

APEX - Bring structure to your rapid apps

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Elements of a framework/structure for APEX

The most important elements



- Users/Passwords and Roles
- Authentication
- Authorization
- Definition of Modules and Apps - Parameters passing
- Navigation within and between Apps - The Menu
 - Plsql to Javascript
 - Parameters and Checksums - the url
- The Navigation toolbar



The SoftBASE MasterAPP

APEX Structured Framework features

- Users/Passwords and Roles
- Authentication - Custom auth - adaptable to your security model



```
Function SoftBASE_Login (  
    p_username in varchar2,  
    p_password in varchar2 )  
    return boolean is  
    wf_ret Boolean;  
  
begin  
    wf_ret := mm1_apex_auth.mm_login(wf_mm_username_in => p_username,  
                                     wf_mm_password_in => p_password);
```

```
    Return wf_ret;
```

```
Exception
```

```
    when others then
```

```
        Return false;
```

```
End;
```

The SoftBASE MasterAPP

The screenshot shows the 'Users and Roles' management interface. It features a search bar, a table with columns for Employee, Company, User L., Sys. L., Group, Adm., Chg.Firm, Account, Shortcut, and Roles. The table contains several rows of user data, with the 'ROI' user selected. The interface also includes a sidebar with navigation options and a footer with the version number '12.1.0.409-W'.

	Employee	Company	User L.	Sys. L.	Group	Adm.	Chg.Firm	Account	Shortcut	Roles
<input type="radio"/>	HELGA	HWJ	DK	EN	MAN	No	No	Yes	Yes	
<input type="radio"/>	LAB	0001	DK	EN	MAN	Yes	No	No	Yes	
<input type="radio"/>	LASADM	0001	EN	EN	BASE	No			Yes	
<input type="radio"/>	MM1	0001	DK	EN	MAN	Yes	Yes	Yes	Yes	
<input checked="" type="radio"/>	ROI	0001	EN	DK	ADM	Yes	Yes	Yes	Yes	
<input type="radio"/>	ROIADM	0001	DK	EN	MAN	Yes	Yes	Yes	Yes	
<input type="radio"/>	TESS	0001	DK	EN	MAN	No	No	Yes	Yes	

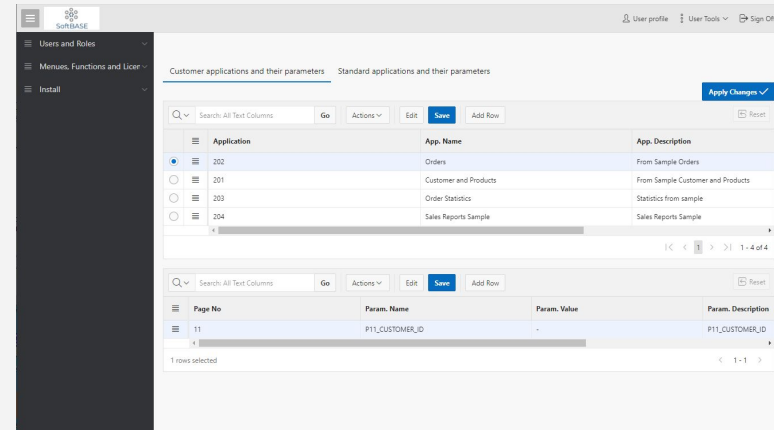
APEX Structured Framework features



- Definition of Modules and Apps - Integration items
- Navigation within and between Apps - The Menu
 - Plsql to Javascript
 - Parameters and Checksums - the url - Builtin Authorization

