



Enterprise Micro Applications UI Guidelines

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1. Introduction

1.1. Purpose

The purpose of this document is to present the UI guidelines for creating Enterprise MicroApp clients for SAP (Enterprise MicroApps).

This document provides the specification for building various types of Enterprise MicroApps with a uniform appearance. The document describes the generic elements that are used by most of the Enterprise MicroApps.

1.2. What Are Enterprise MicroApps?

Enterprise MicroApps are small applications designed to extend a defined set of enterprise application functionality and transactions that is specific to a users role and requirements. Developers of Enterprise MicroApps leverage SAP NetWeaver enterprise and web services to securely deliver enterprise system functionality on desktops, within browsers, or mobile devices, and within cloud environments using gadgets, widgets, mobile applications, and other.

In order to consume Enterprise MicroApps, business users simply pick and select Enterprise MicroApps from the Enterprise MicroApp gallery space and add them on any container supported by the IT department. For example, a portal in the browser, a widget engine on the desktop, or a application container on the mobile device. Enterprise MicroApp gallery spaces are managed by the IT administrator; therefore the permission and usage of Enterprise MicroApps is completely under the control of IT department.

Enterprise MicroApps can be built using any language of choice by any developer, consuming either newly developed backend data services or already existing services, for example, enterprise services registered in SAP Enterprise Service Repository (SAP ESR).

1.3. General Enterprise MicroApps UI Concepts

Enterprise MicroApps usually contain one or several views that displays various type of data, and large set of controls to operate with the data. Dimensions of the Enterprise MicroApp are not strictly defined. Enterprise MicroApps are built to allow the end-user resizing their dimensions or Enterprise MicroApp to adjust its dimensions to the container size.

Each Enterprise MicroApp consists of the following basic elements:

| Element | Description |
|--------------|---|
| Header | <p>Almost all Enterprise MicroApps usually contain a header. The header must be located on the top of the Enterprise MicroApp.</p> <p>The main function of the header is to allow user recognizing the particular Enterprise MicroApp.</p> |
| Content area | <p>The Contents area contains the main user interface required for a user to complete tasks.</p> <p>Contents area can be viewable, when the user can only read necessary information, or interactive, when the user can enter data and gather required information.</p> |
| Footer | Two footer types are available: with or without buttons. |

An example of header, content area, and footer follow:



Figure 1 – Header, content area, and footer appearance

All UI strings used in the Enterprise MicroApp must follow the common text styling guidelines. For more information on the text styling guidelines, see [Font Styles](#).

To support the Enterprise MicroApp adjustable size, controls that can appear in different sizes, consist of a certain set of slices. Horizontally and vertically resizable controls are made up of nine image slices. Controls that are resizable in one direction only consist of three image slices. The figure below describes the naming of these slices, which can be applied to all respective controls.

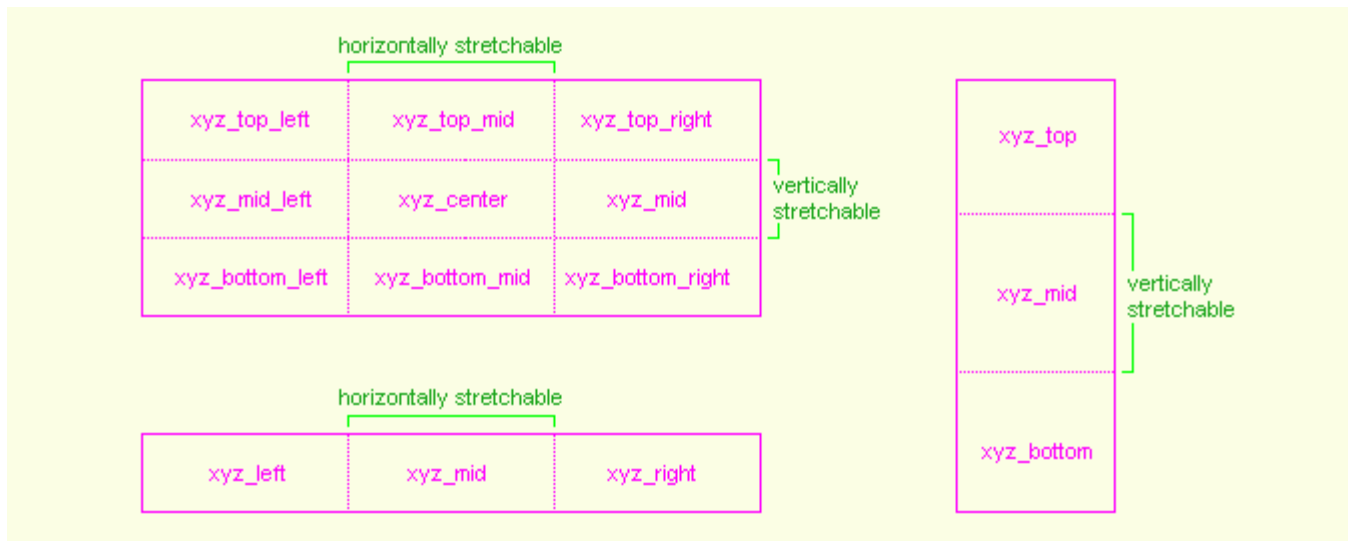


Figure 2 – General control sample

The following UI elements are presented in this guide:

- [About Box](#)
- [Buttons in Footer](#)
- [Calculator](#)
- [Calendar](#)
- [Checkbox](#)
- [Combo Box](#)
- [Divider](#)
- [Drawer](#)
- [Drop-Down List Box](#)

- [Drop-Down Menu](#)
- [Footer](#)
- [Header](#)
- [Input Field](#)
- [Pop-Up Window](#)
- [Radio Button](#)
- [Rounded Box](#)
- [Scrollbar](#)
- [Table](#)
- [Text Field](#)
- [Window Pane](#)
- [Your Comments Dialog](#)

2. Describing Enterprise MicroApps Uniform Appearance

This section presents available elements of Enterprise MicroApps appearance on such Enterprise MicroApp examples as:

- [Lookup MicroApp](#)
- [List MicroApp](#)
- [Data Monitor MicroApp](#)
- [Status MicroApp](#)
- [Search MicroApp](#)
- [Data Entry MicroApp](#)
- [Time Tracking MicroApp](#)
- [Send-to MicroApp](#)

Depending on the Enterprise MicroApp functionality and purpose, Enterprise MicroApp can include various controls, can have different size, or contain different number of views, but all Enterprise MicroApps share the uniform appearance. The Enterprise MicroApps example follows:

