

# Knock yourself out

with APEX and KnockoutJS  
SMART4Solutions - Richard Martens



# Agenda

- Introducing Knockout
- Demo in APEX
- Questions



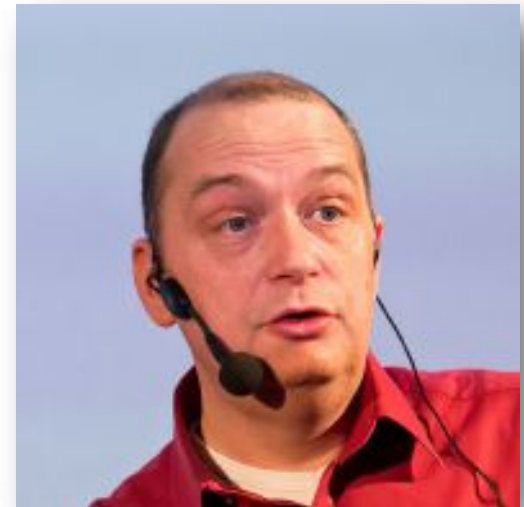
# Who is Richard?

- Smart4solutions partner (2017)
- Smart4apex founding member (2010)
- Oracle since 2002 (Oracle 8i)
- PL/SQL, Apex, HTML(5), CSS(3), JavaScript, XML, XSLT
- Special interest in UI
- Trainer at skillbuilders.com

RIMA on Oracle Forums

 @rhjmartens

 richardmartens.blogspot.nl



# SMART4apex



- Cooperative of 10 independent software developers
- Worldwide conference speakers



# Agenda

- Introducing Knockout
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# Introducing Knockout

Knockout is a JavaScript library that helps you to create rich, responsive display and editor user interfaces with a clean underlying data model. Any time you have sections of UI that update dynamically (e.g., changing depending on the user's actions or when an external data source changes), KO can help you implement it more simply and maintainably.





# Introducing Knockout

Knockout is a JavaScript library that helps you to create rich, responsive display and editor user interfaces with a clean underlying data model. Any time you have sections of UI that update dynamically (e.g., changing depending on the user's actions or when an external data source changes), KO can help you implement it more simply and maintainably.





Ahh much better



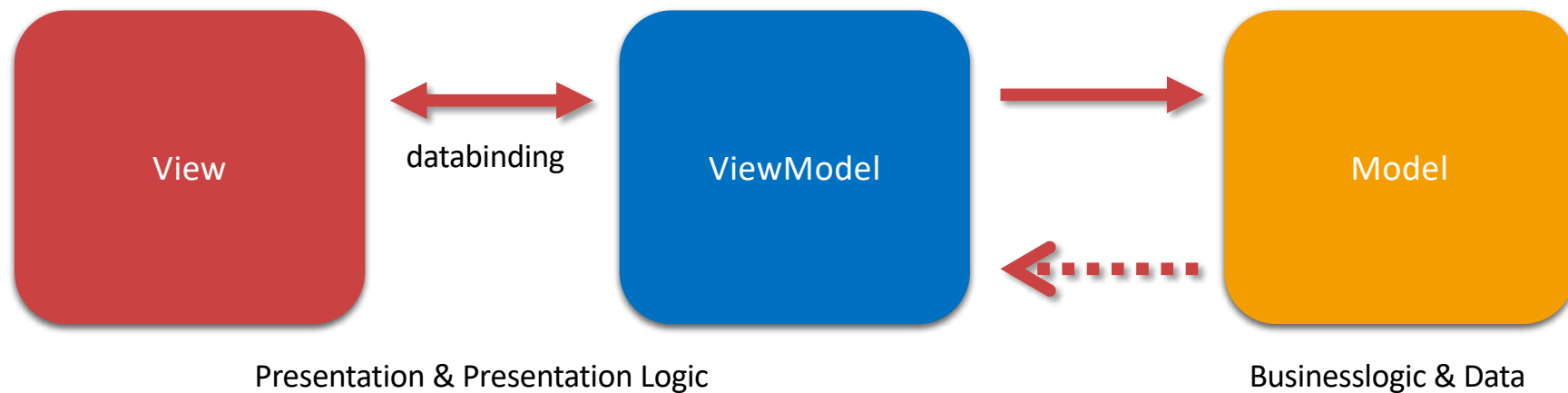
# Knockout Introduction

- So what is this knockout all about in lay terms
  - Rich user interfaces
  - Data / Presentation separation
  - Maintainable and easy to read code

demo



# Knockout - Model-View-Viewmodel (MVVM)



- Separation of data and presentation
  - Model contains data
  - View contains presentation (HTML)
  - ViewModel binds them together



# Knockout

- Uses the “data-bind” html-attribute
  - Text & appearance
    - text, html, css, style, attr
  - Control Flow
    - foreach, if, ifnot, with, component
  - Input fields
    - click, enable, textInput . . .
  - Templating
    - template
- Watch: <http://learn.knockoutjs.com/#/?tutorial=intro>



# Oracle JET



- Library of Libraries (JavaScript Extension Toolkit)
  - jQuery
  - jQuery UI
  - Knockout
  - Require JS
  - Cordova
  - Oracle specific libraries



# Knockout & APEX

- Shipped with APEX (as part of Oracle JET)
- Add code at “Page” or “User Interface Details” level

The screenshot displays the APEX configuration interface for the 'User Interface' section. The 'User Interface Details' tab is active, showing a 'JavaScript' section. A modal window is open, showing the 'File URLs' field with the following content:

```
#IMAGE_PREFIXlibraries/oraclejet/4.2.0/js/libs/knockout/knockout-3.4.8.js  
#APP_IMAGES#knockout-pre-rendered#IMAGE_PREFIX#js
```

The main configuration page shows the 'JavaScript' section with a 'Content Delivery Network' dropdown set to 'None (Use Web Server)' and a 'File URLs' field containing the same paths as shown in the modal window.



# Knockout & APEX

Handy plugins:

<https://github.com/knockout/knockout/wiki/plugins>

- Knockout init
  - <https://github.com/civicsource/knockout.init>
- Knockout sortable
  - <https://github.com/rniemeyer/knockout-sortable>
    - Also includes draggable







# Warning: JavaScript involved!

- Oracle JET is a JavaScript tool
- We're stepping outside of the "APEX-framework"
  - Therefore no declarative programming



Demo time



# Knockout & APEX

- Demo time !
- <http://oradock/ords/f?p=knockout:intro>



# Questions

