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Innsbruck, Austria

e4 - The platform of the future

Eclipse Summit Europe
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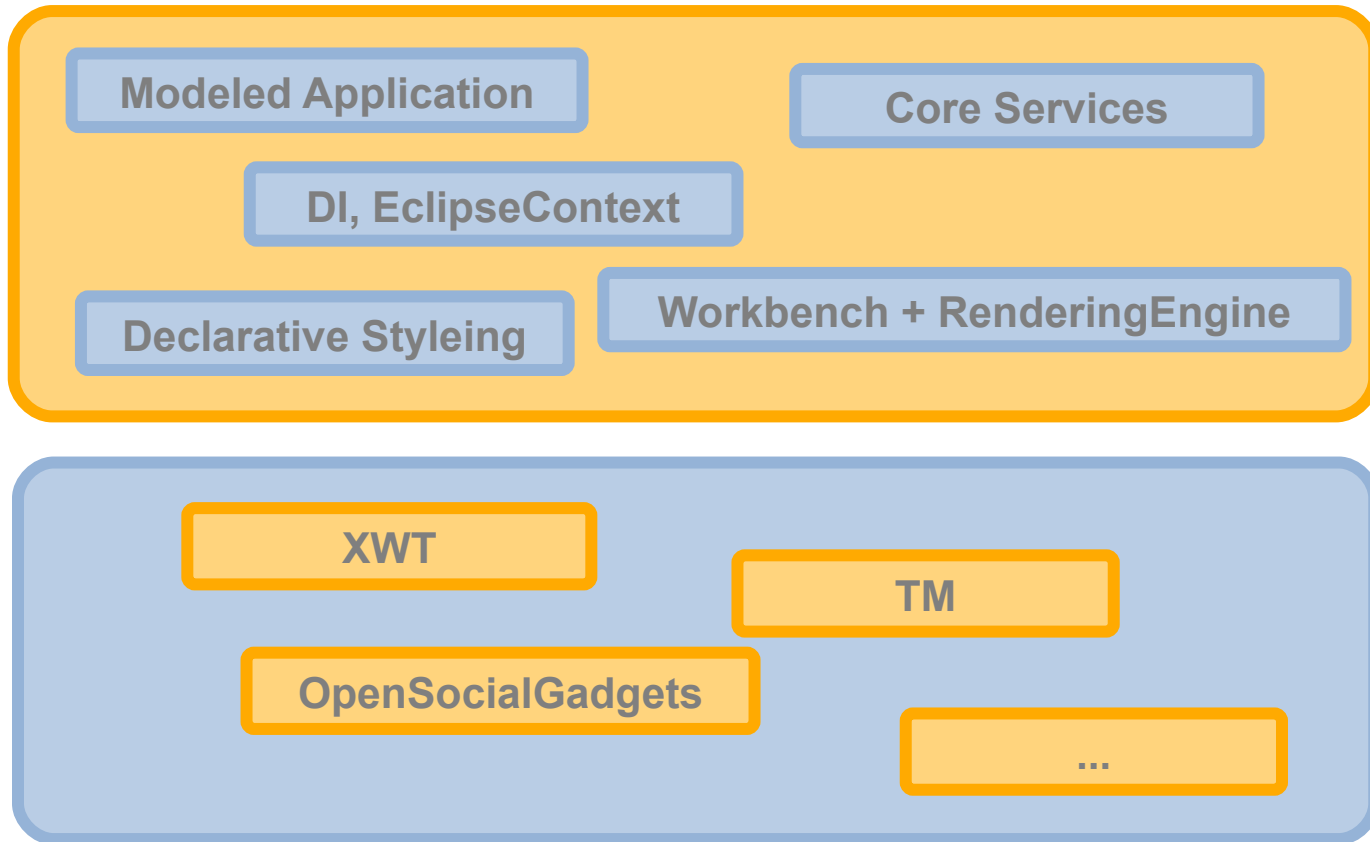
e4 – About Me