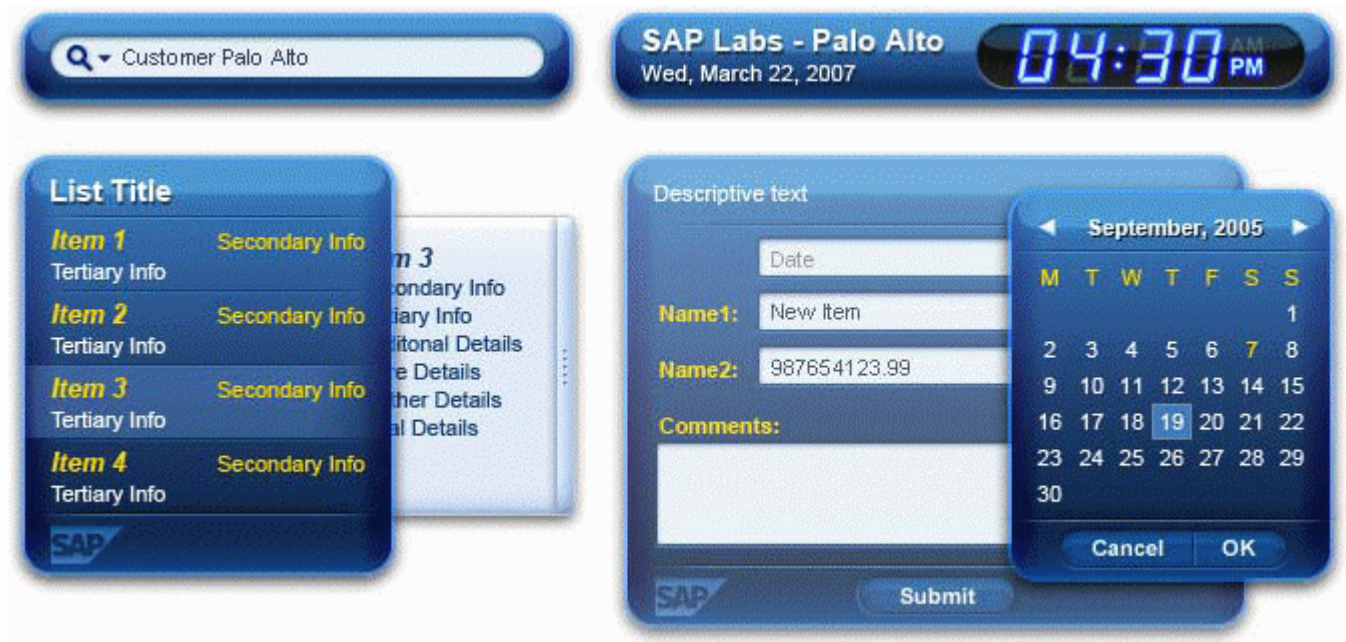


Figure 3 - Example of various Enterprise MicroApp types

2.1. Basic UI Elements

This section introduces basic Enterprise MicroApp UI elements that are common among the most of the Enterprise MicroApps.

2.1.1 Window Pane

There are two different sets of slices for the window pane. The Small Size window set is vertically not resizable. It can be used for minimized window panes, and content that doesn't need more height.

Small Size window pane example:

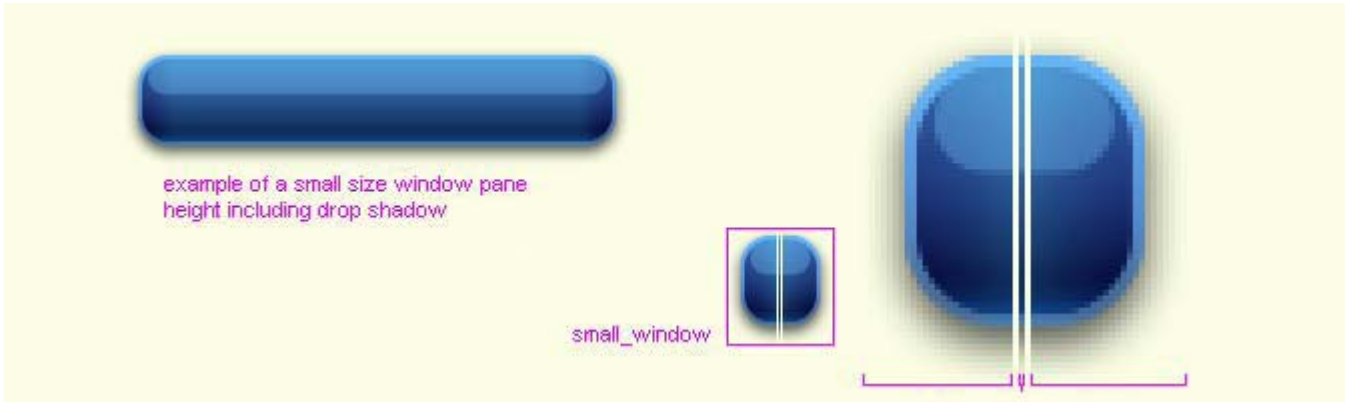


Figure 4 - Small Size window pane example

The Standard Size window set is resizable at will, but due to the slices the height can't be made smaller than the minimum height.

Standard Size window pane example:

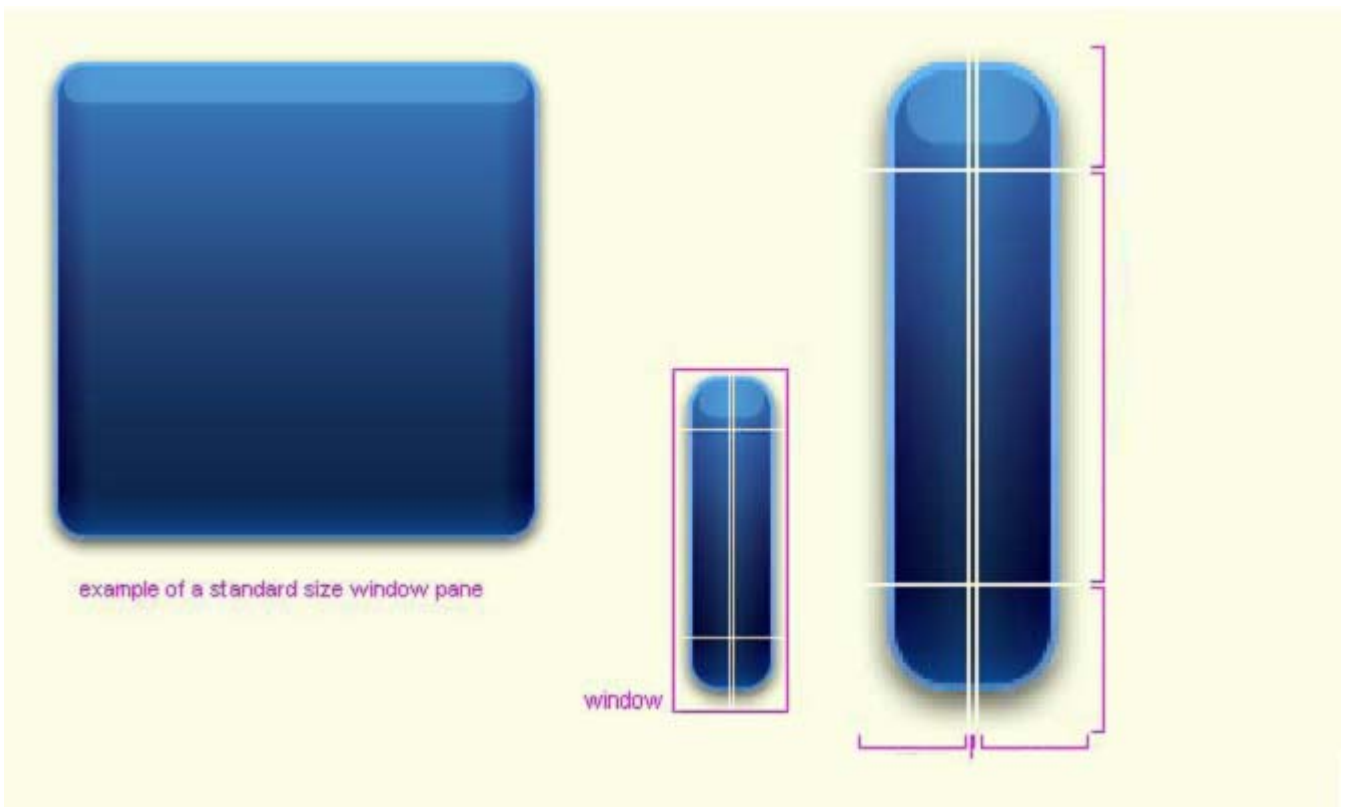


Figure 5 - Standard Size window pane example

2.1.2 Header and Footer

The Header and the Footer frame the content area, and are separated from the content by two lines. The images of these two lines (header_divider.png, footer_divider.png) include an almost invisible shading that overlays the content area. Thus, while scrolling, the content isn't cut off by a hard edge, but it fades out smoothly.



