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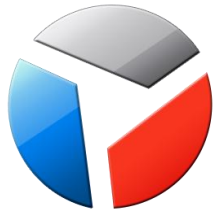
# Oracle JavaScript Extension Toolkit (JET)

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# Safe Harbor Statement

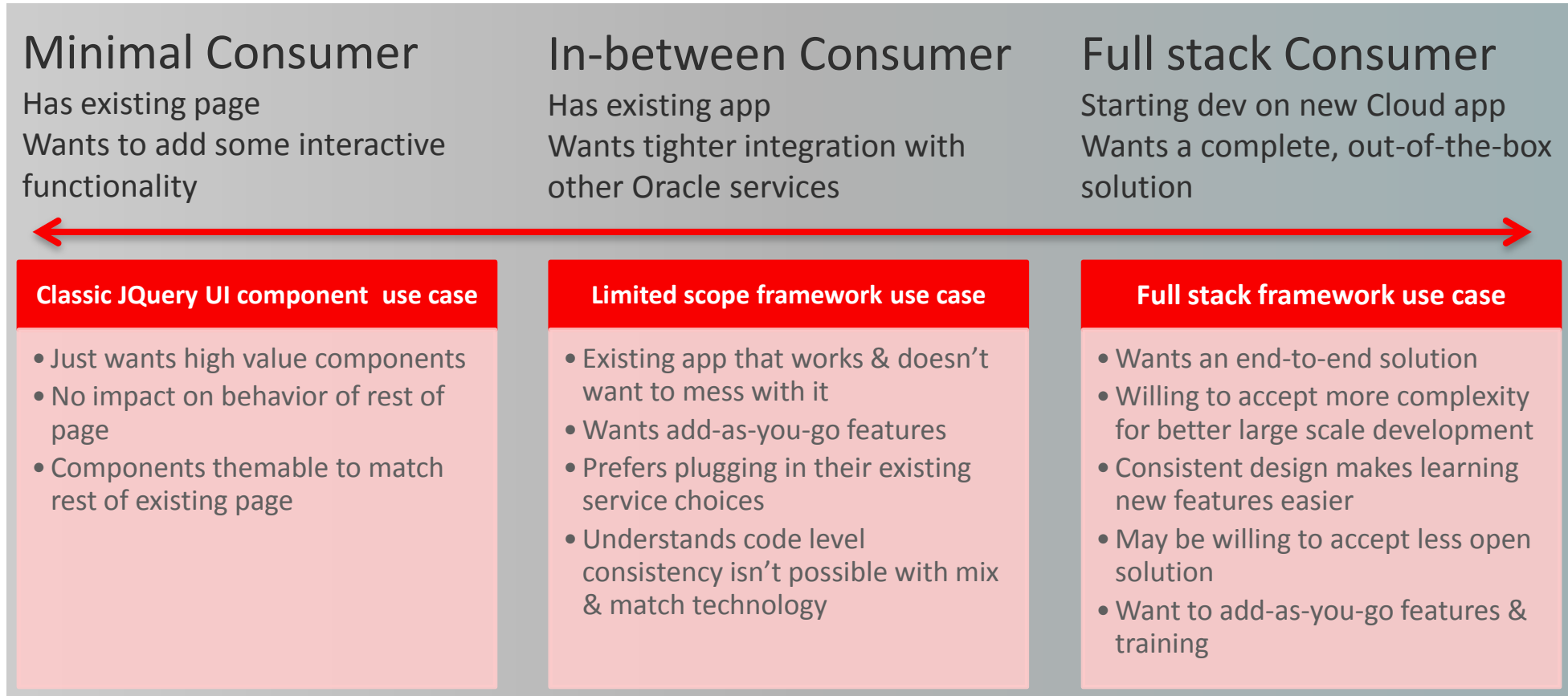
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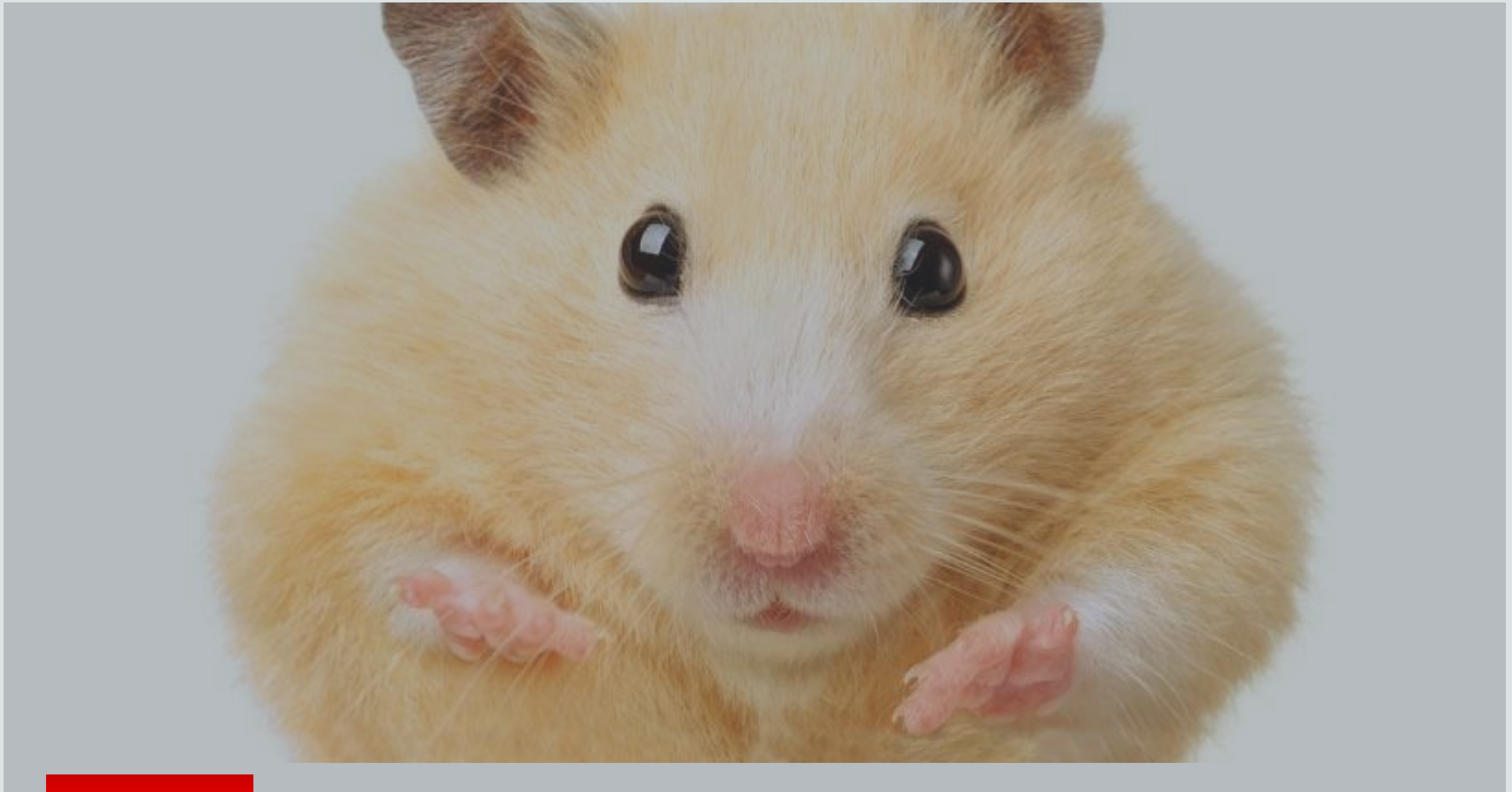


