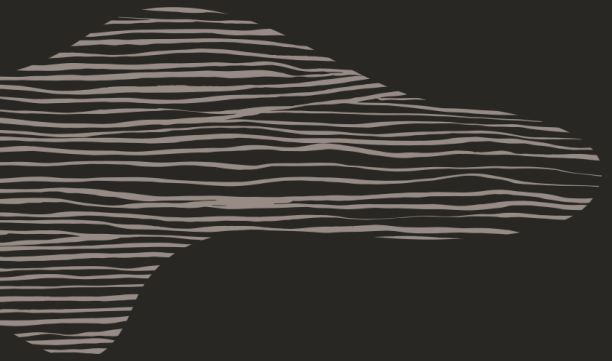
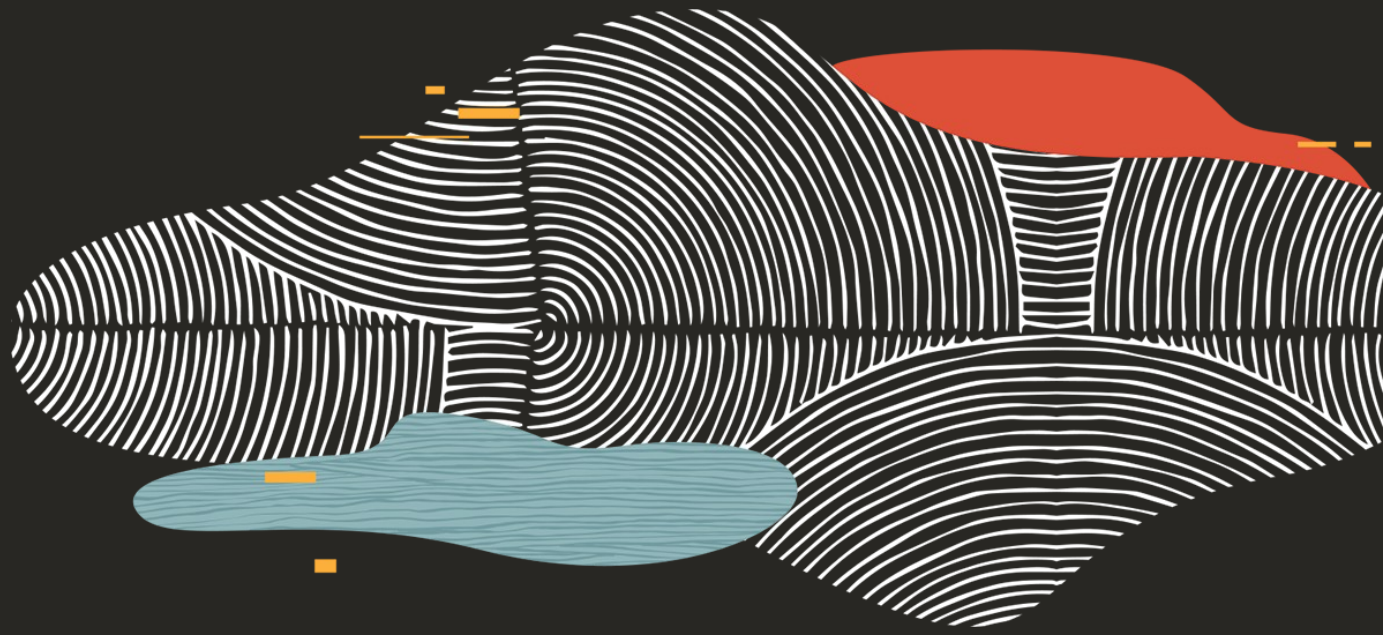
ORACLE





All the Things That Pop Up

John Snyders

Consulting Member of Technical Staff
Oracle Application Express Development Team
December 2019
#orclapex

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John Snyders

At Oracle since 2008 (WebLogic)
Joined APEX Team in 2012

Focus Area: JavaScript

Projects: Faceted Search, New Popup LOV, Interactive Grid, Page Designer, JavaScript Widgets

Twitter: @J_Snyders

Blog: http://hardlikesoftware.com

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When all the data won't fit the screen

—

What do you do?

