



XWT

Eclipse XML Windowing Toolkit

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Agenda

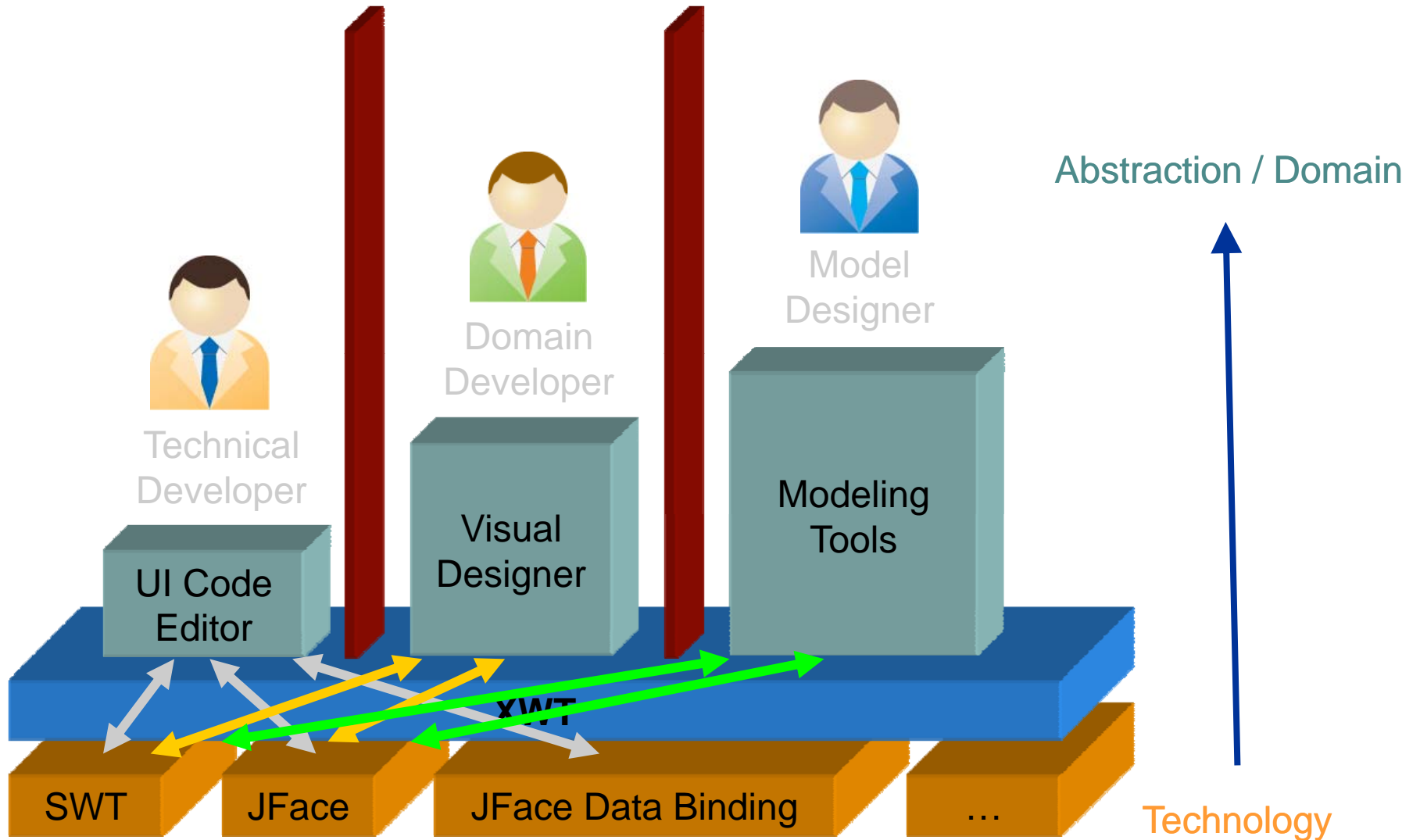
- ⬢ What is XWT?
- ⬢ Architecture
- ⬢ XWT Fundamentals
- ⬢ Demo 1
- ⬢ Binding and Data Binding
- ⬢ Demo 2
- ⬢ Product overview
- ⬢ Q&A

What is XWT?