- **Founder and Owner of BestSolution.at**
- **Eclipse Committer**
 - e4
 - Platform UI
 - EMF
- **Projectlead**
 - Nebula
 - UFaceKit

e4 – The model a short history

- **EclipseCon 08**
- **First Prototype**
 - May 20th 2008: Mail to e4-dev „A radical approach to explore new paths for e4“
 - Platform designed from Scratch
 - Based upon an EMF-Application-Model
 - No statics, no singletons, usage of DI
 - Based on OSGi-Services

e4 – Component Overview

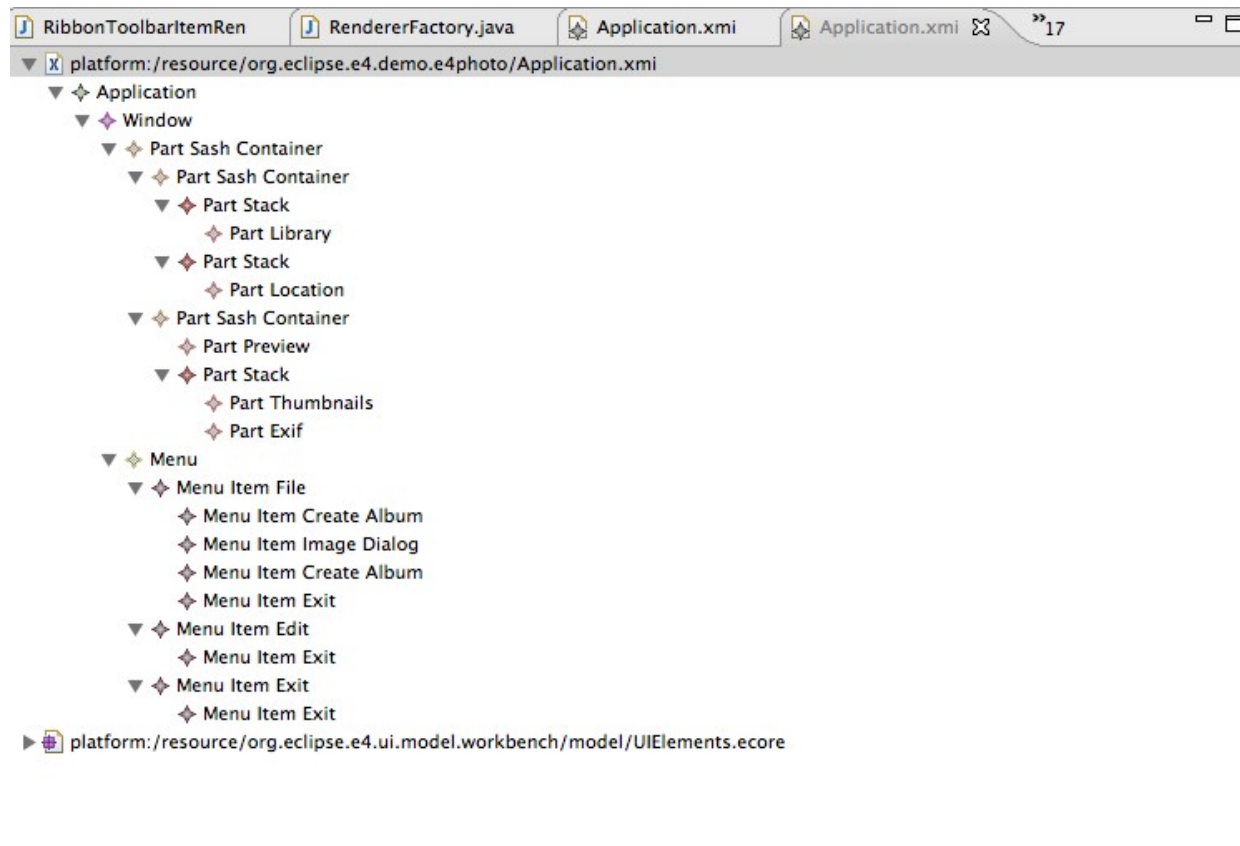


e4 – Anatomie of an E4-App

- **Main Building Blocks**
 - Application model instance
 - POJO to fill the parts of the UI with content
- **Additional Building Blocks**
 - CSS – Theming your application
 - IEclipseContext – Accessing services, ...