- Multiple screens/pages
- Scrolling
- Hide/Show in place
  - tabs, collapsibles, trees
- Overlay on top
  - menus, dialogs, popups

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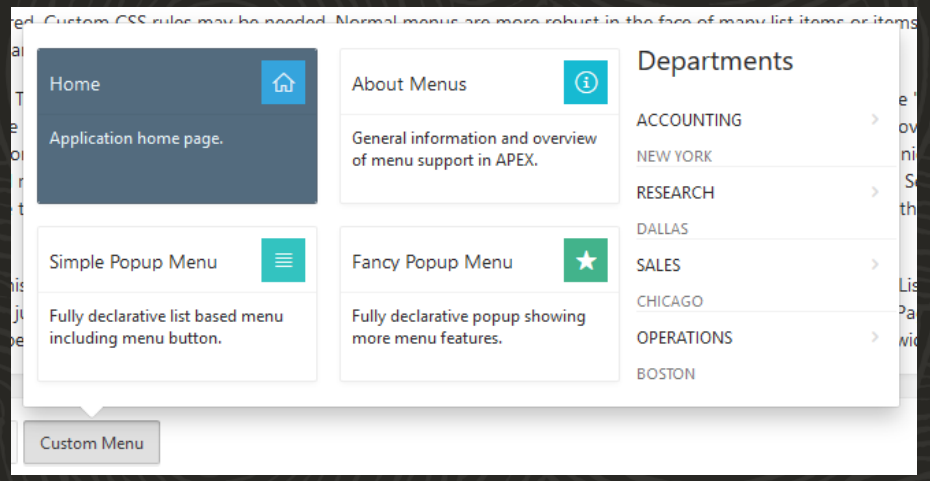
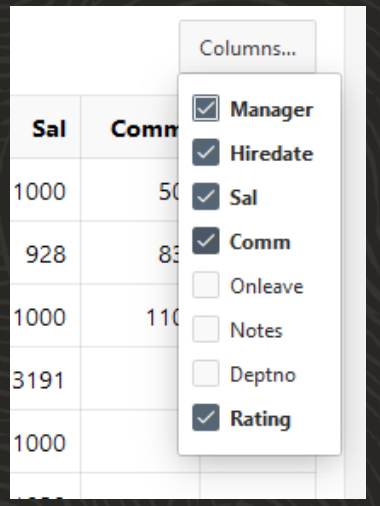
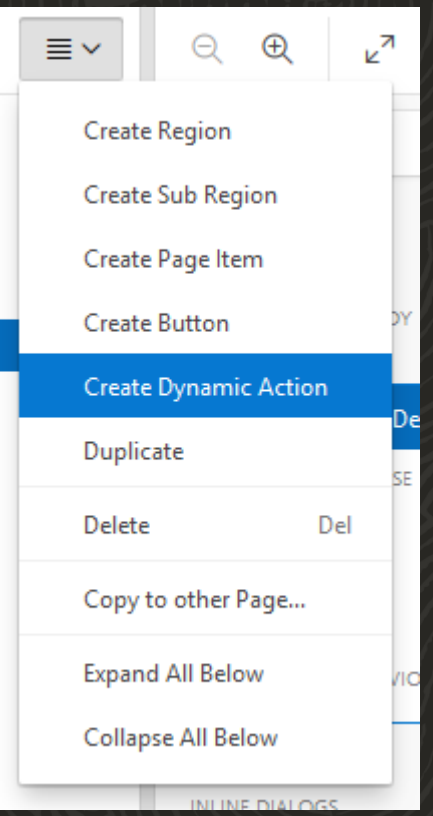
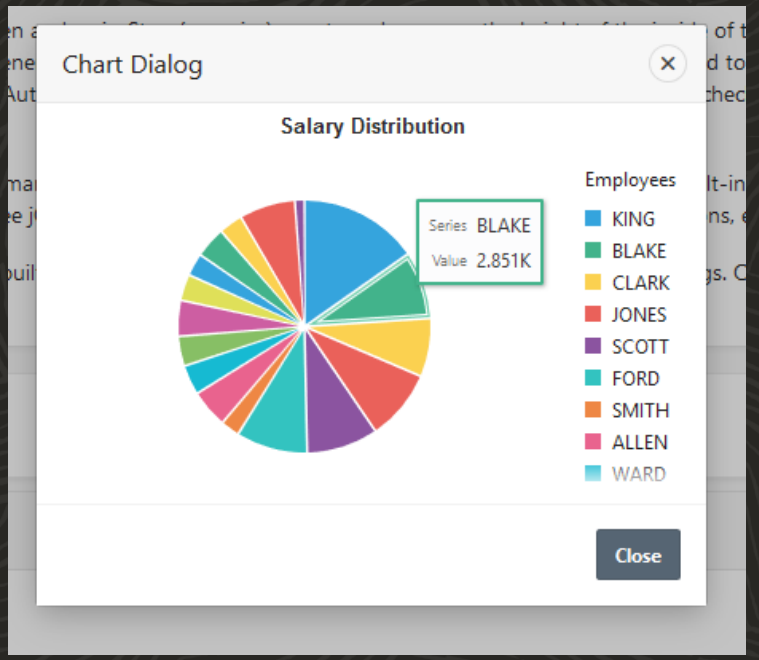
Menus
Dialogs
Popups