# Oracle JET

**Oracle JET is targeted at intermediate to advanced JavaScript developers working on client-side applications. It's a collection of open source JavaScript libraries along with a set of Oracle contributed JavaScript libraries that make it as simple and efficient as possible to build applications that consume and interact with Oracle products and services, specifically Oracle Cloud services.**

# Spectrum of potential customers





# Why not a more popular framework?

- Modularity over all-in-one approach
- Focus on what Enterprises need, not the everyday website
  - Accessibility
  - Internationalization
  - Integration into existing sites
  - HTML5 standards
  - JavaScript developer focus

# Open Source Libraries



Hammer



Knockout.js



jQuery



jQueryUI



RequireJS



# Architecture

- Use of **Model-View-ViewModel (MVVM)** architecture
  - Better organized code by isolating logic for managing a specific part of the UI
  - Natural point for plugging in View Unit Tests
  - Enables automatic View updates in response to data changes and user input, reducing the quantity of business logic (or glue) required in the code
  - Enables designer-developer workflow due to loose coupling between View markup & code behind
- Use **two-way data binding** to ease development

# What does Oracle JET provide?

- Collection of Open Source and Oracle built JavaScript libraries
- Advanced and basic UI Component sets
- Alta theme built-in
- Oracle standards compliant
  - Accessibility
  - Internationalization
  - Security
- Common Model API
- Validation and Converter framework
- Responsive grid and form layout

# JET UI Components meet the following standards

- Two-way data binding
- Packaged as jQueryUI wrapped widgets
- Styled by default to meet the Alta UI style specifications (SASS based theming)
- All components meet Oracle NLS standards (i18n). Formatting for Currency, Numeric, and Date/Time (28 languages and 160+ locales)
- All components provide support for Oracle software localization standards (l10n). Including BiDi, and lazy resource loading
- All components meet OAG 2.0 standards for accessibility (based on WCAG 2.0)
- All components provide methods for test automation integration
- All components provide touch functionality where appropriate

# Accessibility matters

“The key takeaway from this research: adoption of WCAG 2 is progressing steadily and becoming increasingly important:

The governments of Australia, Canada, France, Germany, Hong Kong, Ireland, Japan, Netherlands, New Zealand, Norway and the UK have already adopted WCAG 2.

In the US, Section 508 is being (slowly) refreshed to harmonize with WCAG 2.

The European Commission has moved to WCAG 2 as a European government standard..”



– Mark Rogers on Jul 4, 2015, PowerMapper Software

# Intermission



# How is Oracle JET being released?

We are releasing Oracle JET in a three phase plan.

1. Internal use 
2. Oracle Customer use 
3. General Public use

The first release was internal and you can see the result of that with many of the new Oracle Cloud Services being shown this week.

The second phase is for Oracle Cloud customers. This release is covered under a restricted use license (RUL) and is available today.

The third and final phase is to release Oracle JET as Open Source software. This is planned and should be available next year.

# How is Oracle JET licensed?

Oracle JET is available for anyone to download and explore with today. It is available for use in production applications through a Restricted Use License with limits the distribution to applications that interact with or consume the following Oracle Cloud Services:

- Mobile Cloud Service
- Developer Cloud Service
- Java Cloud Service
- Application Builder Cloud Service

Purchasing a subscription to any of the above Cloud Services will grant you a right to distribute an application built using Oracle JET.

# JET Framework Features

- Common Model and Collection API (based on Backbone syntax)
- Messaging and event services for both Model layer and UI layer
- Validation framework for both client and server
- Caching services for performant paging and virtual scrolling
- Filtering services provided at the Model layer (e.g. sorting)
- Support for responsive design with a built in fluid-grid layout framework
- Libraries and resources are loaded using a lazy loading methodology
- URL and browser history managed as part of the framework
- Security testing of framework to meet Oracle Security review



# How is Oracle JET different from ADF?

- Oracle JET is targeted at JavaScript developers from intermediate level to advance. Oracle ADF is targeted at Java developers from beginner to advance.
- Oracle JET has a code centric development paradigm, while Oracle ADF aims for a more declarative approach to development.
- Oracle JET is a pure client-side toolkit. Oracle ADF is a server focused framework.
- Oracle JET handles the creation of user interfaces, Oracle ADF handles the business service creation in addition to creation of UI layer.
- Oracle JET data interaction is via web services only (REST, WebSockets, SSE, etc). Oracle ADF support web service interaction with data services (REST/SOAP) in addition to direct binding approach.

# Documentation

- Documentation is provided in the following areas
  - API guides
  - Developers Guide
  - Getting Started Guide
  - Cookbook for all components with copy and paste examples
- Open Source documentation provided by vendors

# Tooling

- Tooling agnostic
- NetBeans
- Developer Cloud Service



# A look under the covers

Code!

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