Overview of the Rich Web Backplane Panel and Note

- [Kevin Kelly] → Charlie Wiecha - Introduction and definition, demo
- John Boyer - Intelligent XML Data Model
- Steven Pemberton - Events, Intent based Events
- Mark Birbeck – Submit
- [Al Gilman – Accessibility] → Accessibility and DI (Rhys Lewis)
Rich Web Application Backplane

- Compound Documents
- Reduce duplication of the same functionality in many markups
- A more reliable, consistent, mixed markup, authoring model
- Enhances interoperability between declarative and procedural authoring
Rich Web Application Backplane

Interaction Namespaces and Frameworks
- XHTML
- SVG
- XForms
- VoiceXML
- SMIL
- AJAX-based Composite Apps

Rich Web Application Backplane
- Compound Document Framework
- XML Data Model
- Model-view binding and events
- Submission object (XMLHTTP++) and behavior
- Choreography (SCXML)
- Component Model and Composition

Platform technologies
- DOM Parser
- XPath, XSLT
- DOM Events
- JS
- Security
Example: From “mash-ups” to “hook-ups”

- Search box elements and Yahoo map component “hook-up” to backplane – vs. mash-up to each other
- State Chart XML Controller manages cross-component coordination
Composition in the Backplane
Loose Coupling of Applications in the Backplane

Compound document
Root language, e.g. XHTML

Submission object

XML Data Model
- Validation
- Constraints
- Binding
- Transformation

Event-based processing model for Model <-> View updates

Submission processing
- Synchronous page replace
- Asynchronous instance replace

Root view, e.g. XHTML Body

Web Apps View

XForms View

SVG View

Voice View
Web Components and Composition in the Backplane

Compound document
Root language, e.g. XHTML

Submission object
XML Data Model

Event-based processing model for
Model <-> View updates

Submission processing
• Synchronous page replace
• Asynchronous instance replace

Root view, e.g. XHTML Body

Loose coupling uses
Model <-> Model updates
Similar to XForms <bind>

Web Apps View
SVG View

Web Component
XML Model Views
Example: Recursive XML application components

- Search box elements and Yahoo map component combined into “hotel search” component
- Enclosing application document sees component as XForms control with “subtree” binding