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Agenda

- Definitions, Overview
- Demonstration
- Show Examples
- Q&A

Objective:

- You will be able to add menus, dialogs, and popups to your apps

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Background

- Menus and Dialogs have a long history
  - Developed in the ‘70s and early ‘80s with GUI R&D
  - Formalized in ‘87 IBMs CUA spec
- Popups (a.k.a popovers) newer, mobile/touch friendly
- Users know how to interact with them
- Consistency in look and behavior is key
- Efficient use of space – overlay
- Browsers have no built-in support for these things

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Menus

A popup overlay list of actions/links

- Purpose: Navigation, Commands, Configuration
- Types
  - Menu bar drop down
  - Popup
  - Context menu (right click)
  - Mega menu (custom content)

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About APEX Menus

- Introduced in 5.0
  - Started with page designer, now used everywhere
- Implementation: menu widget
- Benefits:
  - Familiar
  - Consistent
  - Flexible
  - Robust
  - Accessible/Usable

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APEX Menu Features 1

- Desktop style menu bars +
  - show current "tab", split button, overflow
- Popup Menus from a menu button or context menu (right click)
- Mega menus, custom content
- Nested sub menus

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APEX Menu Features 2

- Scrolling long menus
- Optional Asynchronous loading of content
- Items: Navigation or actions, stateful toggle or radio group items
- UI: callout, icons, responsive
- Accessibility: WAI-ARIA menu, keyboard, type to select, keyboard accelerators

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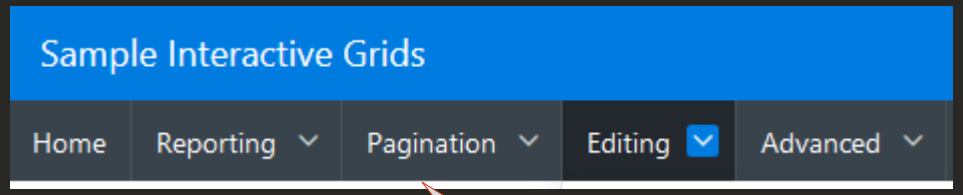
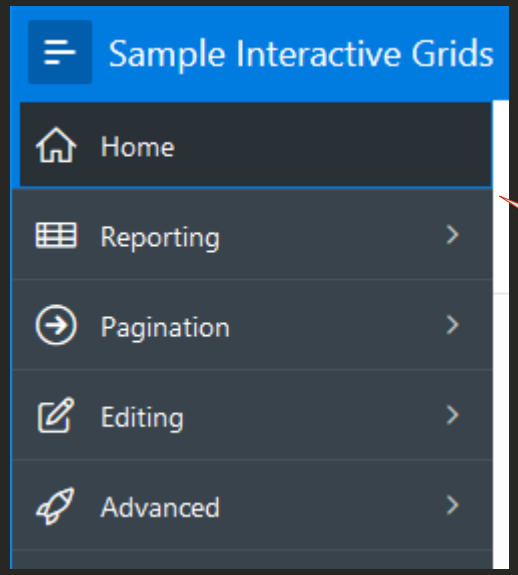
Navigation Menus



