

Internet Applications

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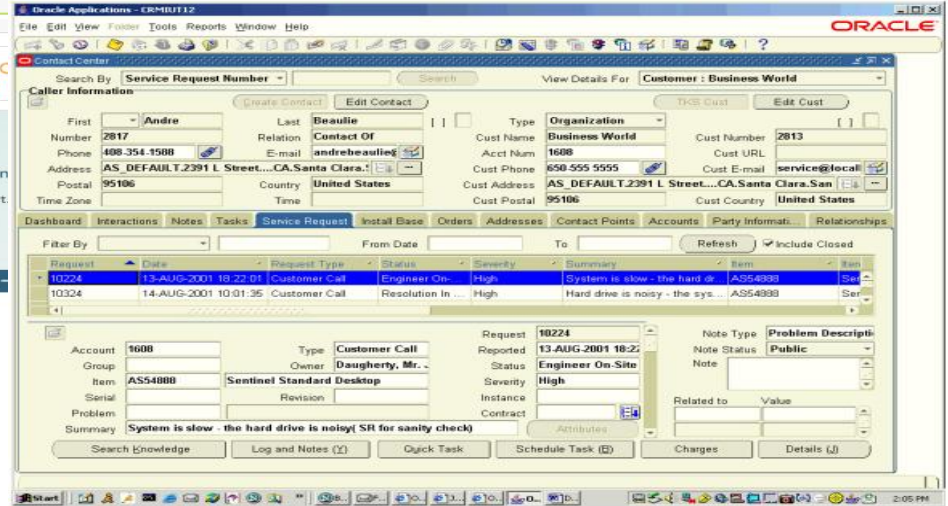
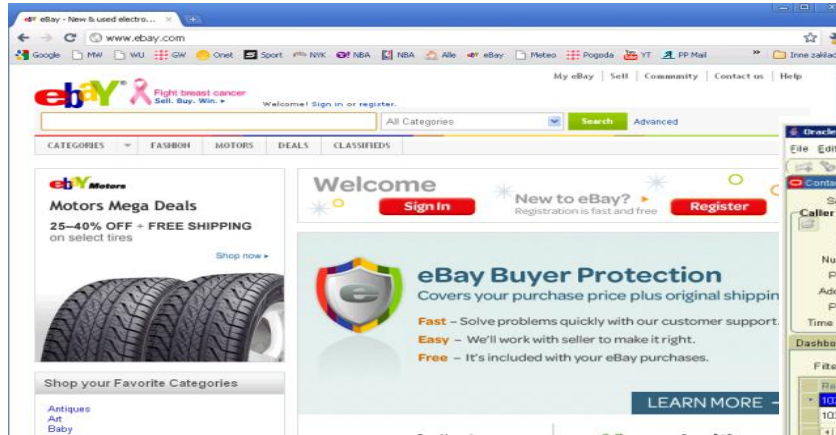
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Best Practices in Web UI Design

- ▶ Knowing how to program is not enough to build intuitive and user-friendly Graphical User Interfaces
- ▶ Related topics:
 - ▶ Information Architecture
 - ▶ Usability
- ▶ Different approaches:
 - ▶ Web Applications
 - ▶ Corporate Portals

Desktop App GUI vs. Web App GUI

► Same GUI design patterns?



What's Special About Web Applications

- ▶ **Guest users:**
 - ▶ Our Web App is not the only one
 - ▶ Not trained in how the complete system works
 - ▶ Give up easily
 - ▶ Not interested in in-depth exploration of the Web App
 - ▶ Don't trust the Web App much enough to give away personal information
- ▶ **What it means to Web App designers?**
 - ▶ Support for first-time users
 - ▶ Trust building
 - ▶ Clear and intuitive Graphical User Interface

What's Special About Corporate Portals

- ▶ **Trained users:**
 - ▶ Know how the complete system works
 - ▶ Perform repeatable tasks
 - ▶ Focused on their work performance
- ▶ **Process large volumes of data:**
 - ▶ Complex Web forms
 - ▶ Tabular data presentation
- ▶ **What it means to Corporate Portal designers?**
 - ▶ More important to support experienced users (keyboard shortcuts, keyboard navigation, quick access to frequent operations)
 - ▶ Hard to layout dense page contents
 - ▶ Need to solve problems not discussed in literature

Where to look for help?