e4 – Anatomie of an E4-App

■ Application model



e4 – Anatomie of an E4-App

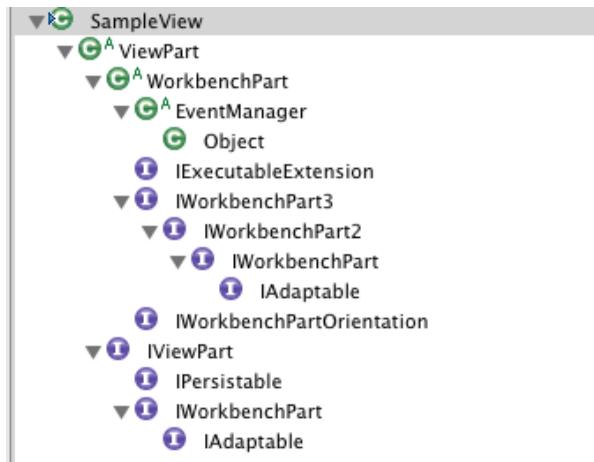
■ Part POJO

```
public class Preview {  
    public Preview(Composite parent, Realm workspace) {  
        // Create UI ...  
    }  
  
    @In  
    public void setSelection(final IFile input) {  
        // React on Selection Changes  
    }  
}
```