Menu Control



Tree Control

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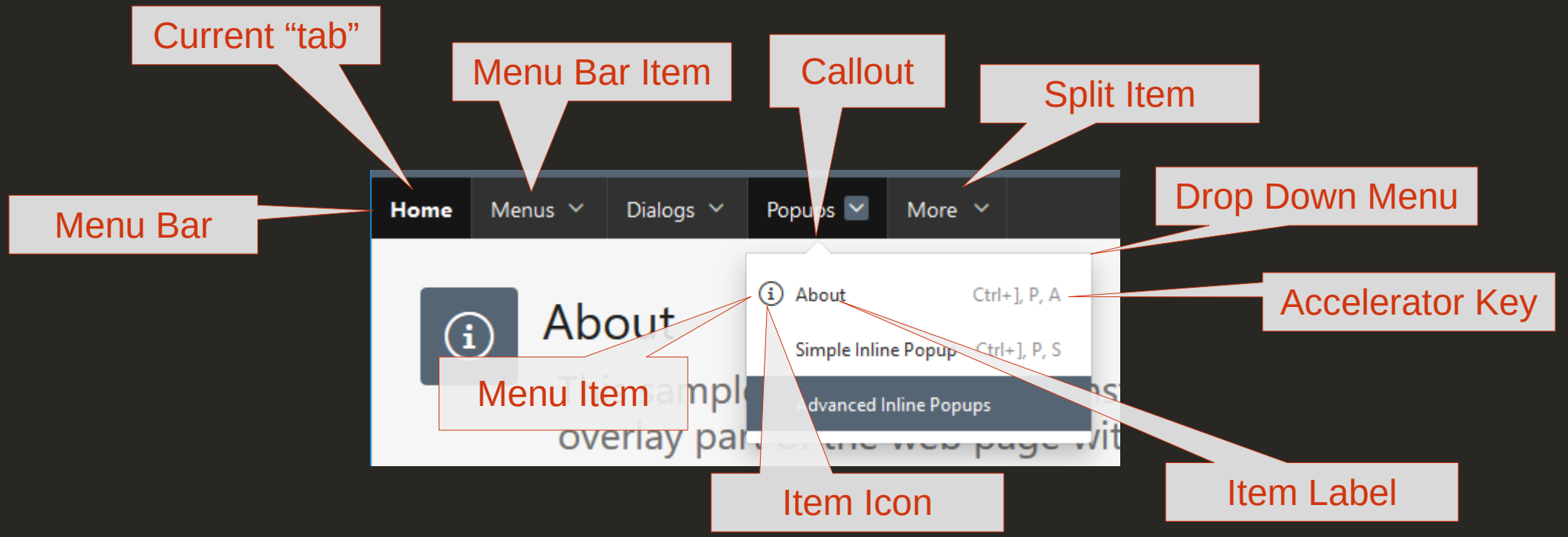
Menu Terminology



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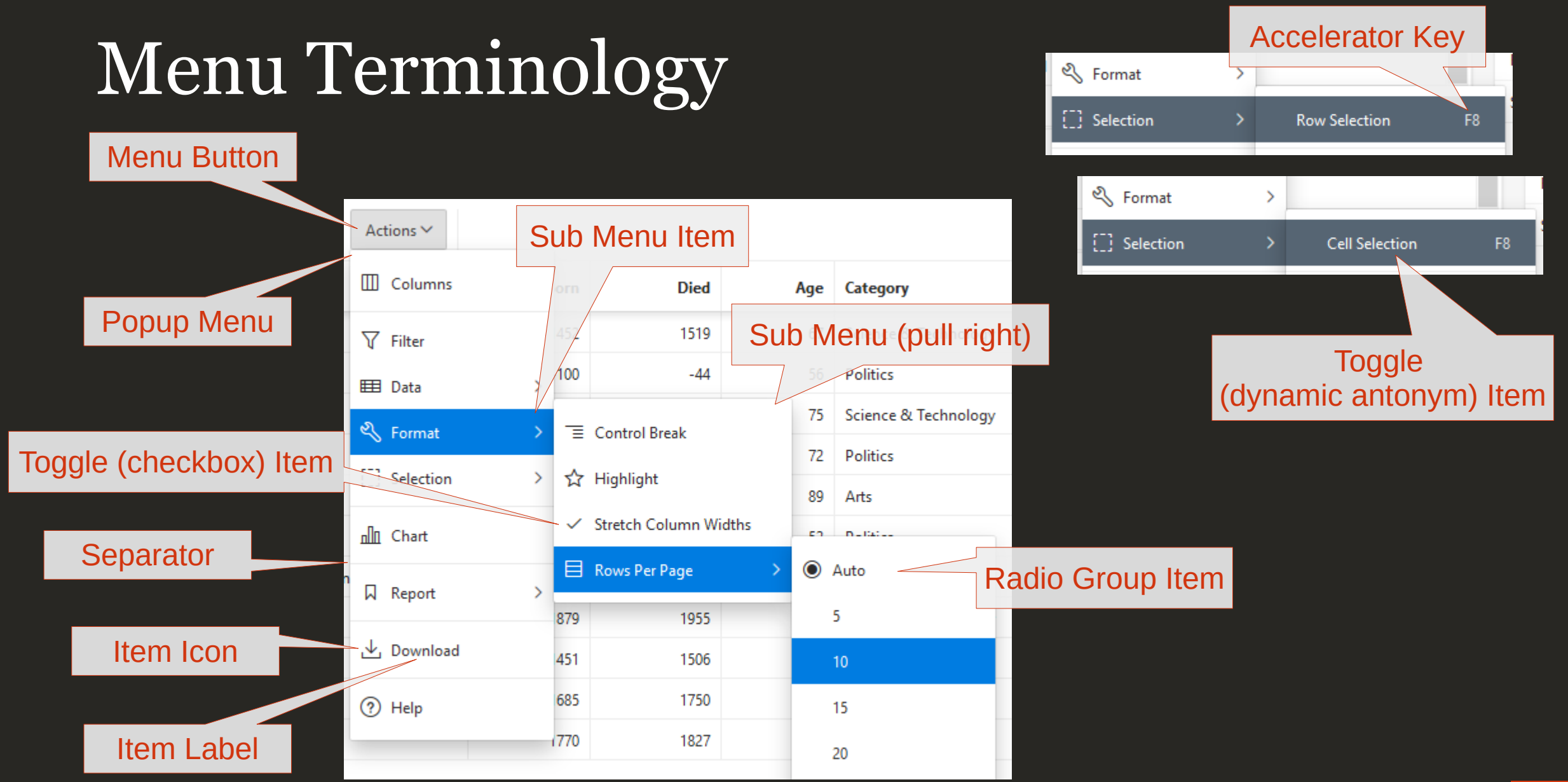
Menu Terminology