- ▶ Literature
 - ▶ Typography, colors
 - ▶ Navigation
 - ▶ Selecting interactive form elements
 - ▶ Error messages
- ▶ „Industry standards“
 - ▶ Hints and recommendations developed by vendors to describe how their Web Apps should be build
 - ▶ Mostly available on thre Internet

Industry Standards for Web Apps

- ▶ Available on the Internet:
 - ▶ UI Guidelines for CRM WebClient User Interface (SAP)
 - ▶ Oracle Browser Look and Feel (BLAF) Guidelines (Oracle)
 - ▶ Seagate Web Style Guide(Seagate)
 - ▶ Windows User Experience Interaction Guidelines (Microsoft)
 - ▶ Web Content Accessibility Guidelines (WCAG) 2.0 (W3C)

Typical hints and recommendations (1 / 2)

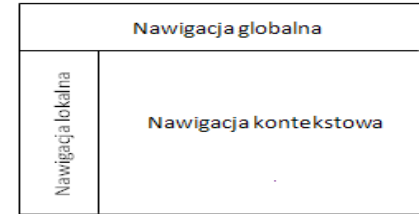
- ▶ **General**
 - ▶ Page layout
 - ▶ Scroll bars
 - ▶ Colors
 - ▶ Component shapes
 - ▶ Typographht
 - ▶ Icons
 - ▶ Language
- ▶ **Navigation**
 - ▶ Navigation regions
 - ▶ Menu types
- ▶ **Tabular data presentation**

Typical hints and recommendations (2/2)

- ▶ **Forms**
 - ▶ Form layout
 - ▶ Labels
 - ▶ Using and positioning various interactive element types
 - ▶ Validation
- ▶ **User interaction**
 - ▶ Messages
 - ▶ Processing status reporting
 - ▶ Searching
 - ▶ Dialog boxes
 - ▶ Wizards
 - ▶ Keyboard shortcuts
- ▶ **Accessibility to people with disabilities**

Page Layout

- ▶ Typically three regions
 - ▶ Header (top): system links (eg. Logout), search
 - ▶ Navigation (left/right): first level menu, second level menu, optionally extensible/collapsible
 - ▶ Work area, with custom toolbar



- ▶ All pages based on the same template
 - ▶ Customized templates for page groups allowed

Long Pages, Scroll Bars

- ▶ Long pages should be split into sections
 - ▶ Section headers
 - ▶ Section links on top of the page
- ▶ Vertical scroll bars allowed if contents can't fit in work area
- ▶ Horizontal scroll bars forbidden
 - ▶ Exception: image gallery
 - ▶ How about tables?

GUI Colors (1 / 2)

- ▶ 216 „Web Safe” colors? Not any more!
- ▶ Colors should be context-related
- ▶ Example: Oracle BLAF
 - ▶ White-blue color palette with beige elements
 - ▶ According to Oracle: clean, professional, and business like look that can convey messages such as: trust, security, cleanliness, precision, conservative, technology, comfort, and warmth



GUI Colors (2/2)

- ▶ Four groups of colors

- ▶ Basic

- ▶ In BLAF: blues
 - ▶ In general: strong, saturated colors, used for the key elements of GUI, eg. tab bar

- ▶ Accents

- ▶ In BLAF: beiges
 - ▶ In general: neutral colors, complementary to basic colors, used eg. for table background, buttons

- ▶ Strong accents

- ▶ In BLAF: greys
 - ▶ In general: adding depth, used for 3D shading

- ▶ Others (in BLAF: white - for page background, brown/orange - for links, red - for error messages)



Element Shapes

- ▶ In BLAF: rectangular and rounded elements
 - ▶ rounded shapes are quite effective in portraying psychological responses like connection, community, and comfort
 - ▶ a rectangular shape can evoke responses such as order, logic, and security



The screenshot shows the Oracle HR Headstart Demo application. The main content area displays a table of employees. The table has columns for Employee ID, Name, Last Name, Job, Salary, and Department. The data is as follows:

Employee ID	Name	Last Name	Job	Salary	Department
100	Steven	King	CEO	24000	EXECUTIVE
101	Neena	Kochhar	MANAGER	17000	EXECUTIVE
102	Alexander	De Haan	MANAGER	17000	EXECUTIVE
103	Payam	Kaufling	MANAGER	17000	EXECUTIVE
104	Janelle	King	MANAGER	17000	EXECUTIVE
105	Dennis	Scott	MANAGER	17000	EXECUTIVE

Typography (1/2)

- ▶ Sans-Serif typeface preferred to convey cleanliness, and modernity, easier to read on low-resolution screens
- ▶ If Serif typeface is needed, then Georgia Font should be preferred as the best readable on low-resolution screens (up to 10 pt)
- ▶ The most popular San-Serif typeface on the Internet is Verdana
 - ▶ Readable even for 8-10 pt
 - ▶ Uppercase „I” is Serif!
- ▶ Verdana alternatives:
 - ▶ Tahoma
 - ▶ Lucida
 - ▶ Arial (narrower, condenses the text, but cleanliness is compromised)

I can read Verdana!