e4 – Anatomie of an E4-App

- DI to flatten the Hierarchy

3.x

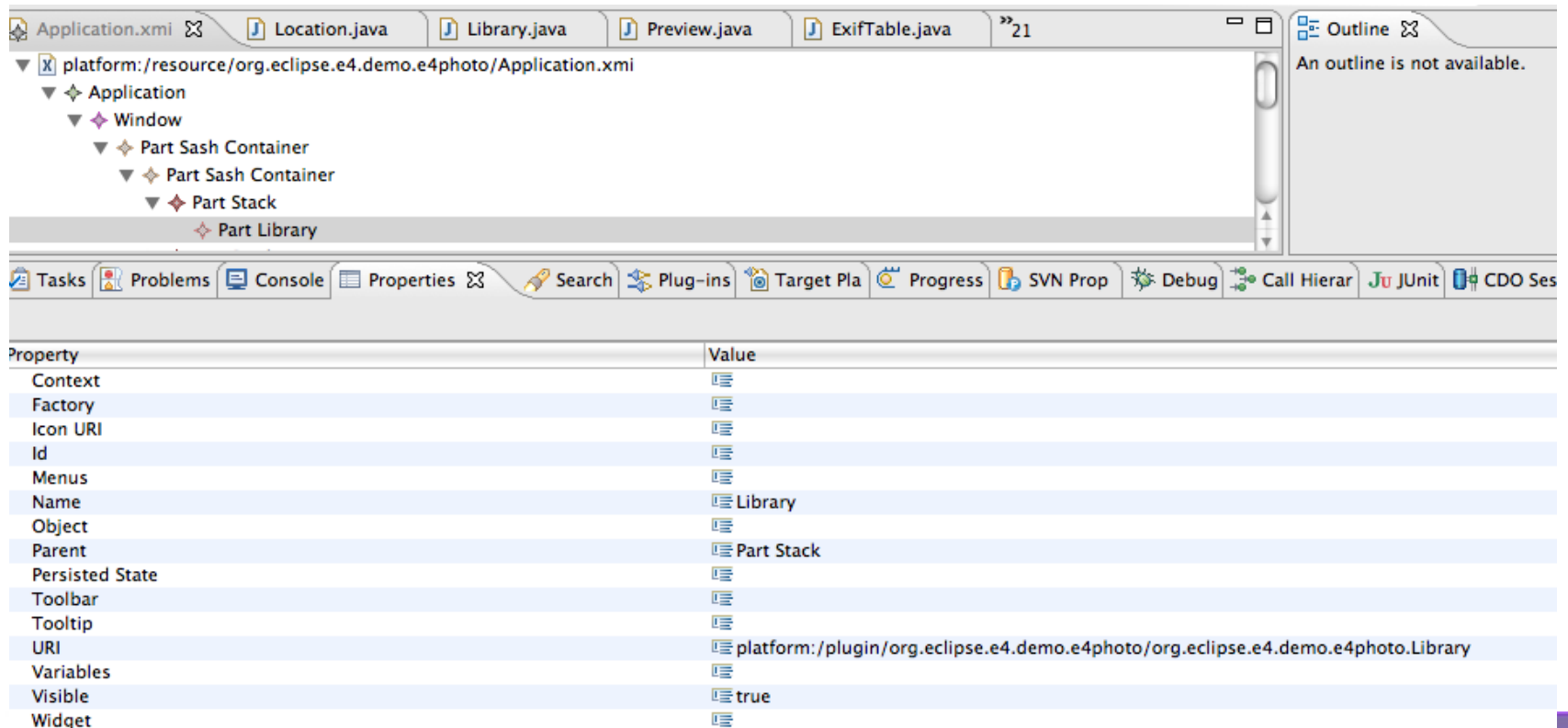


e4



e4 – Anatomie of an E4-App

■ Wiring the part POJO into the Application Model



The screenshot shows the Eclipse IDE with the following components:

- Editor Tabs:** Application.xmi, Location.java, Library.java, Preview.java, ExifTable.java, and a tab labeled "21".
- Outline View:** Shows the Application Model structure:
 - Application
 - Window
 - Part Sash Container
 - Part Sash Container
 - Part Stack
 - Part Library (selected)

- Properties View:** Displays the properties of the selected "Part Library" object.

Property	Value
Context	
Factory	
Icon URI	
Id	
Menus	
Name	
Object	Library
Parent	Part Stack
Persisted State	
Toolbar	
Tooltip	
URI	platform:/plugin/org.eclipse.e4.demo.e4photo/org.eclipse.e4.demo.e4photo.Library
Variables	
Visible	true
Widget	