Figure 6 – Enterprise MicroApp header and footer example

2.1.3 Buttons in Footer

Additionally, the footer can have various controls for interaction with the Enterprise MicroApp.

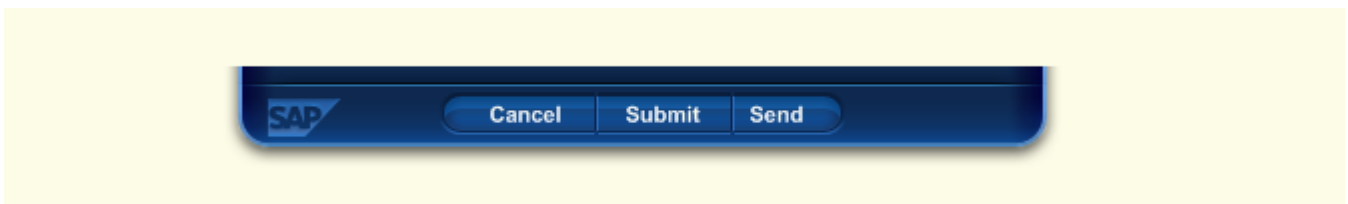


Figure 7 – Footer with buttons

The button can be used outside of the footer area, too (for example see figure 23, 25 and 25). For disabled versions of the button font opacity is used.

2.1.4 Divider

The following divider types are available:

| Divider type | Description |
|----------------|---|
| Header divider | For header separation from the Enterprise MicroApp content area. |
| Footer divider | For footer separation from the Enterprise MicroApp content area. |
| Item divider | For separating items inside the Enterprise MicroApp list element. |

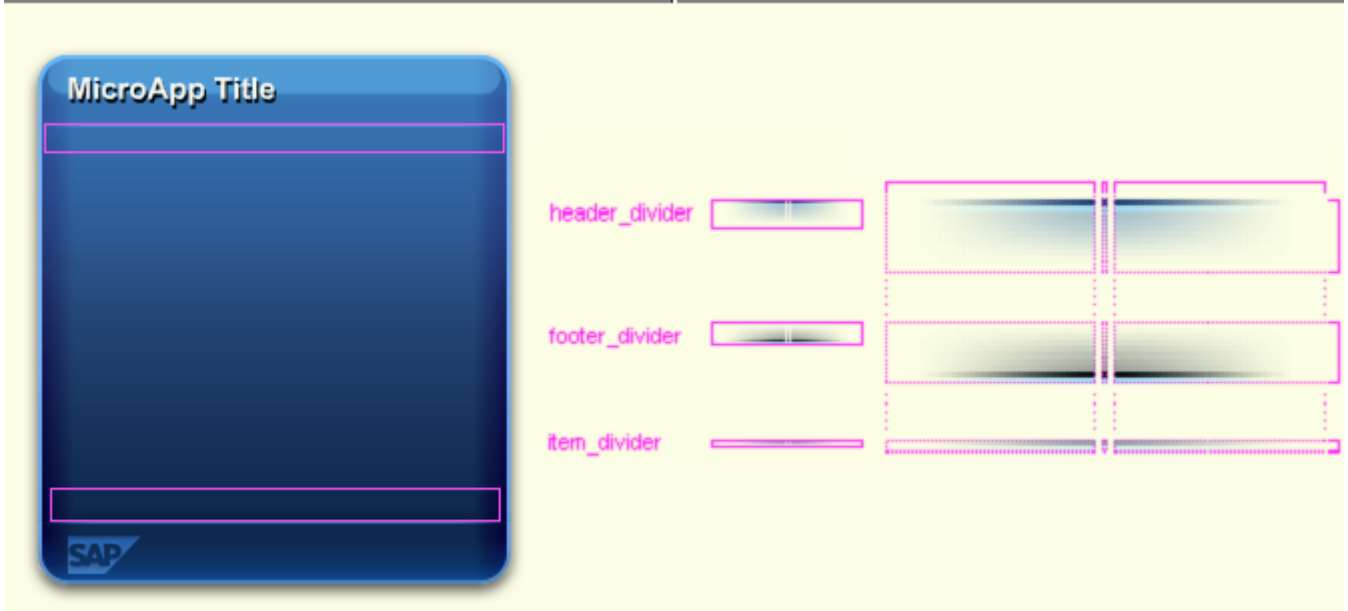


Figure 8 - Enterprise MicroApp divider types

2.1.5 Scrollbar

To make the Enterprise MicroApp more compact, the scrollbars are used to navigate among collections of items in lists or tables.

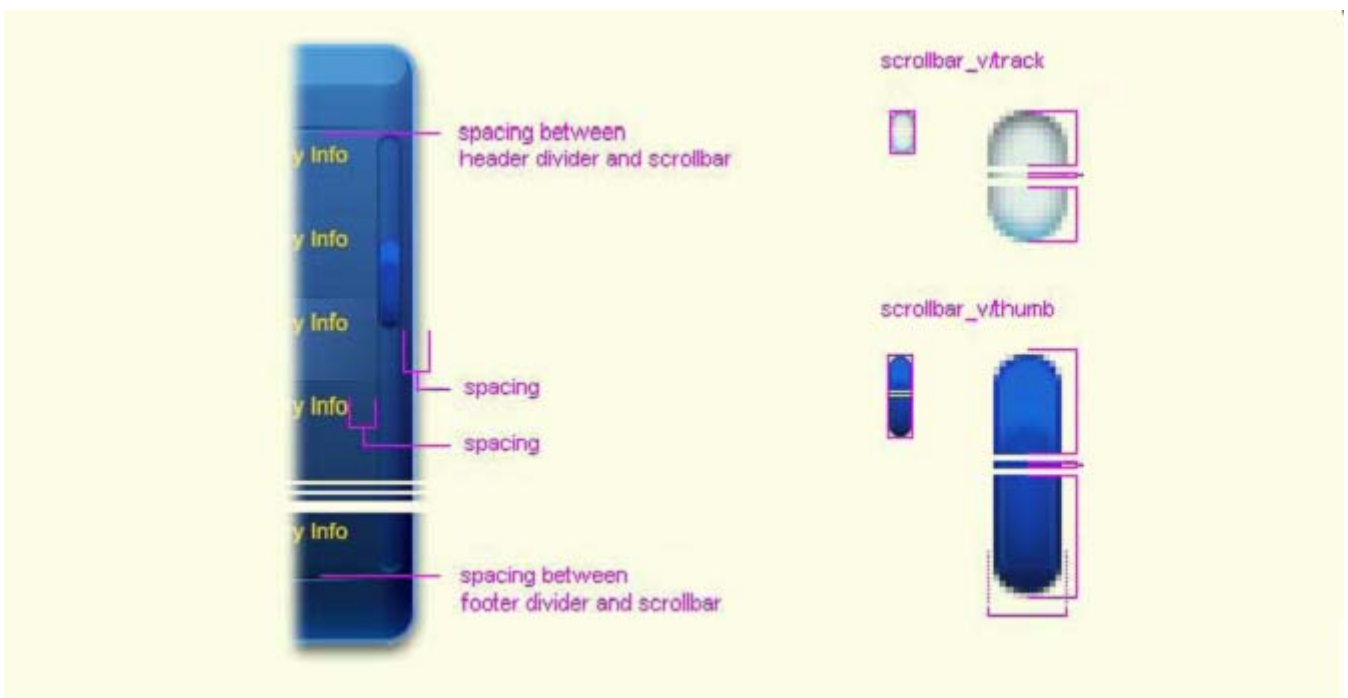


Figure 9 – Scrollbar sample

2.2. Lookup Enterprise MicroApp

Lookup Enterprise MicroApp is used to display the data received from the SAP system in the list format using the list element and the drawer to display additional details about each list item.