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Dialogs

Floating “window” with title bar, close button, content area

- Purpose
  - Drill down
  - Access to secondary information
  - Temporary, infrequent change of attention
  - Doesn’t affect current context
- Types
  - Modal
  - Non-modal (modeless)

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About APEX Dialogs

- Introduced in 5.0
  - APEX Modal Pages, Inline Dialog Regions, now everywhere
- Implementation: jQuery UI dialog widget +
- Benefits:
  - Familiar
  - Consistent
  - Flexible
  - Robust
  - Accessible/Usable

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APEX Dialogs: Two Kinds

- Modal Dialog Page
  - APEX page with Page Mode = Modal Dialog
  - Full participation in the APEX page life cycle
  - Modal only
- Inline Dialog Region
  - Region using the Inline Dialog region template.
  - Part of the page, can use ajax to refresh its content or save data.
  - Modal or Non-Modal

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When to use

Modal Dialog Page

- Need Submit Processing, Validations
- For convenience of open with URL
- Open from multiple pages
- With region that doesn't refresh

Inline Dialog Region

- Speed is critical, frequent use
- Maintain context between opens
- Small amount of data to fetch or save
- Want non-modal

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APEX Dialogs Features

- Keyboard accessible:
  - Escape key closes dialog
  - Tab key keeps focus in the dialog
- Optionally Resisable – change size
- Optionally Draggable – move
- Stackable