e4 – Example Application

Contacts List

First name	Last name
Tom	Schindl
Udo	Rader
Bernd	Reitmair
Magdalena	Bauer

Details

General

Firstname

Tom

Last name

Schindl

Company

BestSolution.at Systemhaus Gmbh

Comment

Business Address

Street

Eduard-Bodem-Gasse 5-7

City

Innsbruck

Zip

6020

State/Province

Tyrol

Country

Austria

Business Phone

Phone

+43 512 93 58 34

Mobile

+43 676 323 21 47

Business Internet

E-Mail

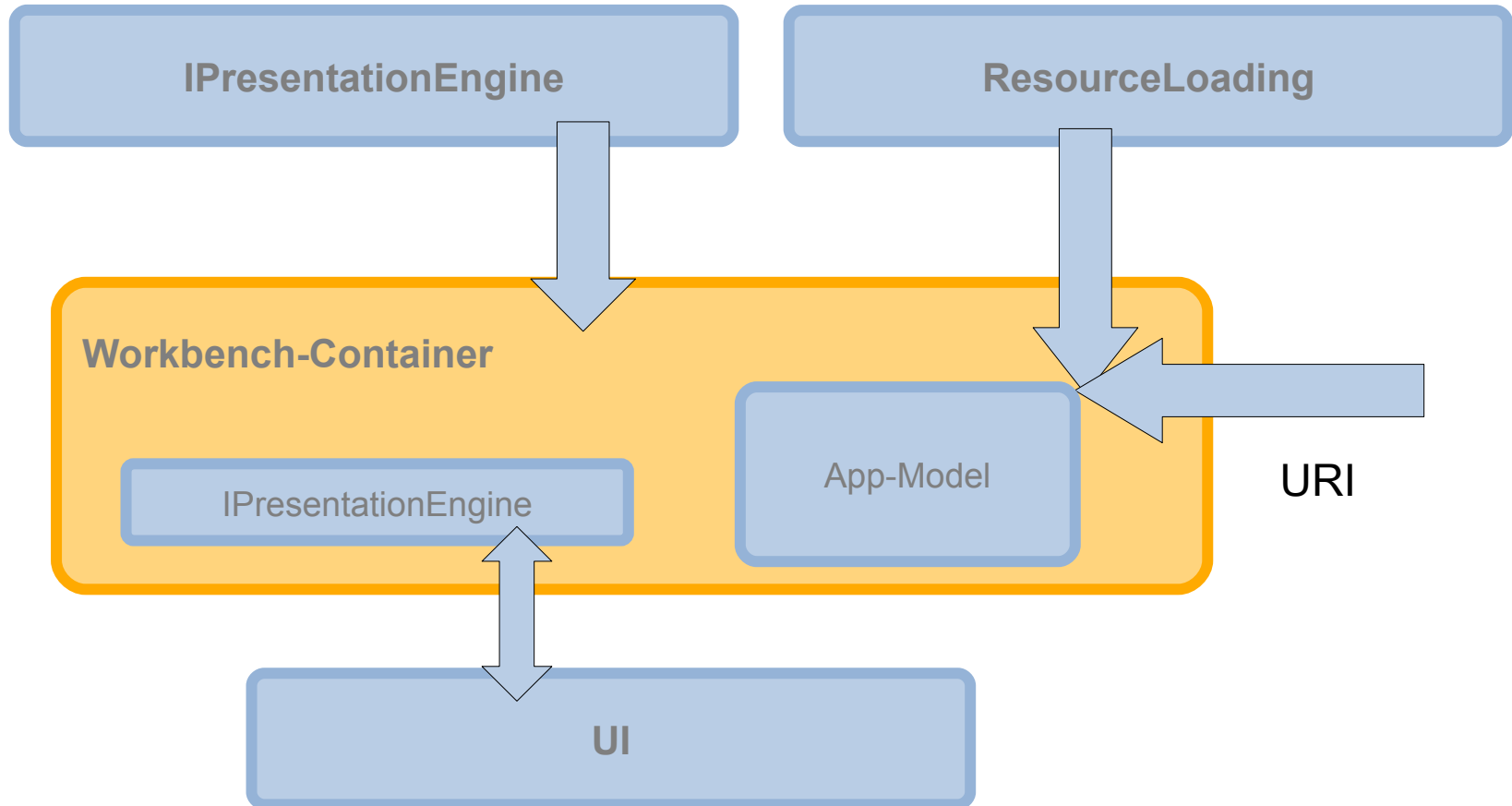
tom.schindl@ufacekit.org

Homepage

http://www.ufacekit.org

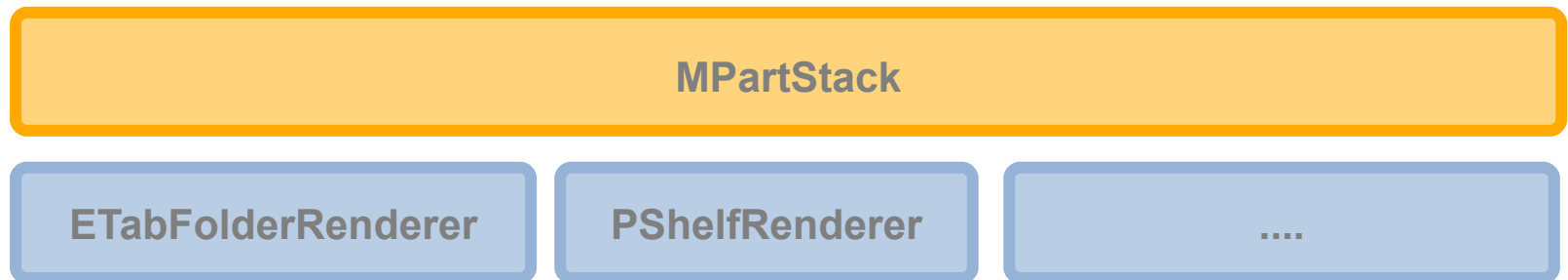
LinkedIn

e4 – Everything is a service



e4 – SWT Renderer

- **Default Presentation Engine provided by E4**
 - Based on SWT
 - Extensible by plug in your own renderers
- **One Appmodel Element multiple renderers**



e4 – SWT Renderer

■ Enhancing the renderers

The screenshot displays a graphical user interface for a contact management application. It is divided into two main panels. The left panel, titled 'Contacts List', contains a table with two columns: 'First name' and 'Last name'. The table lists four contacts: Tom Schindl, Udo Rader, Bernd Reitmair, and Magdalena Bauer. The contact 'Tom Schindl' is highlighted. The right panel, titled 'Details', shows the form for editing the selected contact. It is organized into sections: 'General' (Firstname: Tom, Last name: Schindl, Company: BestSolution.at Systemhaus Gmbh, Comment:), 'Business Address' (Street: Eduard-Bodem-Gasse 5-7, City: Innsbruck, Zip: 6020, State/Province: Tyrol, Country: Austria), 'Business Phone' (Phone: +43 512 93 58 34, Mobile: +43 676 323 21 47), and 'Business Internet' (E-Mail: tom.schindl@ufacekit.org, Homepage: http://www.ufacekit.org, LinkedIn:).

First name	Last name
Tom	Schindl
Udo	Rader
Bernd	Reitmair
Magdalena	Bauer

Details

General

Firstname:

Last name:

Company:

Comment:

Business Address

Street:

City:

Zip:

State/Province:

Country:

Business Phone

Phone:

Mobile:

Business Internet

E-Mail:

Homepage:

LinkedIn:

e4 – SWT Renderer

■ Enhancing the renderers

The screenshot displays the e4 SWT Renderer application window. The interface is divided into two main panes: 'Contacts List' on the left and 'Details' on the right. The 'Contacts List' pane contains a table with two columns: 'First name' and 'Last name'. The 'Details' pane shows a form for editing a contact, with fields for 'General', 'Business Address', 'Business Phone', and 'Business Internet' information.

Contacts List

First name	Last name
Tom	Schindl
Udo	Rader
Bernd	Reitmair
Magdalena	Bauer

Details

General

Firstname: Tom
Last name: Schindl
Company: BestSolution.at Systemhaus Gmbh
Comment:

Business Address

Street: Eduard-Bodem-Gasse 5-7
City: Innsbruck
Zip: 6020
State/Province: Tyrol
Country: Austria

Business Phone

Phone: +43 512 93 58 34
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e4 – Open Social Gadgets

