SAP ERP Development using WEB DYNNPRO

NetWeaver Development

<table>
<thead>
<tr>
<th>Content Complexity</th>
<th>Web Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transactional Business Applications</td>
</tr>
<tr>
<td></td>
<td>Interactive Applications</td>
</tr>
<tr>
<td></td>
<td>Display Applications</td>
</tr>
</tbody>
</table>

- SAP NetWeaver Developer Studio
- SAP ABAP Development Workbench
- PDK for .Net
- SAP NetWeaver Visual Composer
- SAP EP Portal Content Studio
- Required Technical Development Skills
- Creating NetWeaver Content
- Developing NetWeaver Content
Web Dynpro

Standard programming model for building NetWeaver user interfaces (UI).
  Focus primarily on design and less manual coding (system generated code).
  Set of consistent UI tools.
  Available in both Java and ABAP versions.
Eclipse-based IDE for development
Multi-device/platform deployment environment

Place within NetWeaver Toolset
Deployment strategy

Source: Web Dynpro for Java and ABAP: Selecting the Tool that Best Fits Your Needs by Thomas Jung

Application Delivery Scenario

Source: Web Dynpro for Java and ABAP: Selecting the Tool that Best Fits Your Needs by Thomas Jung
Web Dynpro Goals

Deliver enterprise quality Web development environment
- Minimize coding, maximize design
- Separate layout and login
- Support arbitrary backend systems

Achieve platform independence

Provide “High Fidelity Web UI”
- Browser based (multi-device)
- Client and server dynamics
- AJAX-like execution
- End-user personalization

Construct applications from “patterns”—reusability

MVC architecture

Source: Web Dynpro by Peter McNulty

Model View Controller (MVC)

Binds the user and business interaction layers together. All intermediate processing is performed here.

Generates the application data without caring how it will be displayed.

Visualizes the application data without caring how it was generated.

Source: Web Dynpro for Java and ABAP: Selecting the Tool that Best Fits Your Needs by Thomas Jung
MVC interface element example

**Component**
- **View:** Define visible layout via predefined UI elements
- **UI elements:** Smallest UI building blocks
  - Provided in libraries
  - Have properties which control behavior
- **Controller:** Contains UI logic
  - Implements event handlers

---

**Copyrights**

Presentation prepared by and copyright of Dr. Tony Pittarese, East Tennessee State University, Computer and Information Sciences Dept. ([pittares@etsu.edu](mailto:pittares@etsu.edu))

Podcast lecture related to this presentation available via ETSU iTunesU.

Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, System i, System p, System i5, System i6, System z, System z10, System i9, z10, z9, iSeries, pSeries,
- xSeries, zSeries, eServer, z/VM, z/OS, S/390, OS/400, AS/400, S/390 Parallel Enterprise Server, PowerVM, Power Architecture, POWER6+,
  - POWER6, POWER5+, POWER5, POWER, OpenPower, PowerPC, BatchPipe, BladeCenter, System Storage, GPFS, HACMP, RETAIN, DB2 Connect, RACF,
  - Redbooks, DS/2, Parallel Sysplex, MV5/ESA, z/OS, Intelligent Miner, WebSphere, Netfinity, Tivoli and Informix are trademarks or registered trademarks of IBM Corporation.

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.

Oracle is a registered trademark of Oracle Corporation.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP Business ByDesign, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.

Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects S.A. in the United States and in other countries. Business Objects is an SAP company.

Other products mentioned in this presentation are trademarks of their respective owners.