Typography (2/2)

- ▶ Text color, background color
 - ▶ Contrast is the priority
 - ▶ Reversed contrast is worse (eg. white text on black background is 40% less readable than white text on black background)
- ▶ Specify font size in points
 - ▶ Pixel-size problems with IE; „small”, „medium” etc. do not work properly across browsers
- ▶ Emphasize using bold
 - ▶ Don't underline - will be confused with links
 - ▶ Don't capitalize - more difficult to read
- ▶ When presenting numbers, use group separators (groups of 3 digits)
- ▶ Text adjustment: left-side is better than both-side, especially for narrow columns
 - ▶ Large, nonuniform spacing between words

CAPITALIZE

Icons

- ▶ Don't overload
- ▶ Can replace text labels only for navigation elements
- ▶ Are convenient shortcuts for advanced users, but may be difficult to understand for beginners

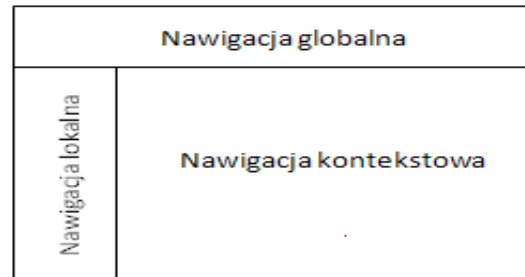
Language

- ▶ Should be understandable to users, but avoid techspeak
- ▶ Consistent grammar and style form across the Web App
- ▶ Use „please” only if action is inconvenient to a user

Navigation Regions

Products > Games > Console

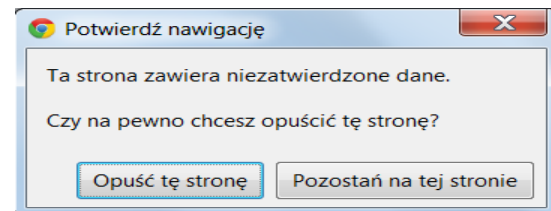
- ▶ Should describe user's current location - eg. with bread crumbs
- ▶ Global, local and context navigation regions



- ▶ Popup menus can be used for global and local navigation
- ▶ An idea: use home page as the starting page for a user
 - ▶ Include the most frequently used tools, links, reports in the home page

Navigation: Uncommitted Changes

- ▶ Detect if there are uncommitted changes on the page being left by a user
- ▶ Display a 3-option message box:
 - ▶ Commit and continue navigation
 - ▶ Discard and continue navigation
 - ▶ Cancel navigation
- ▶ How to implement:
 - ▶ Manually: JavaScript, `window.onbeforeunload` event
 - ▶ Framework
 - ▶ In Oracle ADF:
`uncommittedDataWarning` (on/off)
in `af:document` tag



Menu Styles (1/2)

- ▶ Horizontal menu
 - ▶ Space efficient (+)
 - ▶ Readable (+)
 - ▶ Limited number of items (max 8-10) (-)
 - ▶ Item labels must be short (-)
- ▶ Horizontal menu with tabbed submenus
 - ▶ Advantages of horizontal menu (+)
 - ▶ Clear relationship between menu items and submenu items (+)
 - ▶ Disadvantages of horizontal menu (-)
 - ▶ 2 menu levels only (-)
 - ▶ Wastes horizontal space (-)
 - ▶ Tabs take more space than regular links (-)

Menu Styles(2/2)

- ▶ Vertical side menu
 - ▶ Accomodates lots of items, easy to scale (+)
 - ▶ Takes lot of space (-)
- ▶ Cascading menu
 - ▶ Saves space (+)
 - ▶ Desktop application experience (+)
 - ▶ Accomodates lots of items (+)
 - ▶ Submenu items invisible until menu item is expanded (-)
 - ▶ Does not show user's current location (-)
 - ▶ Side-expandible menus not appreciated by users (-)

Tables: Two Modes

- ▶ Two modes of operation:
 - ▶ Data presentation
 - ▶ Data modification
- ▶ The same columns displayed in both modes
 - ▶ Additional row selector when in data modification mode
- ▶ Additional toolbar when in data modification mode
 - ▶ To operate on single rows
 - ▶ Options to operate on the whole table should be included in the main toolbar, visible in both modes

General Table Remarks

- ▶ Keep the number of columns minimal
- ▶ Avoid horizontal scroll bars
 - ▶ Make it difficult to use the Web Ap
 - ▶ Sometimes cannot be avoided
- ▶ Table header required
 - ▶ Accessibility requirements
- ▶ Most important columns on the left
- ▶ Banding and/or gridding improve readability
 - ▶ For small and narrow tables gridding is sufficient
 - ▶ Vertical gridding not always necessary, eg. in data modification mode only

Navigation and Table Actions

- ▶ Table toolbar must have more than one button (unless multiselection table)
- ▶ Avoid redundancy between table toolbar and row icons
- ▶ Row selection should be disabled only if none of toolbar actions is available for a user
- ▶ If a table has an action column, the column should be the first one

Table Row Selection

- ▶ no-select
- ▶ single-select
- ▶ multiple-select
 - ▶ Include also SelectAll, DeselectAll
 - ▶ Only when necessary, can lead to errors

Form Layout

- ▶ Grid-based, 1- or 2-column
- ▶ Field sizing: 2 approaches
 - ▶ Same length for all the fields
 - ▶ Field length to match expected content size

A form layout where all input fields have the same width. The labels are on the left, and the fields are on the right. The fields are: imię, nazwisko, email, od daty, do daty, and zawód. The 'zawód' field is a dropdown menu. A 'Done' button is at the bottom right.

A form layout where the input fields are sized to match the expected content. The labels are on the left, and the fields are on the right. The fields are: imię, nazwisko, email, od/do daty (split into two boxes with a slash), and zawód (a dropdown menu). A 'Done' button is at the bottom right.