Figure 10 – Lookup Enterprise MicroApp appearance

If a title appears alone on a small window bar, it can have a bigger font size.

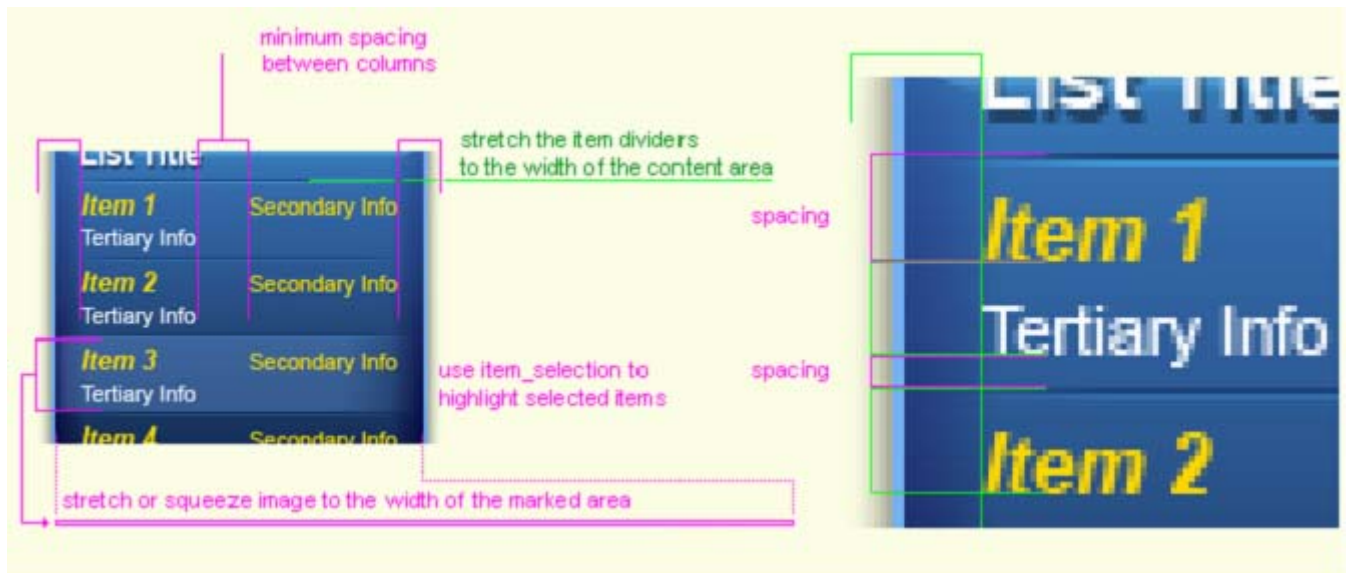


Figure 11 – Item positioning inside the list

2.2.1 Font Styles

The following table describes the font styles:

| Element | Style |
|----------------|--|
| Header | Arial, bold, 15px, #ffffff; Drop shadow: hOffset="1" vOffset="2" color="#000000" opacity="40" Note: hOffset is for the horizontal offset, vOffset is for the vertical offset. |
| Item 1 | Arial, bold, italic, 13px, #ffd800; |
| Secondary Info | Arial, regular, 11px (alternative 13px, see fig. 12), #ffd800; |
| Tertiary Info | Arial, regular, 11px, #ffffff; |
| Button | Arial, bold, 11px, #ffffff; |
| Drawer Header | Arial bold italic, 13 px, #184376; Drawer Text: Arial regular, 11 px, #184376 |
| Drawer Button | Arial regular, 11 px, #184376 |

All font styles of the Lookup Enterprise MicroApp apply to other Enterprise MicroApps as well, if there is no explicit font specification.

2.2.2 Drawer

The drawer is layered underneath the Enterprise MicroApp window. It has the same height as the content area, and it has the same vertical position. The figure below describes a rightward opening drawer. There is a leftward, downward, and upward opening drawer in the drawer folder as well. Use drawer_grip_up-down.png for the latter two. The padding shall be applied respectively.

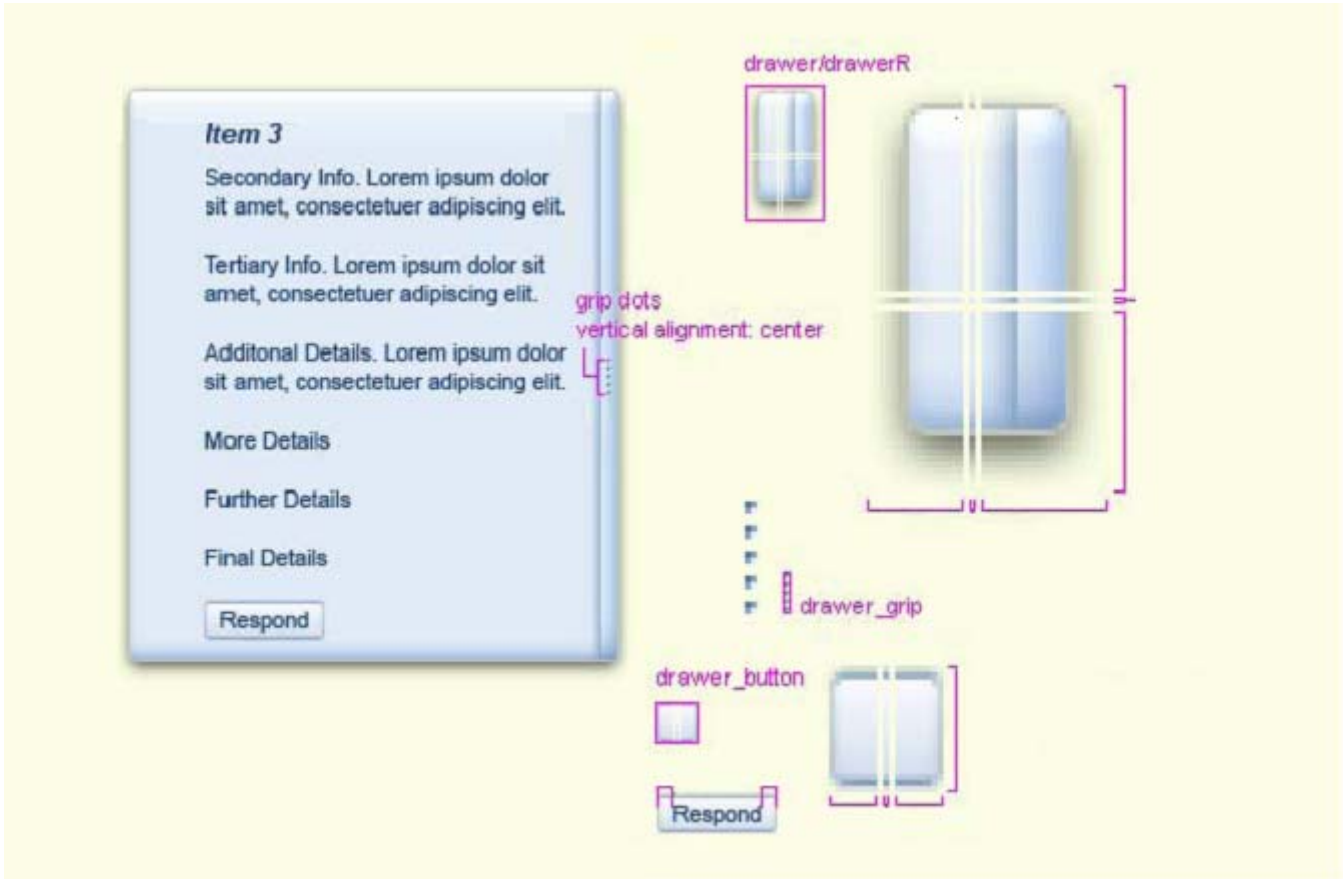


Figure 12 – Drawer sample

2.3. List Enterprise MicroApp

List Enterprise MicroApp is used to demonstrate how to modify the list by adding or removing items and displaying the minimized Enterprise MicroApp view.