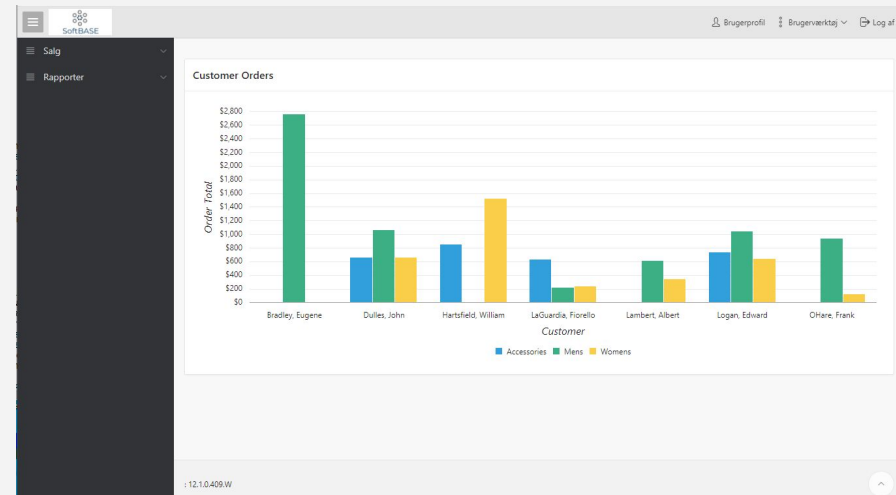
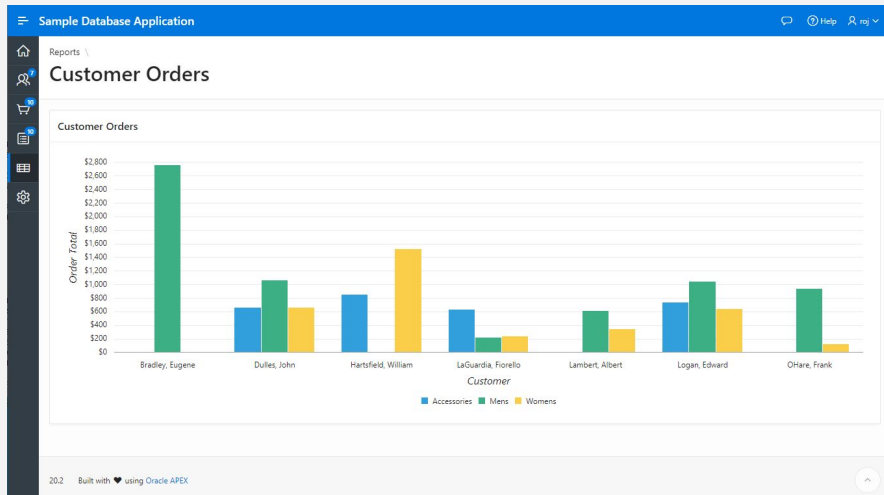
```
return  
q'  
Select lvl,  
label,  
target,  
wf_linage,  
image  
From  
(  
select lvl, label,  
target,  
wf_linage,  
image from table(mm1_apex_app_1220.mm1_apex_app_menu_piped(  
wf_mm_app_id           => :APP_ID,  
wf_mm_user_id         => :CTR_MM_USER_ID,  
wf_mm_lang_user_id   => :CTR_MM_LANG_USER_ID,  
wf_mm_license_id     => :CTR_MM_LICENSE_ID,  
wf_mm_session_id    => :APP_SESSION)));  
];
```

Table Query Function



APEX Structured Framework Workshop

- Sample App - unstructured
- Sample App - Applications 201,202,203 and 204



APEX Structured Framework Workshop

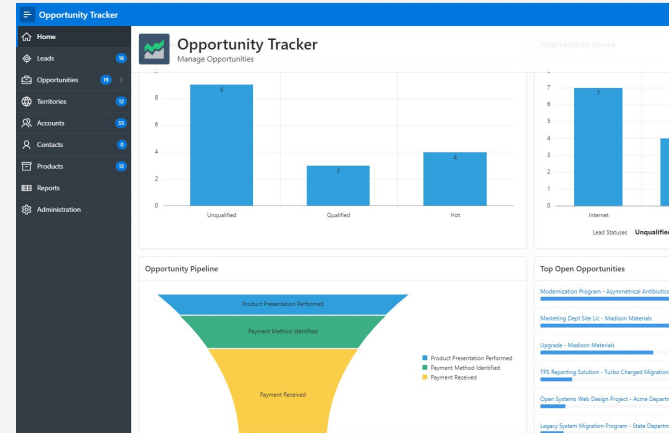


- Opportunity Tracker -> Structured App
107

Leads 19, 133 and 29

Accounts 2, 94 and 3

Opportunities - 1, 80, 16, 71, 108 and 31



Elements of a framework/structure for APEX

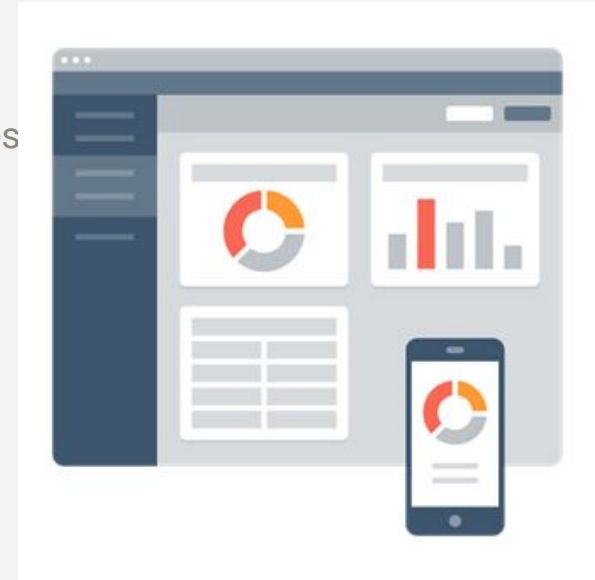
Is there more to it?



A few nice things (the Administration/Designer/Language Modules)

- Dynamic Wizard/workflow per user group
- Accounting integration layer
- Gsuite/Office365 integration layer (Oauth2)
- Dynamic style choice per Unit (Firm, Department..)
- Dynamic choice of Logo per Unit (Firm, Department..)
- Dynamic language control at runtime, per user (All headings, texts, messages etc.)
- Dynamic Default Values per user group
- Dynamic LOV's, via user table App
- Dynamic designer at Runtime, for instance choosing an items color
- Dynamic validation and error handling framework

The SoftBASE MasterAPP



Thanks for listening and look forward to
seeing you next thursday.

The End.



SoftBASE

The Migration Factory