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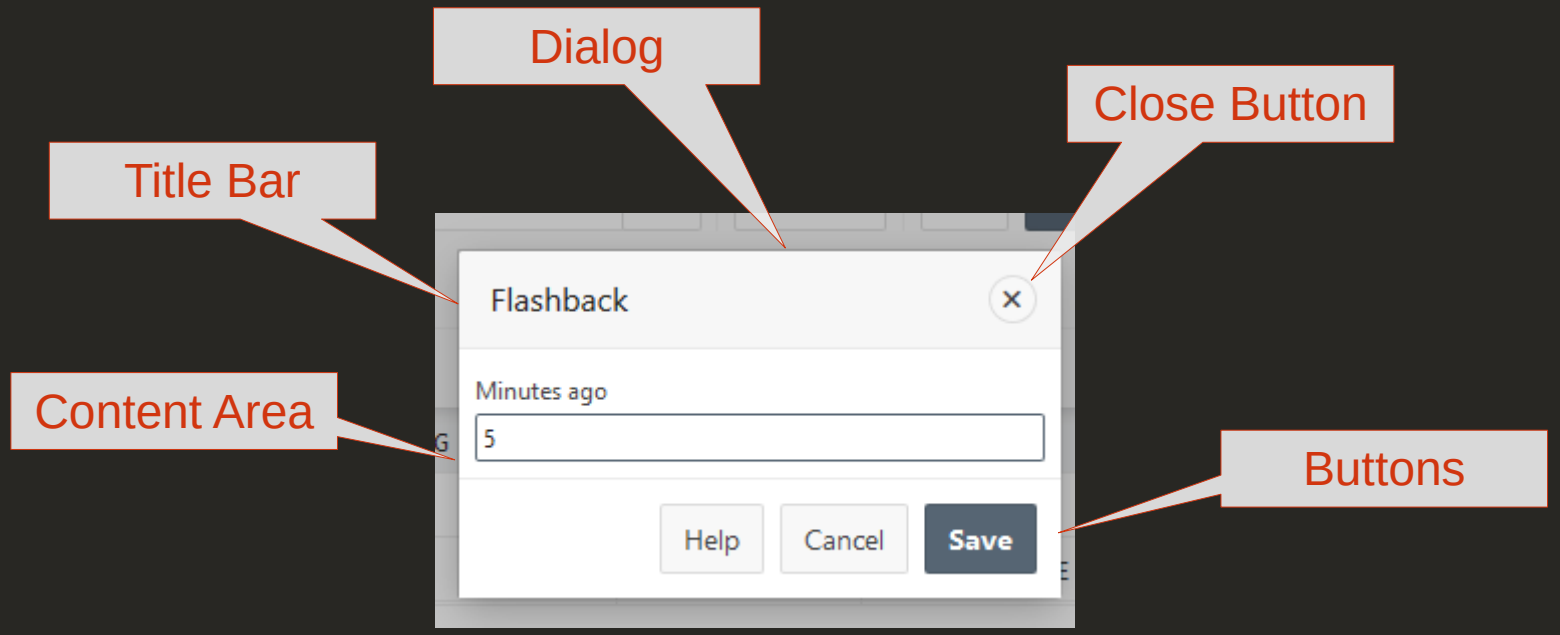
Dialog Terminology



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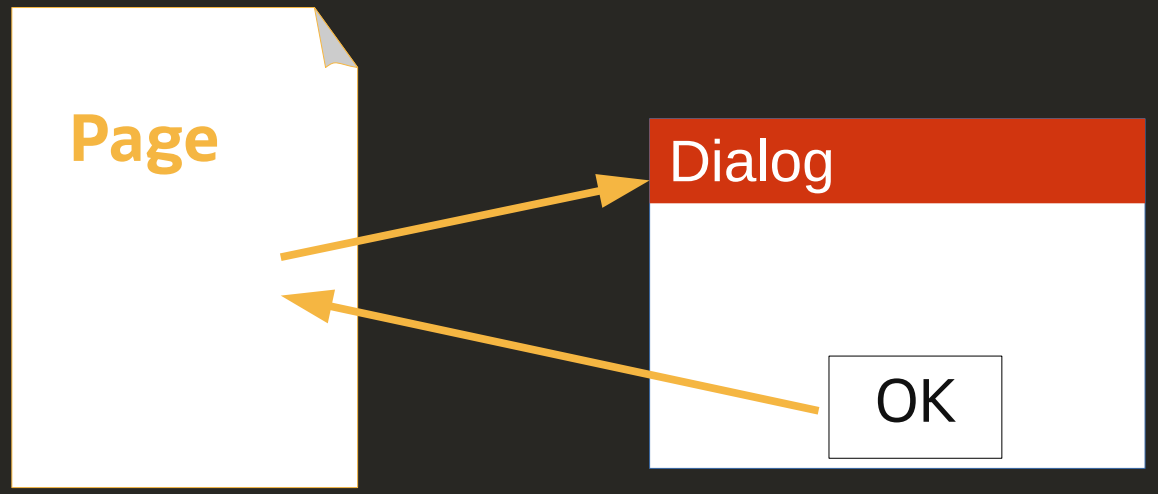
A dialog is the UI equivalent of a function




```
var num;
num = addFun(7,9);
```

```
function addFun(a, b) {
    return a + b;
}
```

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Popups

- Very similar to dialogs
  - No title bar, no drag or resize
  - Always modal, click/touch outside to close
- Purpose: Quick access to
  - Supplemental information
  - Settings or selection
- Not a tooltip, not a menu

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About APEX Inline Popup Region

- Introduced in 19.1 (widget in 18.1)
  - Motivated by column toggle report,
  - Use expanding: Ex: new Popup LOV
- Implementation: popup widget extends jQuery UI dialog widget
- New in 19.2 declarative callout and no overlay options