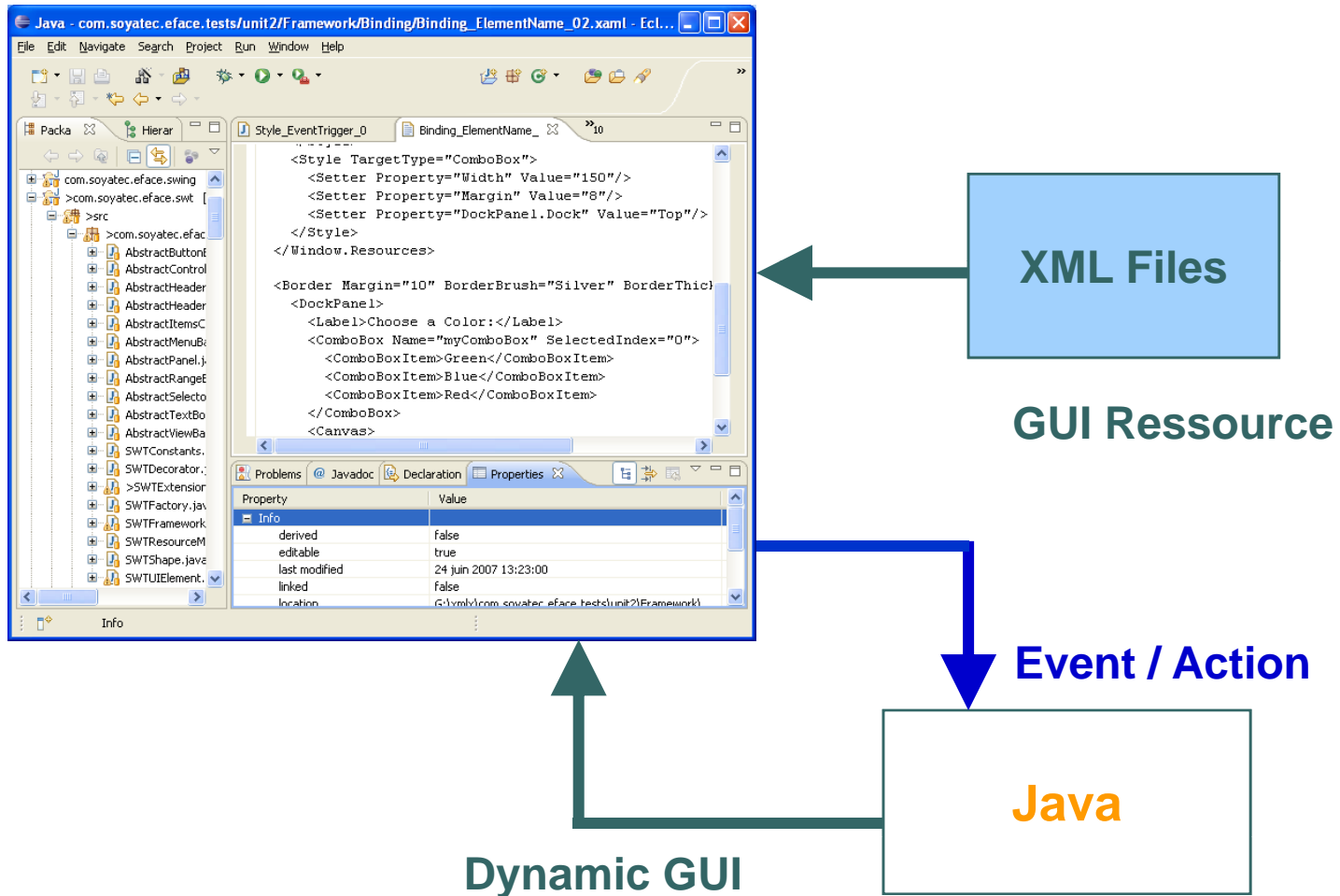
XWT stands for XML Windowing Toolkit. It is a XML based UI declarative solution for eclipse.

XWT targets to be a UI Presentation Foundation for eclipse by providing:

- A common infrastructure that enables UI tools to work together
- Component assembling application development environment



Architecture



Architecture

UI Presentation is to handle an interaction between users and data.

- Reusable and Embeddable
- Clear separation between public description and implementation

A presentation unit consists of 4 aspects

- UI views - XML
- Controlers - Java
- Metadata
- Data context

XWT Fundamentals

Hello, world!