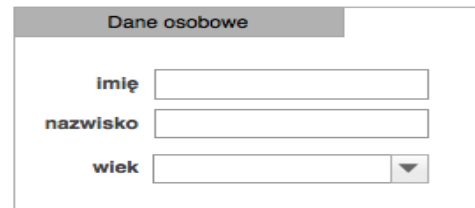
- ▶ Number fields must always be long enough to accomodate the complete contents!

Form Modes of Operation

- ▶ 2 modes: presentation and modification
- ▶ In modification mode all read-only fields implemented as Read-Only Elements
- ▶ Date pickers and drop down lists available in modification mode only
- ▶ Mandatory fields marked with „*” and/or different background color
- ▶ If a field holds a web link, the link should work in presentation mode only
- ▶ Adjustment: in presentation mode: to the left, in modification mode: numbers to the right, other values to the left
- ▶ In presentation mode fields may be concatenated

Form Item Grouping

- ▶ Form elements can be grouped
- ▶ Each group has a label
- ▶ Each group has max. 8 rows
- ▶ Each group has min. 1 element
 - ▶ For 1 element only use group label instead of element label
- ▶ Two-column groups, horizontally adjusted
- ▶ Page navigation must be consistent with element grouping



The image shows a form titled "Dane osobowe" (Personal Data). It contains three input fields arranged vertically. The first field is labeled "imię" (name) and is a text input. The second field is labeled "nazwisko" (surname) and is a text input. The third field is labeled "wiek" (age) and is a dropdown menu.

Nested Elements

- ▶ Nested elements provide further details for an element
- ▶ Should be located closer to their master element even if it's against your spacing rules
- ▶ Nested elements for a checkbox should be disabled if the checkbox is off

imię

nazwisko

wiek ▼

☒ zatrudniony

firma

placa

imię

nazwisko

wiek ▼

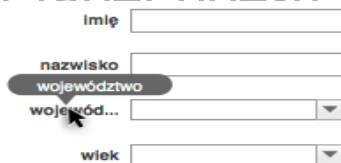
☐ zatrudniony

firma

placa

Labels

- ▶ Unambiguous, unsurprising, consistent with user experience (eg. „Help”, „Contact”)
- ▶ Don't use abbreviations
 - ▶ Use a popup hint if label doesn't fit



A screenshot of a web form with five input fields. The labels are: 'imię', 'nazwisko', 'województwo', 'województwo...', and 'wiek'. The 'województwo' label is highlighted with a dark grey background and a white border. A small black mouse cursor is pointing at the 'województwo...' label. The 'województwo...' label has a small downward arrow on its right side, indicating it is a dropdown menu.

- ▶ Consistent within the Web App:
 - ▶ Character case, visual style (font style, size, color, etc.), grammar (verbs, nouns, questions)

Label Placement and Adjustment

- ▶ Above

- ▶ Users save 50% of time to understand the form; disadvantage: takes much space

- ▶ Left

- ▶ Adjust to the right to save space, difficult to read
 - ▶ Adjust to the left: easier to read, good for novice users



A form example illustrating the 'Left' label placement. It consists of three rows. The first row has the label 'imię' to the left of a text input field. The second row has the label 'nazwisko' to the left of a text input field. The third row has the label 'wiek' to the left of a dropdown menu.

- ▶ Inside

- ▶ Space efficient, must be redisplayed when field is cleared

Checkboxes

- ▶ Can have two types of „labels”: label and checkbox text
- ▶ Labels are not used if checkbox is connected to another element
- ▶ For checkbox groups only the first checkbox has a label
- ▶ Adjusted to the left

rozliczenie ▼

☐ prześlij kopię na email klienta

język ☒ angielski

☐ niemiecki

Radio Buttons

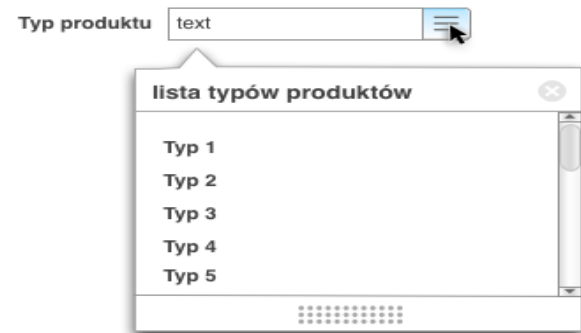
- ▶ Always grouped, usually vertical, adjusted like checkboxes
 - ▶ If connected to another element, then displayed under the element, with no label, adjusted to the left
- ▶ Group label
- ▶ Usually 2-5 radio buttons in a group, for more options use lists

Radio Buttons vs. Checkboxes

- ▶ Checkbox vs. two radio buttons?
 - ▶ If deselected value is not self-evident, then use radio buttons (eg. portrait/landscape)
 - ▶ If both options are equally important, then use radio buttons (eg. female/male)
- ▶ Checkbox group vs. radio group
 - ▶ If selection of 0, 1 or more options, then use checkbox group
 - ▶ If selection of 1 or more options, then use checkbox group and display an error message if none selected

