_contact ).
14
15 🖨 # @TODO handle non existant child
     * IF lo_nd_user_contact IS INITIAL.
16
    - * ENDIF.
17
18
19
    * get element via lead selection
20
     lo el user contact = lo nd user contact->get element( ).
     * @TODO handle not set lead selection
21
22 | IF lo_el_user_contact IS INITIAL.
23
     ENDIF.
24
25
     * get all declared attributes
26
       lo_el_user_contact->get_static_attributes(
27
         IMPORTING
28
           static_attributes = ls_user_contact ).
```

Now, lets pass the value of the strucuture ls_user_contact to the ALV:

As we can see though debug, the variable "node_node_alv" is feeded with the 'USER_CONTACT' node, and later the values were BINDED.



Your final code should be more or less like this:

```
" Get the user details
 wd comp controller->get user contact info( ).
" Wizard
 DATA lo nd user contact TYPE REF TO if wd context node.
 DATA lo el user contact TYPE REF TO if wd context element.
 DATA is user contact TYPE wd this->element user contact.
* navigate from <CONTEXT> to <USER CONTACT> via lead selection
  lo nd user contact = wd context->get child node( name = wd this-
>wdctx user contact ).
* @TODO handle non existant child
* IF lo nd user contact IS INITIAL.
* ENDIF.
* get element via lead selection
 lo el user contact = lo nd user contact->get element().
* @TODO handle not set lead selection
 IF lo el user contact IS INITIAL.
 ENDIF.
* get all declared attributes
  lo el user contact->get static attributes(
    IMPORTING
      static attributes = ls user contact ).
" Fill ALV
DATA:
    node node alv TYPE REF TO if wd context node.
* navigate from <CONTEXT> to <NODE ALV> via lead selection
  node node alv = wd context-
```

```
>get_child_node( name = if_v_select=>wdctx_user_contact ).