XML

```
<Shell xmlns="http://www.eclipse.org/xwt/presentation"
      Text="Appearance">
  <Shell.layout>
    <FillLayout/>
  </Shell.layout>
  <Button Text="Hello world!"/>
</Shell>
```



Java

```
Shell shell = new Shell();
shell.setText("Appearance");
Shell.setLayout(new FillLayout());
Button button = new Button(shell, SWT.PUSH);
Button.setText("Hello world!");
```



XWT Fundamentals

Event Handling

XML

```
<Shell xmlns="http://www.eclipse.org/xwt/presentation"
       xmlns:x="http://www.eclipse.org/xwt"
       x:Class="ui.Handler"
       Text="Event handling">
  <Shell.layout>
    <FillLayout/>
  </Shell.layout>
  <Button SelectionEvent="onClick" Text="Click here"></>
</Shell>
```



Java

```
package ui;
import org.eclipse.swt.Event;
public class Handler {
    public void onClick(Event event) {
        System.out.println("Hello world!");
    }
}
```



Demo 1

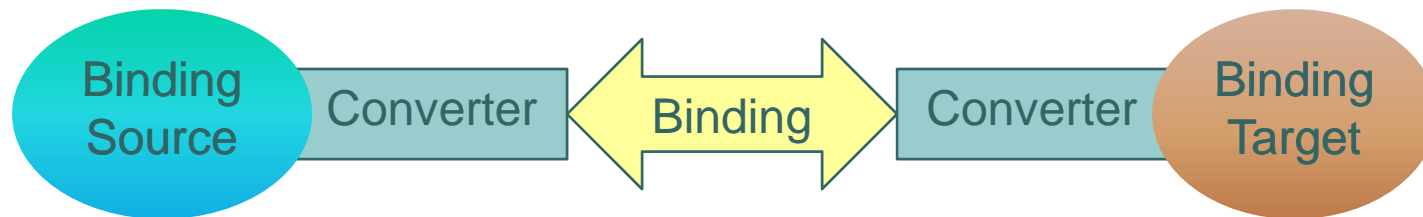
- UI Development
- Event management

Purpose of this demo

- Get overview of XWT concept
- familiar with XWT development environment

Binding & Data Binding

- ❖ XWT Binding Expression language
 - ❖ Data binding
 - ❖ Element binding
 - Reference between element by name
- ❖ Based on Eclipse Data Binding engine
 - ❖ Data conversion
 - ❖ Data validation
 - ❖ Automatic update in two directions



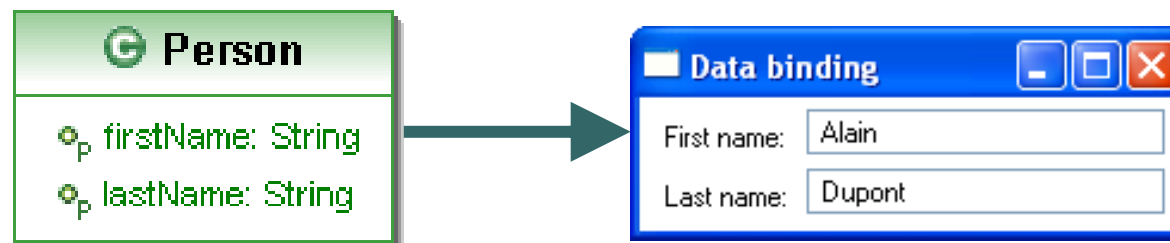
Data Binding

XML

```
<Shell
  xmlns="http://www.eclipse.org/xwt/presentation"
  Title="Data binding">
  <Shell.layout>
    <GridLayout numColumns="2" />
  </Shell.layout>

  <Label Text="First name:" />
  <Text text="{Binding Path=FirstName}" />
  <Label Text="Last name:" />
  <Text text="{Binding Path=LastName}" />
</Shell>
```

Data Context
Person



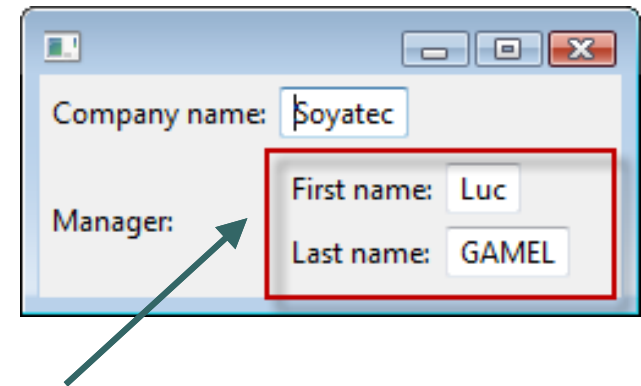
Component & Data Context Management

XML

```
<Composite
  xmlns="http://www.eclipse.org/xwt/presentation"
  xmlns:x="http://www.eclipse.org/xwt"
  xmlns:j="clr-namespace:ui">
  <Composite.layout>
    <GridLayout numColumns="2"/>
  </Composite.layout>

  <Label Text="Company name:" />
  <Text Text="{Binding Path=Name}" />

  <Label Text="Manager:" />
  <j:PersonView dataContext="{Binding
    Path=Manager}" />
</Composite>
```