Drop down lists

- ▶ Sorted alphabetically unless business logic requires another type of ordering (eg. process states)
- ▶ LOV (list of values) if too many options for a dropdown list
- ▶ LOV displayed by pressing a button/icon or when validating a text field
- ▶ LOV displayed as modal dialog boxes, resizable by a user



Buttons (1 / 3)

- ▶ Icon buttons should only be used for generic actions
 - ▶ Provide a tooltip
- ▶ Button location is dependent on its action:
 - ▶ Work area toolbar
 - ▶ Table toolbar
 - ▶ Table first column
 - ▶ Below form element group
 - ▶ At form element
- ▶ Adjustment:
 - ▶ Generally to the left
 - ▶ Exceptions: some generic toolbars eg. Print, Help

Buttons (2/3)

▶ Active/inactive:

- ▶ If a user is not allowed to invoke an operation, the button should not be displayed at all
- ▶ If an operation is not available at the moment and it is obvious why, the button should be displayed but inactive
- ▶ If an operation is not available at the moment and it is not clear why, the button should be displayed, should be active, and it should display an explanation message when pressed

Buttons (3/3)

- ▶ Buttons in dialog boxes:

- ▶ Text only (no icons)
- ▶ Adjusted to the left or centered
- ▶ Confirmation button should be the first on the left

- ▶ Microsoft



- ▶ „use this order (from left to right): OK, Cancel, and Apply”

- ▶ Apple



- ▶ „the action button in the bottom-right corner of the alert”

Button or Link?

- ▶ **Link:**
 - ▶ Navigate to details
 - ▶ Can contain the object's name/id
- ▶ **Button:**
 - ▶ Invoke an operation or navigate to an operation
 - ▶ Generic name



A screenshot of a web form titled "Add a Comment:". It features a text input field, a checkbox labeled "Follow this discussion. Get notified by email about new comments." which is checked, and two buttons: "Add Comment" and "or Cancel".

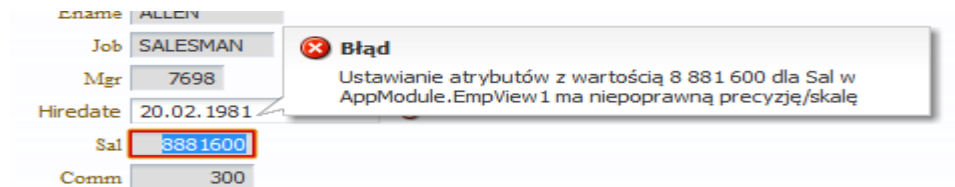
- ▶ Button for the „typical” action, link for an „emergency” action

Validation

- ▶ Erros should be displayed next to the element
 - ▶ A message box with a list of all validation errors is not a good idea
- ▶ On-line field validation
- ▶ If field's size is limited, the limit should be displayed and adjusted when typing
- ▶ Validation errors must be reported immediately, erroneous fields should be marked

Validation Error Messages

- ▶ Red icon in a message
- ▶ Error messages should be consistent
- ▶ An error message must provide three types of information:
 - ▶ What error?
 - ▶ Where?
 - ▶ What next?



The screenshot shows a form with the following fields:

Cname	ALLEN
Job	SALESMAN
Mgr	7698
Hiredate	20.02.1981
Sal	8881600
Comm	300

An error message box is displayed over the 'Sal' field, which is highlighted with a red border. The message box contains a red 'X' icon and the text:

Błąd
Ustawianie atrybutów z wartością 8 881 600 dla Sal w AppModule.EmpView1 ma niepoprawną precyzję/skalę

Messages

- ▶ Location:
 - ▶ Message Bar - Message Area (between toolbar and work area)
 - ▶ Not for progress messages
 - ▶ table („no data”)
 - ▶ dialog boxes
- ▶ Four types of icons
 - ▶ Error, warning, information, confirmation
- ▶ Use proper words and interpunction eg.
 - ▶ Don't use „please”
 - ▶ Use „.” if a question goes next
 - ▶ Don't use „!”, don't capitalize

Progress Reporting

- ▶ For 1+ second actions (mostly asynchronous)
- ▶ Progress bar or spinning circle to cheat on time flowe
- ▶ Use one or another, not both
- ▶ Progress bar should make one pass only



Search Form

- ▶ Typically 4 rows for initial selection criteria (attribute, operator, value, add/remove condition)
- ▶ Natural language operators selected from list
- ▶ Special cases:
 - ▶ „between” has two fields
 - ▶ „is empty” has no fields
- ▶ Results displayed on the same page, below the search form
- ▶ Full-text searching problems

The screenshot shows a search form with the following elements:

- Search** (dropdown menu)
- Podstawowe** (tab)
- Zapise wyszukiwanie** (tab)
- Wyszukiwanie niejawne** (dropdown menu)
- Uzgodnij** (radio buttons): ☒ Wszystkie, ☐ Ktorekolwiek
- Empno** (label): **Równa się** (dropdown),
- Ename** (label): **Zaczyna się od** (dropdown),
- Job** (label): **Zaczyna się od** (dropdown),
- Szukaj** (button)
- Resetuj** (button)
- Zapisz...** (button)
- Dodaj pola** (button)