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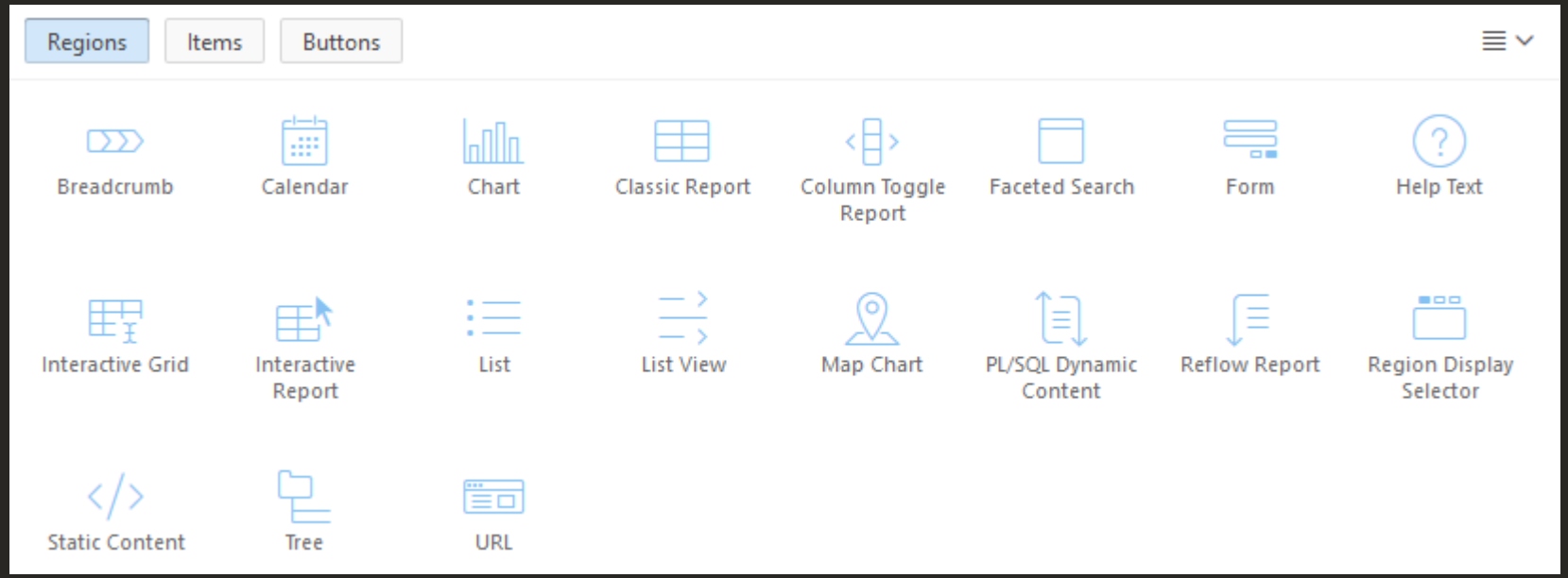
Discoverability



Where's the Menu?
Where's the Dialog or Popup?

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A region is made up of 2 parts

- Region Type
  - Typically high level UI functionality like a calendar, chart, or grid
- Template
  - Surrounding markup with placeholders for buttons, items, sub regions
  - But can also have its own behavior: tabs, carousel, collapsible
- Menu = List Region + Menu Popup List Template
- Dialog = Any Region + Inline Dialog Region Template
- Popup = Any Region + Inline Popup Region Template

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Demo

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Examples

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Questions?

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Resources: Menu

- Custom Menus http://hardlikesoftware.com/weblog/2015/07/13/apex-5-0-custom-menus/
- Media List Mega Menu http://hardlikesoftware.com/weblog/2018/05/03/apex-media-list-mega-menu/
- More Menu Fun http://hardlikesoftware.com/weblog/2019/03/02/more-apex-menu-fun/
- Keyboard Shortcuts http://hardlikesoftware.com/weblog/2015/04/19/apex-5-0-and-keyboard-shortcuts/
- Menu Widget API https://docs.oracle.com/en/database/oracle/application-express/19.2/aexjs/menu.html