* get all declared attributes
  node_node_alv->bind_structure( ls_user_contact ).
```

- 11) Checking the results after running the WDA:
 - a. Go to the WDA and execute it:



As we can see in the SS below, the layout is messed up, but it is working:



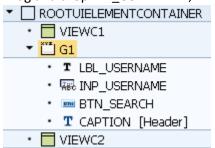
- 12) Adjusting the layout for best Appearance:
 - a. Send the VIEWC1 to the first position



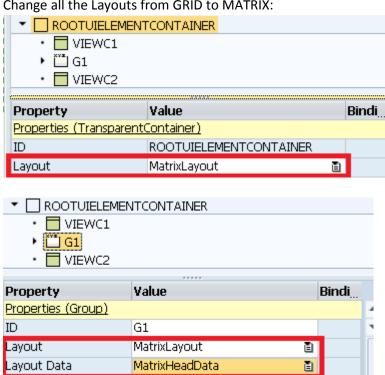
b. Create an Group Element in the ROOT:



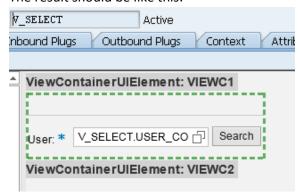
c. Drag and drop LBL_USERNAME, LBL_USERNAME and LBL_USERNAME to the group created:



d. Change all the Layouts from GRID to MATRIX:

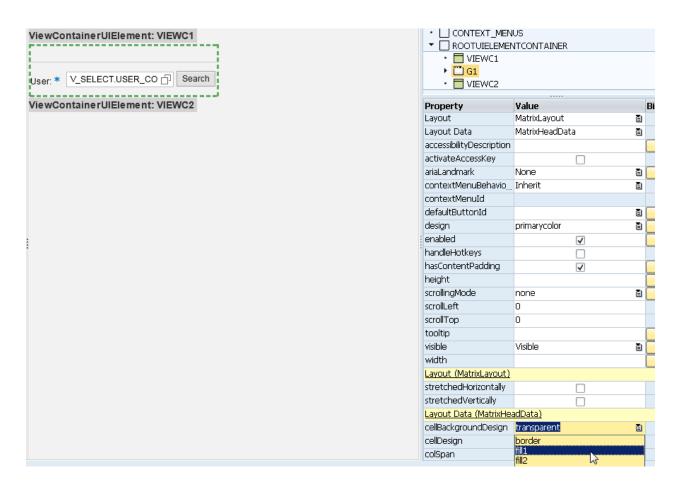


e. The result should be like this:



f. One tip here, when you want to change a layout property just press ENTER and check the results, example:

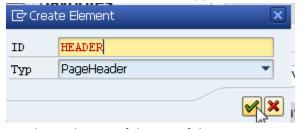
Selecting "fill1" as background color:



Press ENTER:

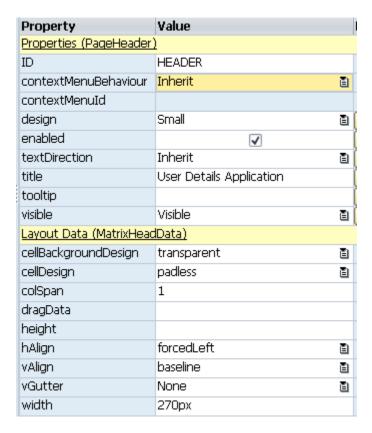


g. Lets create now a title for our Application:

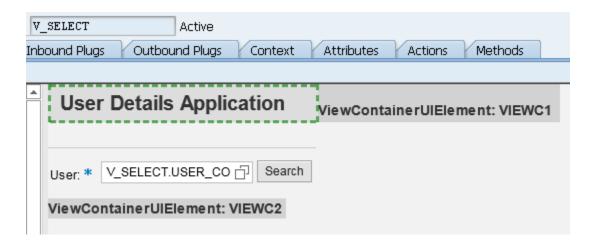


Put this in the top of the List of the ROOT. Name the title as: "User Details Application"

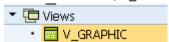
Properties:



Result:



h. The VIEWC1 for is useless, lets assign an image for that View Create a new view, V_GRAPHIC



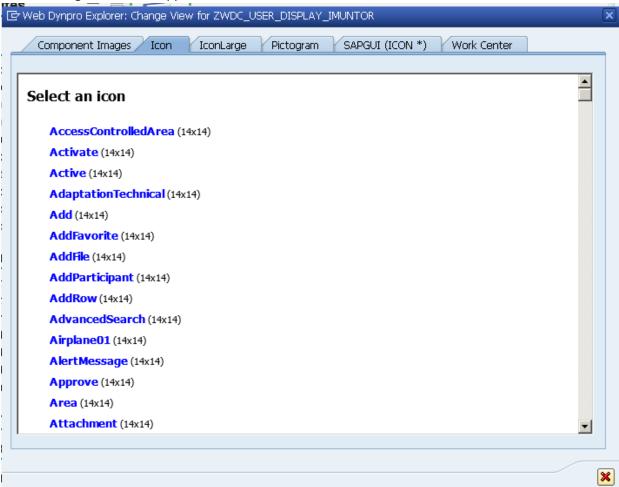
Create an image in the ROOT



Select the source of the image

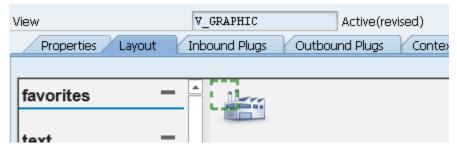


The following window will appears:



Select Work Center and select any image, my choice was "Company"

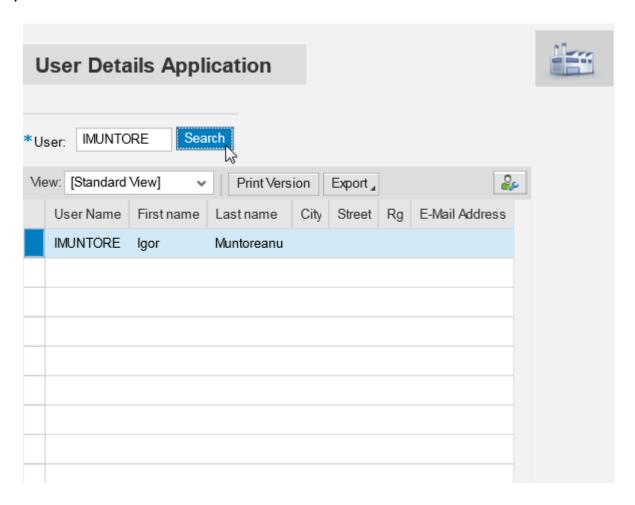
Result:



Go to the Window W_MAIN and Assign the view like shown below and choose the V_GRAPHIC.