Below the form is a table with the following data:

Empno	Ename	Job
7369	SMITH	CLERK
7900	JAMES	CLERK
7934	MILLER	CLERK

Below the table, there are two more search criteria fields:

- Sal** (label): **Między** (dropdown), -
- Comm** (label): **Jest puste** (dropdown),

Dialog Boxes

- ▶ Use dialog boxes for:
 - ▶ Informational messages
 - ▶ Confirming critical actions
 - ▶ Personalize Web App
 - ▶ Provide additional data
- ▶ Do not navigate from a dialog box
 - ▶ Close dialog box only
 - ▶ Exception: to display help window
- ▶ Size depends on the contents
 - ▶ Vertical scrollbar allowed
- ▶ Buttons centered

Pop-up Windows

- ▶ Should be expected by a user
- ▶ Should extend the contents of the main window
- ▶ A user must know how to close the pop-up window
- ▶ One pop-up window at a time

Wizards

- ▶ For complex, rarely used processes that can be split into a number of steps
- ▶ Always display a progress bar (road map)

Keyboard Shortcuts

- ▶ Don't override popular web browser shortcuts
 - ▶ May hurt usability
- ▶ Shortcut types
 - ▶ Tab and Shift-Tab for navigation
 - ▶ Accelerators and hot keys for invoking actions bypassing menu and navigation
 - ▶ Access keys to move focus on an element
 - ▶ Enter to invoke an action on the focused element
- ▶ When entering a page, focus on the first element automatically

Colors

- ▶ 5-10% users have problems with color perception
- ▶ Verify what your pages look like to people with color perception problems
- ▶ Vischeck (<http://vischeck.com/vischeck/vischeckURL.php>)

- ▶ Simulate:
deuteranope,
protanope,
tritanope

Try Vischeck on a Webpage

Your Results:
[Deuteranope simulation](http://www.zakrzewicz.pl/) of <http://www.zakrzewicz.pl/>.

Select the type of color vision to simulate:



☒ Deuteranope (a form of red/green color deficit)

☐ Protanope (another form of red/green color deficit)

☐ Tritanope (a blue/yellow deficit- very rare)

Enter the URL of any webpage- eg. www.google.com.

URL:



- ▶ Colorblind Web Page Filter (<http://colorfilter.wickline.org>)
 - ▶ Simulate: protanope, deuteranope, tritanope, trichromatism ,
protanomaly, deuteranomaly, tritanomaly, achromatopsy

Additional Hints

- ▶ Alternate text for non-textual contents
- ▶ Separate foreground from background
- ▶ Keyboard accessibility for all operations
- ▶ Help in navigation
- ▶ Compatibility with web browser accessibility settings

Case Study: SAP R/3

no breadcrumbs

contrast

shortcuts

field width

label adjustment

unclear button meaning

Sales Document Edit Goto Extras Environment System Help

SAP

SAP R/3 - Create Order Type Sched.Ag.: Overview

Sold to party Orders

Order Type Sche Net value 0,00

Sold-to party

Ship-to party

PO number PO date

Sales Item Overview Ordering Party Procurement Shipping Reason

Reg. deliv. date D 08-04-1998 Deliver. plant

Complete dlv. Total weight 0,000

Delivery block Volume 0,000

Billing block Pricing date 08-04-1998

Pay terms Incoterms

Order reason Delivery time

Sales area data 0001 / 01 / Sales Org. Germany, Direct Sales

All Items

Item	Material	Order quantity	SU	S	Description

Availability Pricing Sched. lines Config.

DIP (1) (800) pswdf028 OVR

52

icon buttons

horizontal scrollbar

Case Study: SAP R/3

HR master data Edit Goto Extras Utilities(M) Settings System Help

Maintain HR Master Data Overview

Find by
Person
Collective search help
Search Term
Free search

Personnel no. 1000
Name Anja Müller
EE group 1 Active Pers.area 1300 Frankfurt
EE subgroup DS Executive employ Cost Center 2200 Human Resource

Core Employee Info. Empl. contract data Gross/net payroll

Infotype text E...
Actions ✓
Organizational Assignment ✓
Personal Data ✓
Addresses ✓
Bank Details ✓
Family Member/Dependents ✓
Challenge ✓
Internal Medical Service ✓
Maternity Protection ✓

Period
Period
From To
Today Curr.week
All Current month
From curr.date Last week
To Current Date Last month
Current Period Current Year
Choose