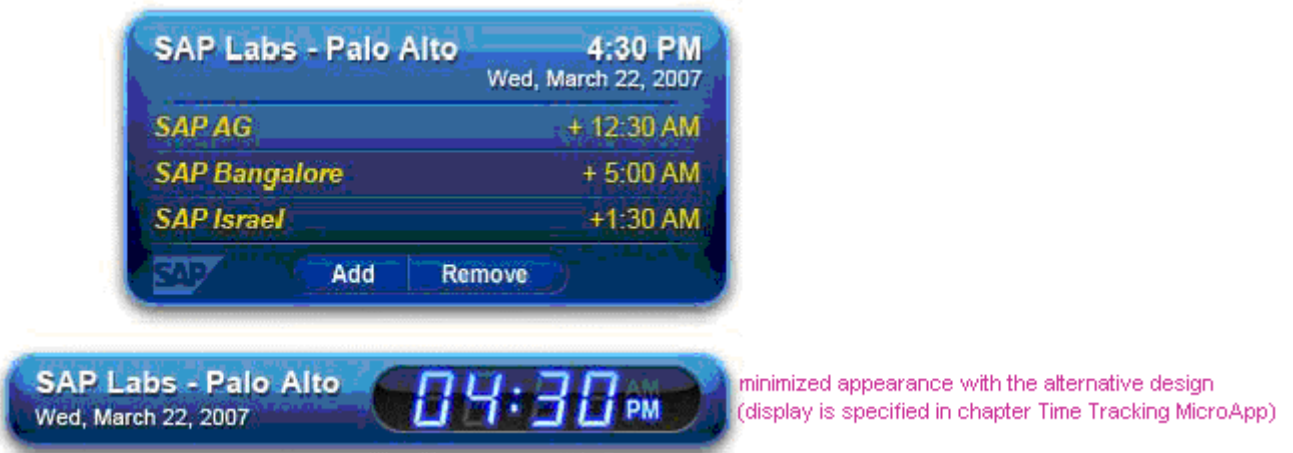


Figure 13 – List Enterprise MicroApp appearance

2.3.1 Pop-Up Window

When a pop-up window opens all functions of the main window are disabled. The main window in the background is rendered with opacity of 80%.



Figure 14 – Pop-up window sample

2.3.2 Combo Box, Input Field, Text Field

Sample of combo box, input field, and text field elements follows:

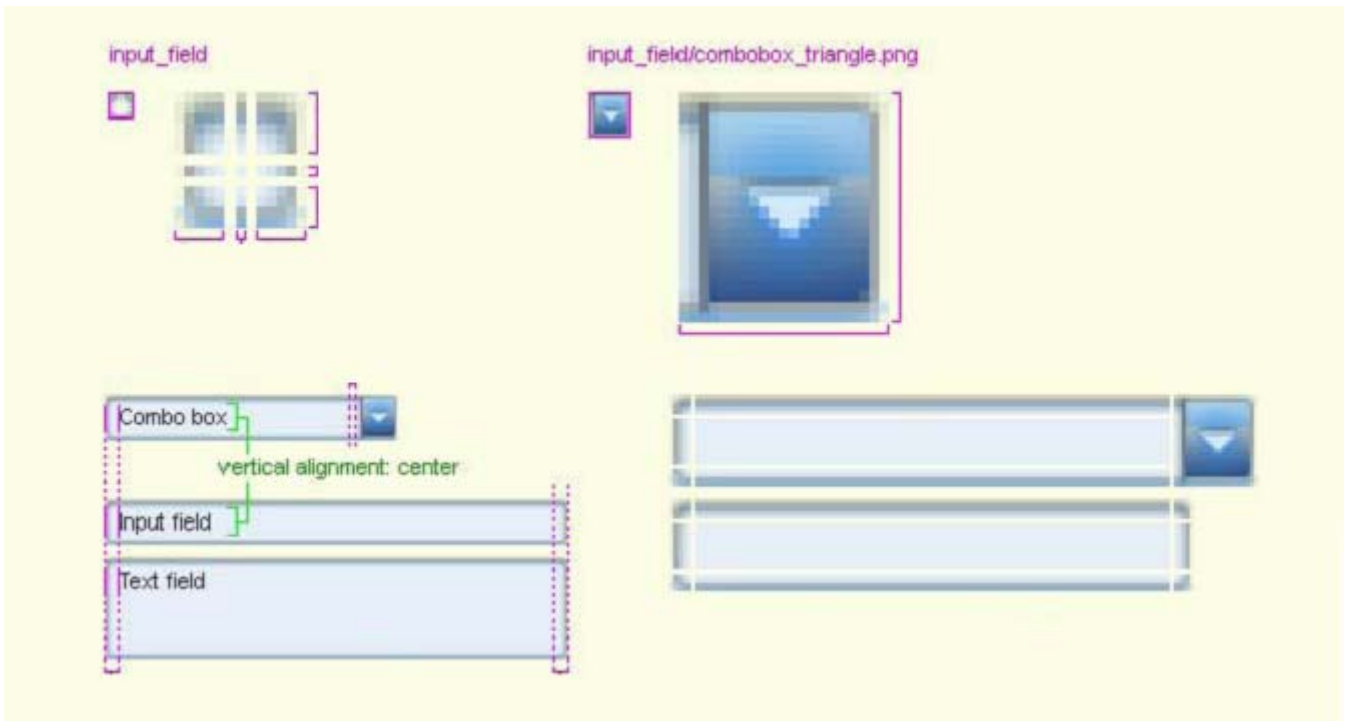


Figure 15 – Combo box, input field, and text field sample

2.3.3 Drop-Down List Box

Sample of the drop-down list box element follows:



Figure 16 – drop-down list box sample

2.3.4 Checkbox, Radio Button

Sample of the checkbox and radio button elements follows:



Figure 17 – Checkbox and radio button sample

2.3.5 Drop-Down Menu

Sample of the drop-down menu element follows:

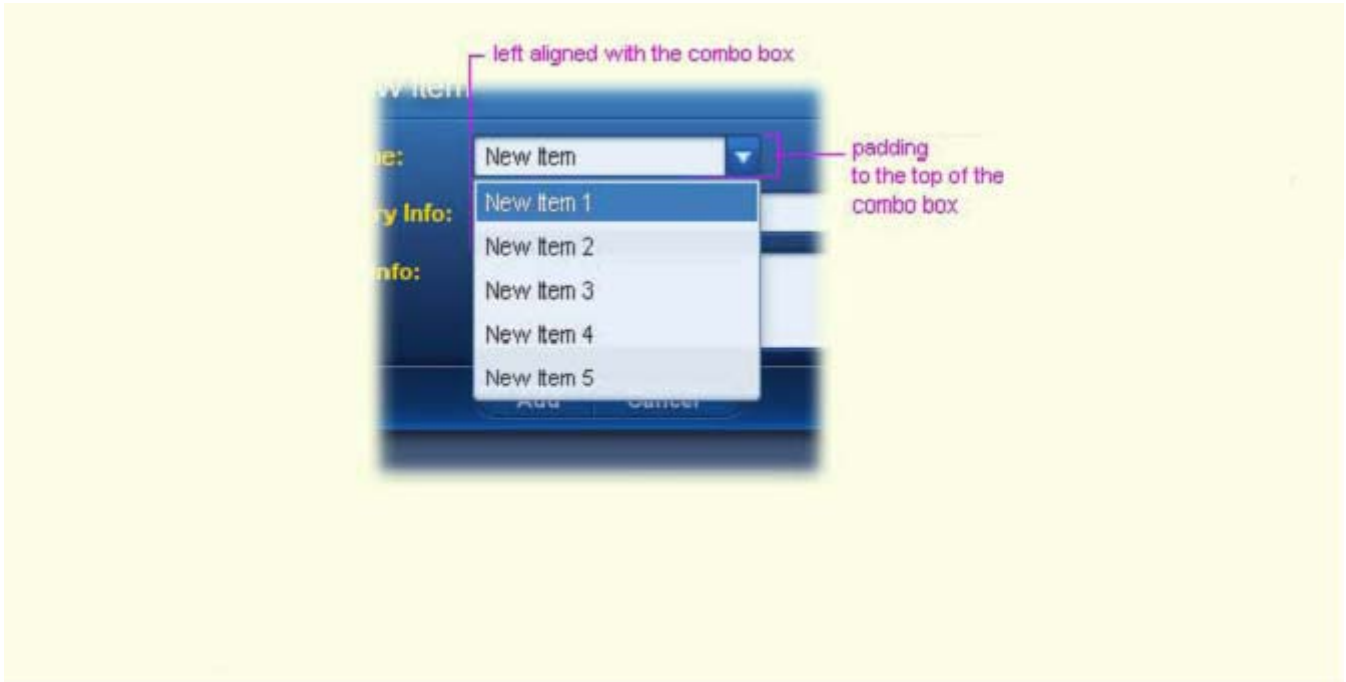


Figure 18 – Drop-down menu sample

2.4. Data Monitor Enterprise MicroApp

Data Monitor Enterprise MicroApp is used to explain how to implement the chart viewer or image.



Figure 19 – Data Monitor Enterprise MicroApp appearance

2.4.1 Drop-Down Menu

Sample of the drop-down menu element follows:



Figure 20 – Drop-down menu sample

2.4.2 Cutting and Layering of the Monitor

Sample of the monitor overlay element follows:

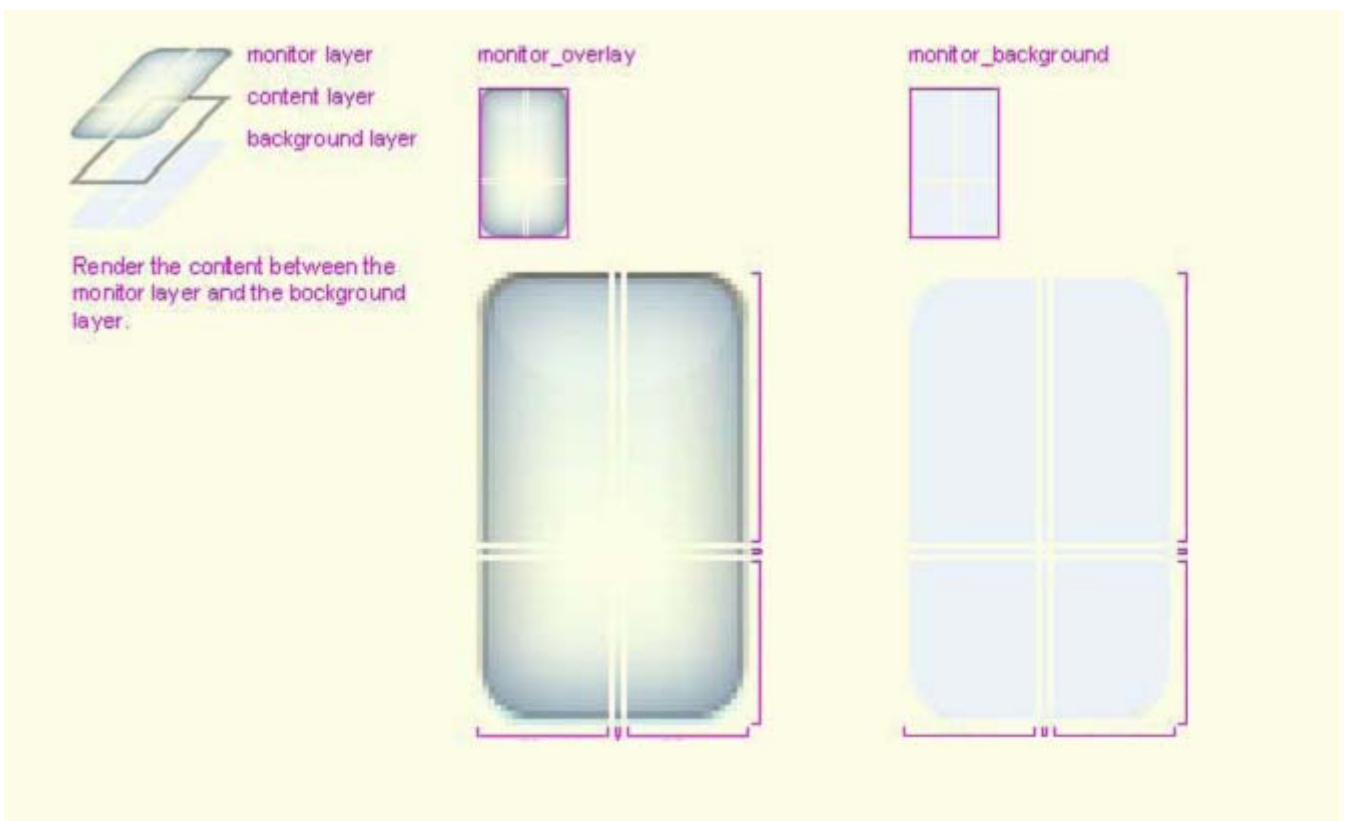


Figure 21 – Monitor overlay sample

2.5. Status Enterprise MicroApp

Status Enterprise MicroApp is used to display an example on how to store specified search criteria in the dropdown list and validate search results according to the specified criteria.