■ What are OpenSocialGadgets

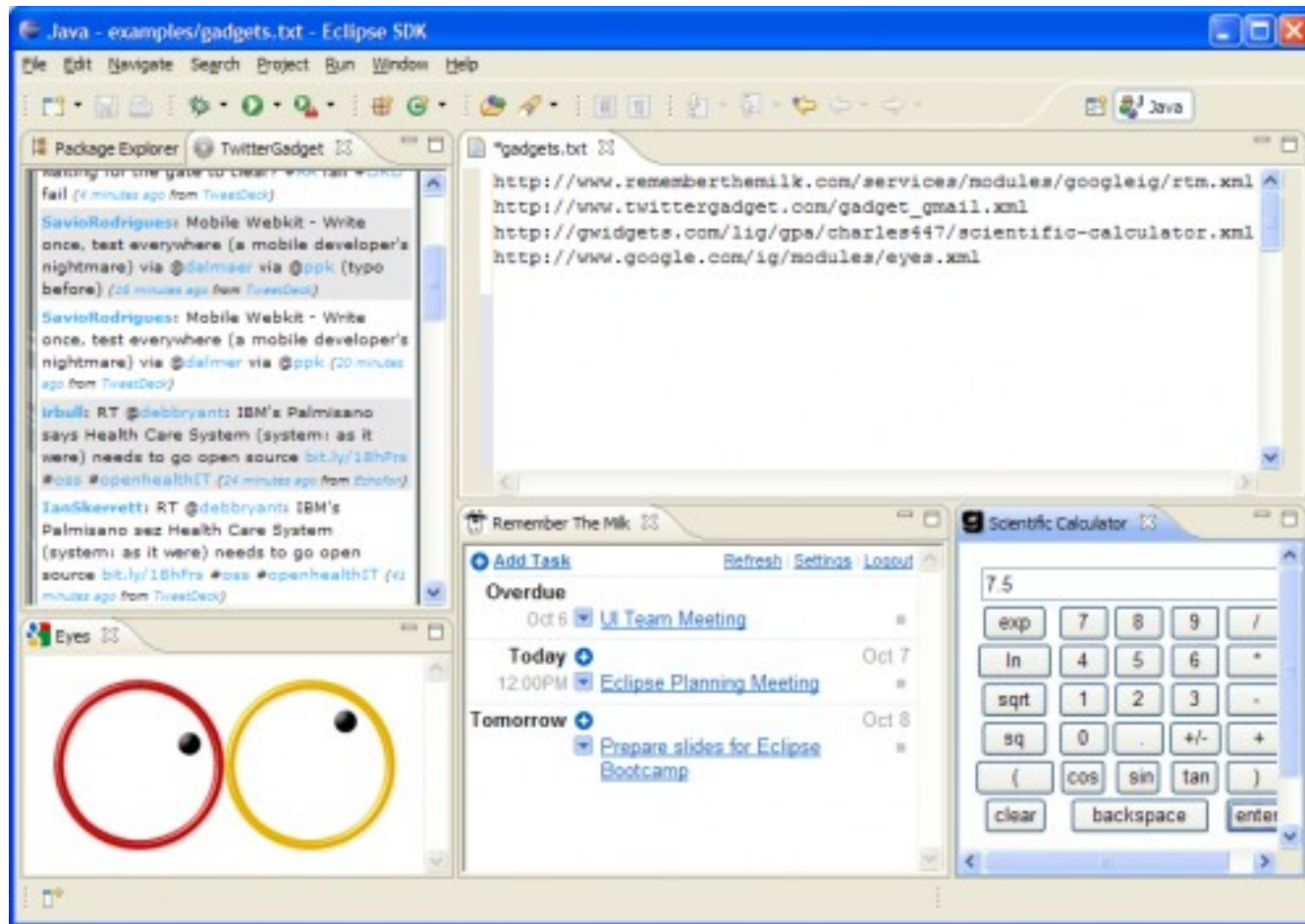
Gadgets are web-based software components based on HTML, CSS, and JavaScript.

■ Open Eclipse for a new set of developers

■ Examples

- Remember the Milk <http://www.rememberthemilk.com>
- Twitter Gadget
- ...

e4 – Open Social Gadgets



e4 – Additional Areas

- **XWT**
 - Based upon XAML concepts
 - Provides Visual Designers
- **TM**
 - Modeled UI exploration
- **Language support**
 - Write bundles e.g. in JavaScript

THE END