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Resources: Dialog & Popup

- Dialogs http://hardlikesoftware.com/weblog/2015/05/22/apex-5-0-dialogs/
- 3 Reasons to use Inline Dialogs https://explorer.co.uk/3-reasons-to-use-inline-dialogs/
- Passing Data in & out of Dialogs http://hardlikesoftware.com/weblog/2017/01/05/passing-data-in-and-out-of-apex-dialogs/
- Inline Popups and Dialogs http://hardlikesoftware.com/weblog/2019/02/11/apex-inline-popups-and-dialogs/
- Persist Dialog Position http://hardlikesoftware.com/weblog/2015/06/25/how-to-persist-apex-dialog-size-and-position/
- Inline Popup Region http://hardlikesoftware.com/weblog/2018/04/20/apex-inline-popup-region/
- Dialog Widget API https://api.jqueryui.com/dialog/

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Thank You

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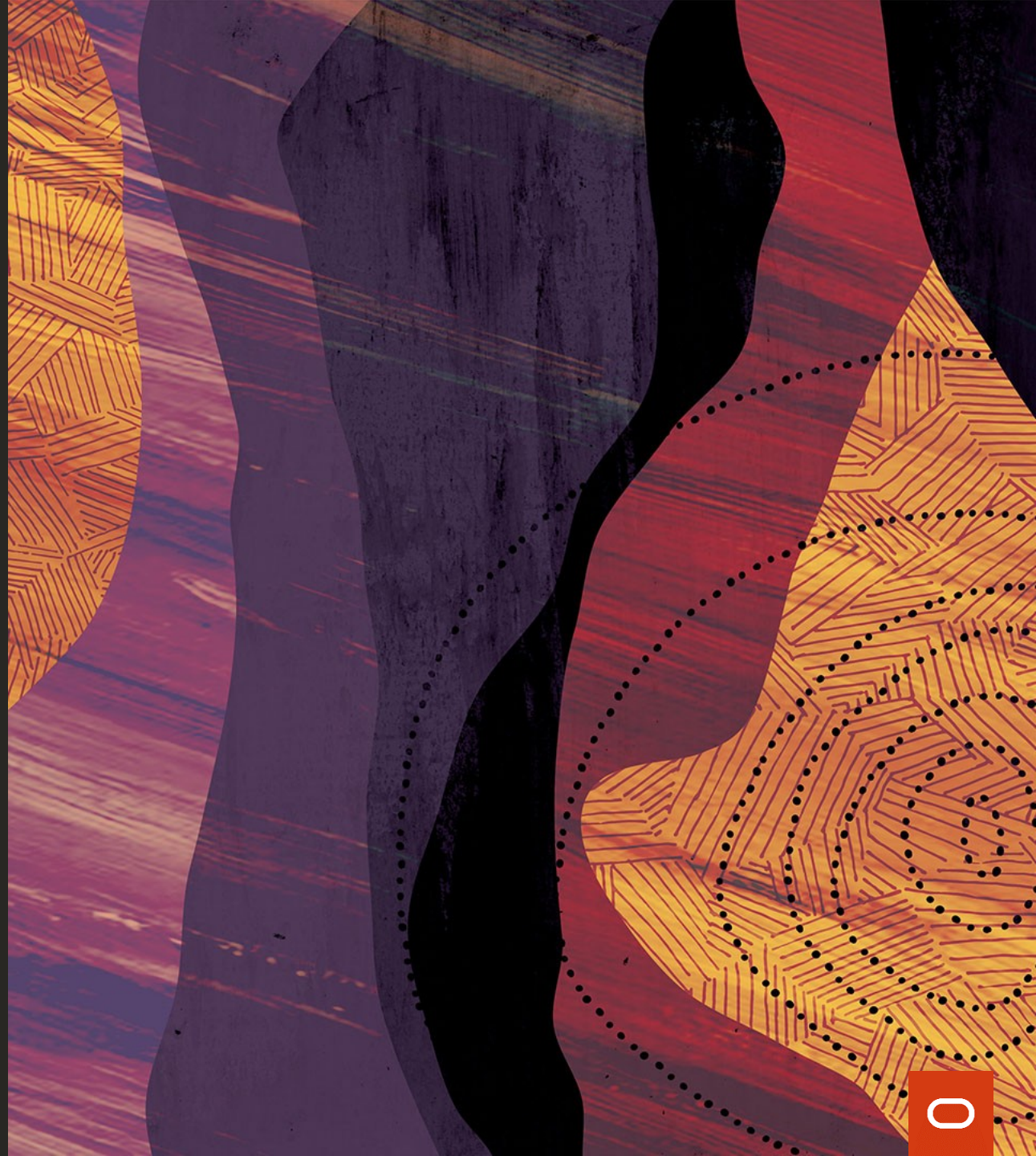

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