Figure 22 – Status Enterprise MicroApp appearance

2.5.1 Rounded Box

Sample of the rounded box element follows:

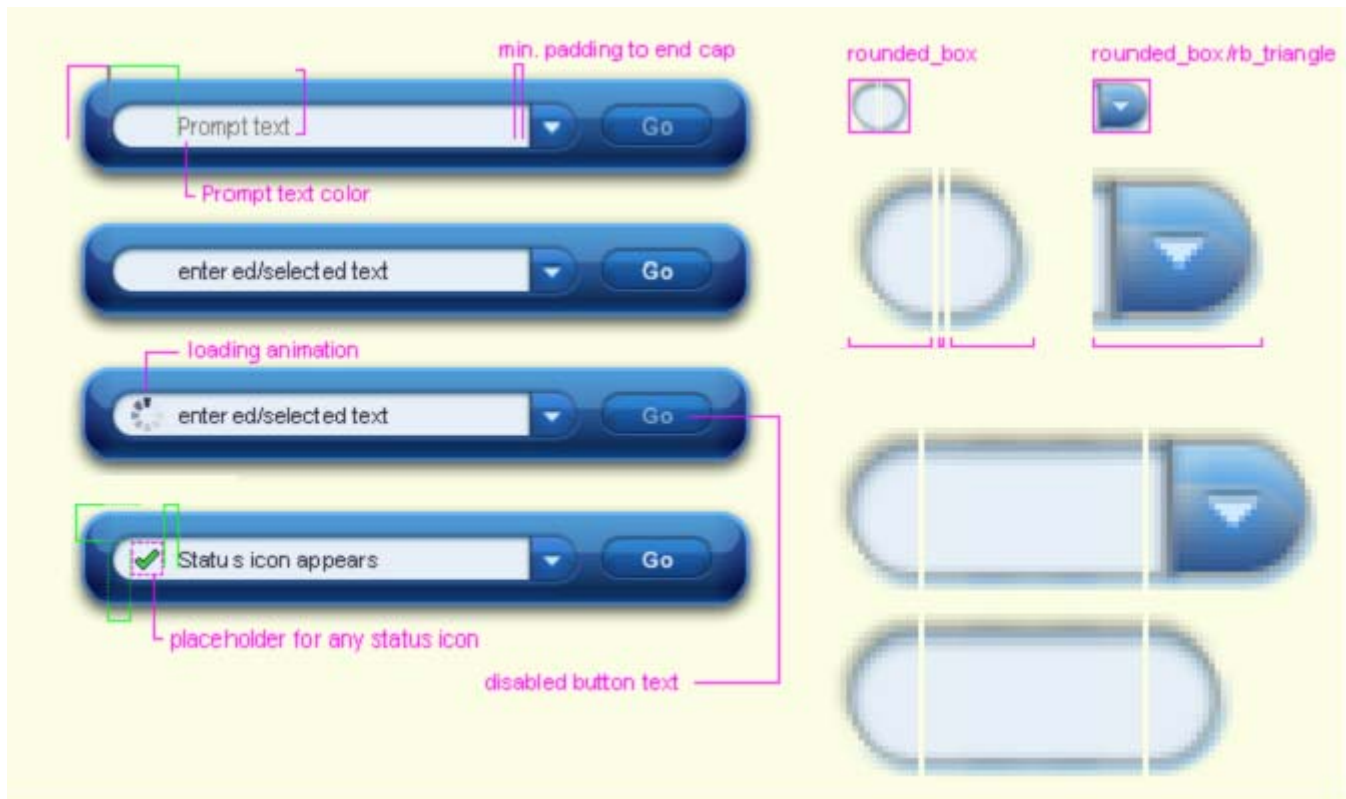


Figure 23 – Rounded box sample

If a combo box or an input field appears alone and prominent on a Enterprise MicroApp use the Rounded Box instead of the standard images (cp. Figure 24 and 27).

2.6. Search Enterprise MicroApp

Search Enterprise MicroApp is used to automatically create the Search widget that searches for information up to the input parameter.



Figure 24 – Search Enterprise MicroApp appearance

The magnifier icon opens the drop-down menu as described in figure 17.

2.7. Data Entry Enterprise MicroApp

Data Entry Enterprise MicroApp is used to display an example on how to work with various widget components, such as calendar, calculator, input fields, and text areas.

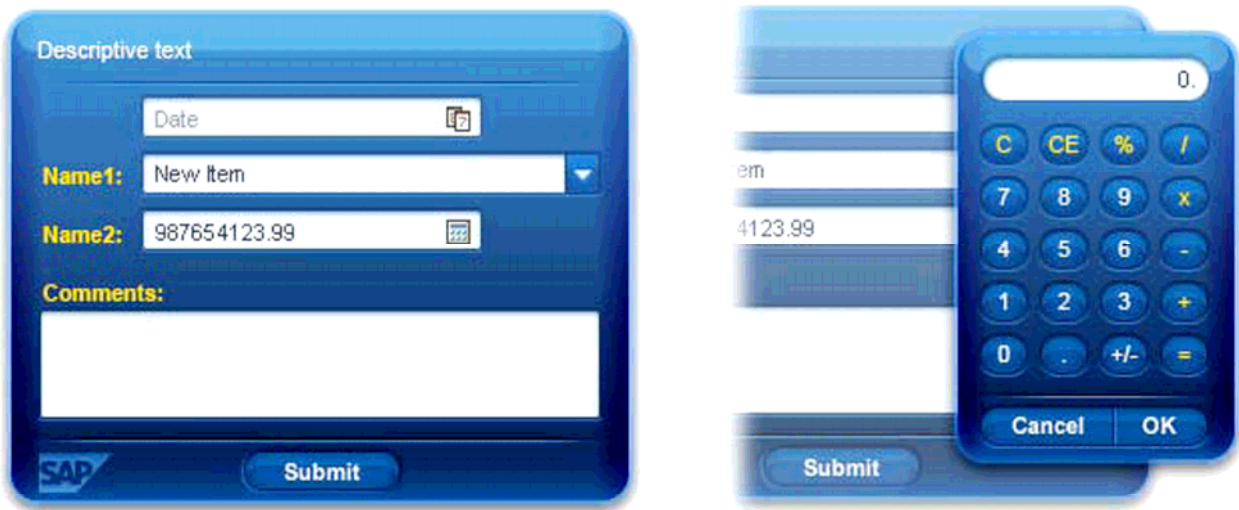


Figure 25 – Data Entry Enterprise MicroApp appearance



Figure 26 – Data Entry Enterprise MicroApp sample

2.7.1 Calculator, Calendar

Sample of the calculator and calendar elements follows:



Figure 27 – Calculator and calendar sample

The buttons of the calculator are made of the footer buttons (see figure 7).

2.8. Time Tracking Enterprise MicroApp

Time Tracking Enterprise MicroApp is used to present how to display the subitems in the list.

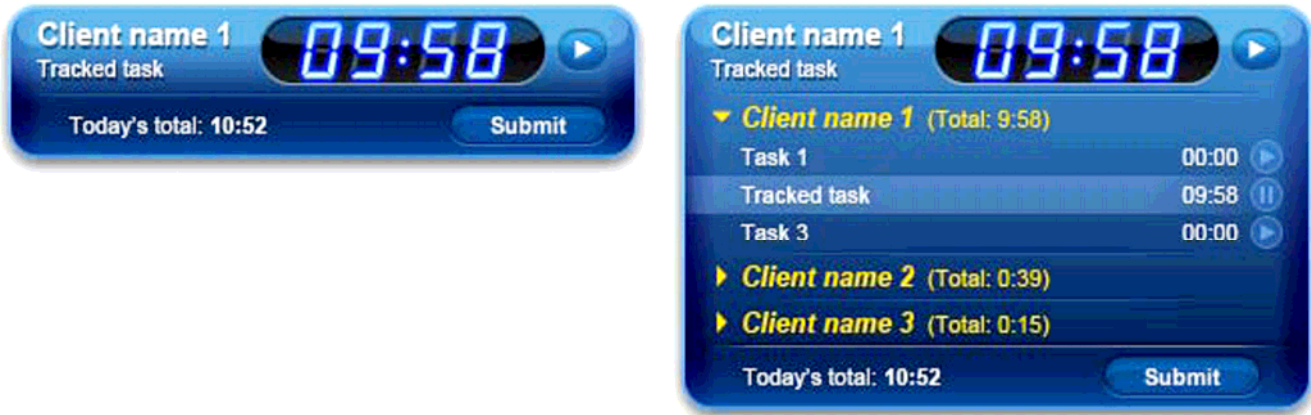


Figure 28 – Time Tracking Enterprise MicroApp appearance

2.8.1 Cutting and Layering of the 7-Segment Display

Sample of the 7-segment display overlay element follows:



Figure 29 – The 7-segment display overlay sample

2.9. Send-To Enterprise MicroApp

Send-to Enterprise MicroApp is used to display how to handle drag and drop events from an Enterprise MicroApp.