Direct selection
Infotype Addresses STy

SAP QPT (1) 004 usciqpt INS

size and adjustment
of radio group

Case Study: SAP R/3

Two methods to enter dates

The screenshot displays the SAP R/3 'New Purchase Request' form. The form is structured with a left-hand navigation pane and a main content area. The main content area is divided into several sections: 'Requested Product', 'Contact Requester', 'Contact Assigned Supplier', and 'Assign Another Supplier'. The 'Requested Product' section includes fields for Product (5678), Description (Spiral Shift), Qty/Unit (100), Total Net Value (2,000.00 USD), and Delivery Date (31 Oct 2005). The 'Contact Requester' section includes fields for Requester (Frank Sander), Phone ((854) 234-3455), and Email (frank.sander@stl.com). The 'Contact Assigned Supplier' section includes fields for Supplier (Smith Inc., Detroit), Delivery Time (4 Days), Supplier Contact (Robert Bush), Phone ((776) 678-9465), Email (robert.bush@smith.com), and Fax ((776) 678-9466). The 'Assign Another Supplier' section includes fields for Supplier Name (AMS), Delivery Time (2 Days), Supplier Contact (Michael Donohue), Phone ((456) 554-3234), Email (michael.donohue@ams.com), and Fax ((456) 554-5235). The form is titled 'New Purchase Request' and has a 'SAP ByDesign' logo at the bottom right.

Form section layout

Case Study: SAGE 200 CRM

CRM - Windows Internet Explorer

http://sage200/CRM/eware.dll/go

File Edit View Favorites Tools Help

CRM

sage 200 CRM

Account: Abbey Retail Ltd
Company: Abbey Retail Ltd
Phone: 44 0131 621 9900

Account Type: Customer

Summary Quick Look Notes Communications Opportunities Cases People Addresses Phone/E-mail Orders Sage 200 Accounts Data Sage 200 Accounts Forms

Recent Main Menu Administration

Find New My CRM Team CRM Reports Marketing Log Off

This is the **Account Summary** screen. If your account is linked with an account in an accounting product, the account information in the top screen will be read only. The information in the second screen is always editable. If you want to change any of the editable details, select the Change action button on the right-hand side of the screen. You can change some Account details from the Summary tab in edit mode, but you need to select the Address, Phone, E-mail, or Person tab to change this type of account information.

Account

Account Type: Customer	Account Reference: ABB001	Account Name: Abbey Retail Ltd	Short Name: Abbey
Currency: GBP	Credit Limit: GBP 100,000.00000	Balance: GBP 9,533.07000	On Hold: <input type="checkbox"/>
Sage 200 Accounts System: Sage Demo	Synch Status: Linked	Tax Rate: 1 - Std Rate	Pricing List: Standard
Tax Registration Number: 612 5749 32	Country Code: Great Britain	Order Priority: A	Account Website: www.abbeyretail.com.uk
Settlement Discount: 0.50000	Settlement Days: 15	Payment Terms: 30	Payment Terms Basis: From Document Date
Discount Group: Customer Discount Group ABB001	Order Value Discount: Order Value Discount	Invoice Discount %: 0.00000	Line Discount %: 0.00000

Non Linked Info

Account Manager:	Team:	Territory: Worldwide
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Address

Street: 16 Church Lane
City: Lochside
Edinburgh
Midlothian
County:

Phone/E-mail

Business	44 0131 621 9900
Fax	44 0131 621 9855

Change Delete Add this record to a Group Add to Contacts Summary Report Help

Local intranet 100%

is it a tab?

number of tabs

Case Study: Oracle eBS 11i

ORACLE Expense Reports

Report Issue Global Policy Home Logout Preferences Personalize Page Diagnostics

Expenses Home | Expense Reports | Credit Card Transactions | Access Authorizations | Projects and Tasks

Expenses Home > ←

Expenses Home

Create Expense Report Import Spreadsheet Export Spreadsheet

Track Submitted Expense Reports

The following expense reports are either outstanding or have been paid in the last 30 days.

Report Number	Report Submit Date	Report Status	Last Report Status Current Activity (Page)	Receipts Status	Report Total (USD)	Purpose	Duplicate	Withdraw
No19524	30-Sep-2005	Pending System Administrator Action	8 Expenses Administrator		0.00	Client visit - Seattle		
No19562	27-Sep-2005	Pending System Administrator Action	8 Expenses Administrator		0.00	Client visit - Seattle		
No19562	27-Sep-2005	Pending Manager Approval	3 Andretti, Mr. Evan Not Required		287.87			
No19562	27-Sep-2005	Pending Manager Approval	3 Andretti, Mr. Evan Not Required		0.00	Test		
No19562	27-Sep-2005	Pending Manager Approval	3 Andretti, Mr. Evan Not Required		41.00			

If the status is Pending Your Resolution, you were sent a notification explaining the required action.

Update Expense Reports

Click an Update icon to make changes to a saved, rejected, or returned expense report.

Report Number	Report Date	Status	Report Total (USD)	Purpose	Update	Duplicate	Delete
No18235	29-Sep-2005	Saved	168.00	Client visit - Seattle			
No19502	23-Sep-2005	Saved	100.00	Travel			

Notifications

View: Open Notifications Select All Notifications: Open (Assign)

Select All Select None

Subject	Sent	Due
Expense J11-518404 for Prod, Mr. Jamie (2.00 USD)	21-Sep-2005	26-Sep-2005

8 TIP: Vacation Rules - Redirect or auto-respond to notifications.
8 TIP: Control Access - Specify which users can view and act upon your notifications.