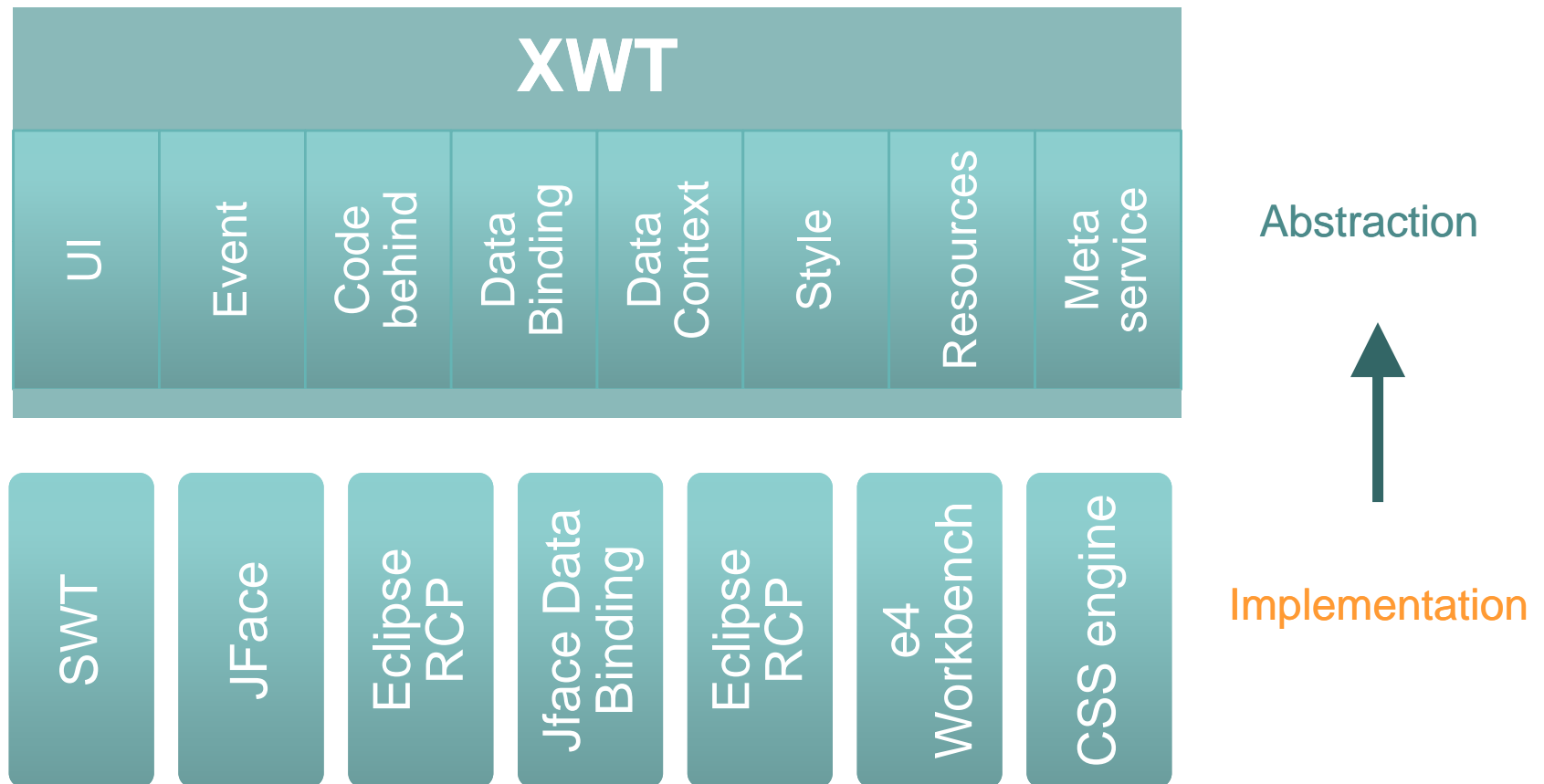




Demo 2

- ⬢ Data Binding
- ⬢ e4 Contact demo

Product overview





Q&A