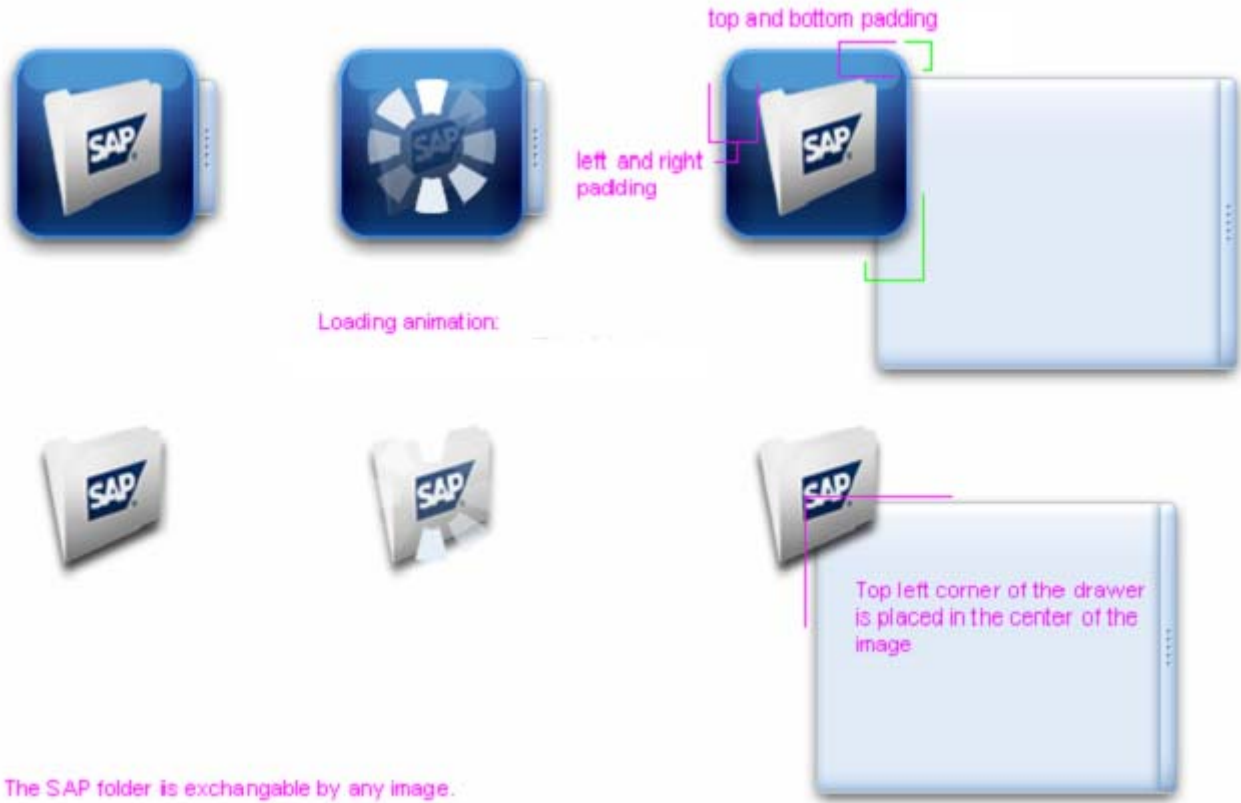


Figure 30 – Send-to Enterprise MicroApp appearance

2.10. Advanced UI Elements

This section introduces advanced Enterprise MicroApp UI elements.

2.10.1 Your Comments Dialog

Sample of your comments dialog element follows:



Figure 31 – Your comments dialog sample

2.10.2 Table

Sample of the table element follows:

| | Commit | Upside | Pipeline | # Deals |
|--------|---------|----------|----------|---------|
| ME | 730 M\$ | 2 M\$ | 2 M\$ | 100123 |
| Name A | 40 M\$ | 30 M\$ | 30 M\$ | 587 |
| Name B | 20 M\$ | 0.40 M\$ | 0.40 M\$ | 456 |
| Name C | 6 M\$ | 40 M\$ | 40 M\$ | 34 |
| Name D | 4 M\$ | 0.40 M\$ | 0.40 M\$ | 12 |
| Name E | 1 M\$ | 20 M\$ | 20 M\$ | 4 |

Figure 32 – Table sample

Since the Enterprise MicroApp table provides no functions except of sorting, it has a reduced appearance similar to the SAP transparent style table. There are no vertical gridlines. The rows are separated by alternating colors. Use `item_selection.png` to achieve the lighter appearance of the rows.

2.10.3 About Box

Sample of the about box element follows:

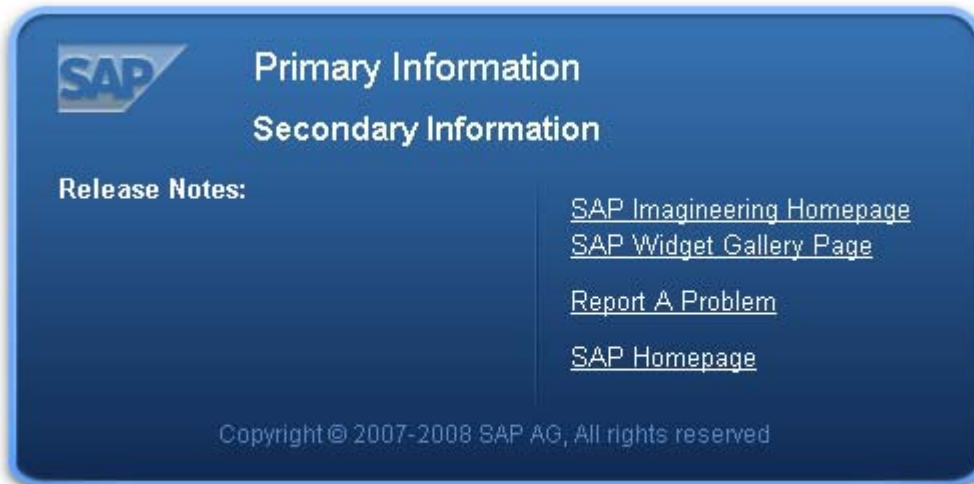


Figure 33 – About box sample

3. Additional Information

Table 3-1. UI guidelines for various development platforms

| Platform | Reference |
|----------|--|
| Web | IGoogle/Google Sites http://www.google.com/webmasters/gadgets/guidelines.html#ui |
| Desktop | Vista http://msdn.microsoft.com/en-us/library/dd834142.aspx#guidelines |
| | Google Desktop http://code.google.com/apis/desktop/docs/gadget_guidelines-test.html |
| Mobile | iPhone http://developer.apple.com/iphone/library/documentation/UserExperience/Conceptual/MobileHIG/PrinciplesAndCharacteristics/PrinciplesAndCharacteristics.html#/apple_ref/doc/uid/TP40006556-CH7-SW1 |
| | Blackberry http://docs.blackberry.com/en/developers/deliverables/6625/index.jsp?name=BlackBerry+Smartphones++UI+GuidelinesNo+Info&language=English&userType=21&category=BlackBerry+Development+Guidelines&subCategory= |