Create Expense Report Import Spreadsheet Export Spreadsheet

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breadcrumbs

abbreviation

ORACLE

Reports Window Help

Request Number Search View Details For Customer Business World

Create Contact Edit Contact

Last Relation E-mail Time

Beaulieu Contact Of andrebeaulieu

Type Organization

Cust Name Business World

Acct Num 1608

Cust Phone 650-555-5555

Cust Address AS_DEFAULT.2391 L Street...A.Santa Clara.San

Cust Postal 95106

Cust Country United States

2391 L Street...CA.Santa Clara.1

2813

service@local

Notes Tasks Service Request Install Base Orders Addresses Contact Points Accounts Party Informat. Relationships

From Date To Refresh Include Closed

Request Type Status Severity Summary Item

5-2001 18-22-01 Customer Call Engineer On High System is slow - the hard drive is noisy - the sys. AS54998 Ser

5-2001 10-01-35 Customer Call Resolution In High Hard drive is noisy - the sys. AS54998 Ser

Request 10224

Reported 13-AUG-2001 10-2

Status Engineer On-Site

Severity High

Instance

Contract

Note Type Problem Description

Note Status Public

Note

Related to Value

Attributes

Search Knowledge Log and Notes (1) Quick Task Schedule Task (2) Charges Details (1)

grid

field/label adjustment

Case Study: Oracle eBS 12

ORACLE Expense Reports

Report Issues Global Policy Home Logout Preferences Personalize Page Diagnostics

EXPENSES

Expenses Home > Expenses Reports > Credit Card Transactions > Account Authorizations > Reports and Tasks

Expenses Expenses Home > Expenses Home

Expenses Home

Create Expense Report Report Spreadsheet Export Spreadsheet

Track Submitted Expense Reports

The following expense reports are either outstanding or have been paid in the last 30 days.

Report Number	Report Submit Date	Report Status	Last Report Status Activity (Days)	Current Expense Status	Expense Purpose	Report Total (USD)	Duplicate	Withdraw
		Pending System Administrator Action		8 Expenses Administrator	0.00 Client visit - Seatt...			
		Pending System Administrator Action		8 Expenses Administrator	0.00 Client visit - Seatt...			
9010662	30-Sep-2005	Pending Manager Approval		1 Andretti, Mr. Evan Not Required	287.87			
9010662	27-Sep-2005	Pending Manager Approval		3 Andretti, Mr. Evan Not Required	8.00 Test			
9010662	27-Sep-2005	Pending Manager Approval		3 Andretti, Mr. Evan Not Required	41.00			

Update Expense Reports

Click an Update icon to make changes to a saved, rejected, or returned expense report.

Report Number	Report Date	Status	Report Total (USD)	Purpose	Update	Duplicate	Delete
9010662	29-Sep-2005	Saved	168.00	Client visit - Seatt...			
9010662	29-Sep-2005	Saved	100.00	Travel			

Notifications

View: Open Notifications Go

Select Notifications: Open

Select of: Select Date

Subject	Sent	Due
Frost, Mr. Jamie Expense 111510404 for Frost, Mr. Jamie (2,00 USD)	21-Sep-2005	26-Sep-2005

TIP: Vacation Rules - Redirect or auto-respond to notifications.

TIP: Worklist Access - Specify which users can view and act upon your notifications.

Report Issues Global Policy Home Logout Preferences Personalize Page Diagnostics

About this Page Privacy Statement

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uniform width

Service Request number

View Details For Customer: Business World

Create Contact Edit Contact

Andre

Last Beraule

Relation Contact of

E-mail andre.beraule@xxx

CA, Santa Clara, San...

Country United States

Time

Type Organization

Cust Name Business World

Acct Num 1608

Cust Phone 650-555-5555

Cust Address AS_DEFAULT 2391 L Street... CA, Santa Clara, San...

Cust Postal 95106

Cust Number 2808

Cust URL

Cust E-mail service@localxxx

Interactions Notes Tasks Service Requests Install Base Orders Addresses Contact Points Accounts Party Information Relationships

From Date To Refresh Include Closed

Request #	Date	Request Type	Status	Severity	Summary	Item	Item
10224	13-AUG-2001 18:22:01	Customer Call	Engineer On-	High	System is slow - the har...	AS54898	Sen
10224	14-AUG-2001 10:01:35	Customer Call	Resolution In-	High	Hard drive is noisy - the...	AS54898	Sen

Account 1608

Group

Type Customer Call

Owner Daugherty, Mr J.

Item AS54898

Sentinel Standard Desktop

Revision

Problem

Request 10224

Reported 12-AUG-2001 08:07:09

Status Engineer On-Site

Severity High

Instance

Contract

Note Type Problem Description

Note Status Public

Note

Related to Value

Summary System is slow - the hard drive is noisy (SR for sanity check)

Search Knowledge Log and Notes (Y) Quick Task Schedule Tasks (R) Charges Details (J)