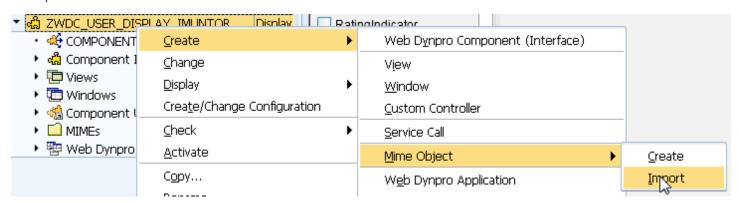
13) Final Result:



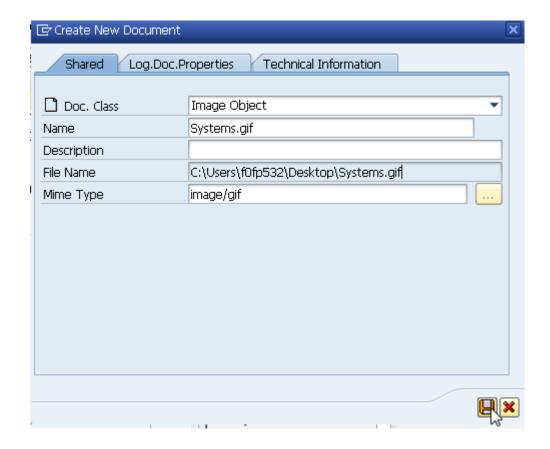
NOTE: These images are standard. You can add your own image by using the MIME Repository.

MIME: The MIME Repository is used to store all MIME objects (style sheets, graphics, icons and so on) in the SAP System.

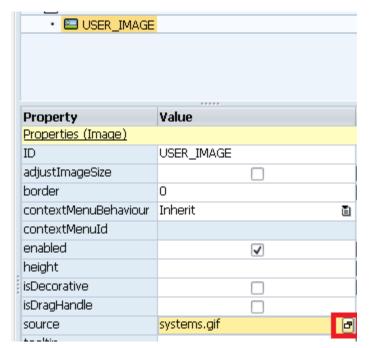
Example:



Upload the image you want and save:



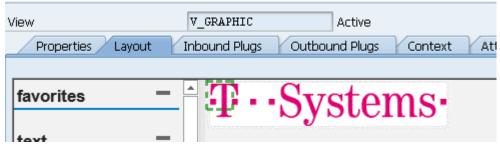
Go to the V_GRAPHIC view



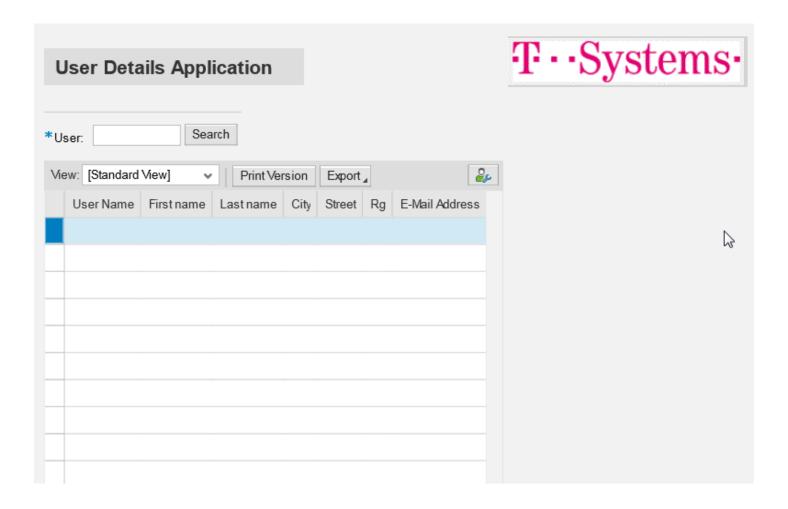
Choose your image:







Final Result:



14) Homework:

a. Insert a new column (Country) in the ALV between Last Name and City. Tip: It comes from BAPIADDR3-COUNTRY.

