

Responsive HTML5 single Page Apps



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Topics for Today

- Scout Intro
- Resources to get started

Exercises

1. «Hello World» add Form Fields
2. «Hello World» add your Theme
3. «Contacts» add your Entity (the big one ...)

Intro

What is Scout?

Business Application Framework

- Based on **Java** and **HTML5**
- **Multi Device** support, **Modular** Apps, ...

Framework Goals

- **Long Term** Strategy (enterprise apps live > 10 years)
- Boosts **Productivity** (producing software in Switzerland ...)
- **Easy** to learn (new team members productive in 1-2 weeks)

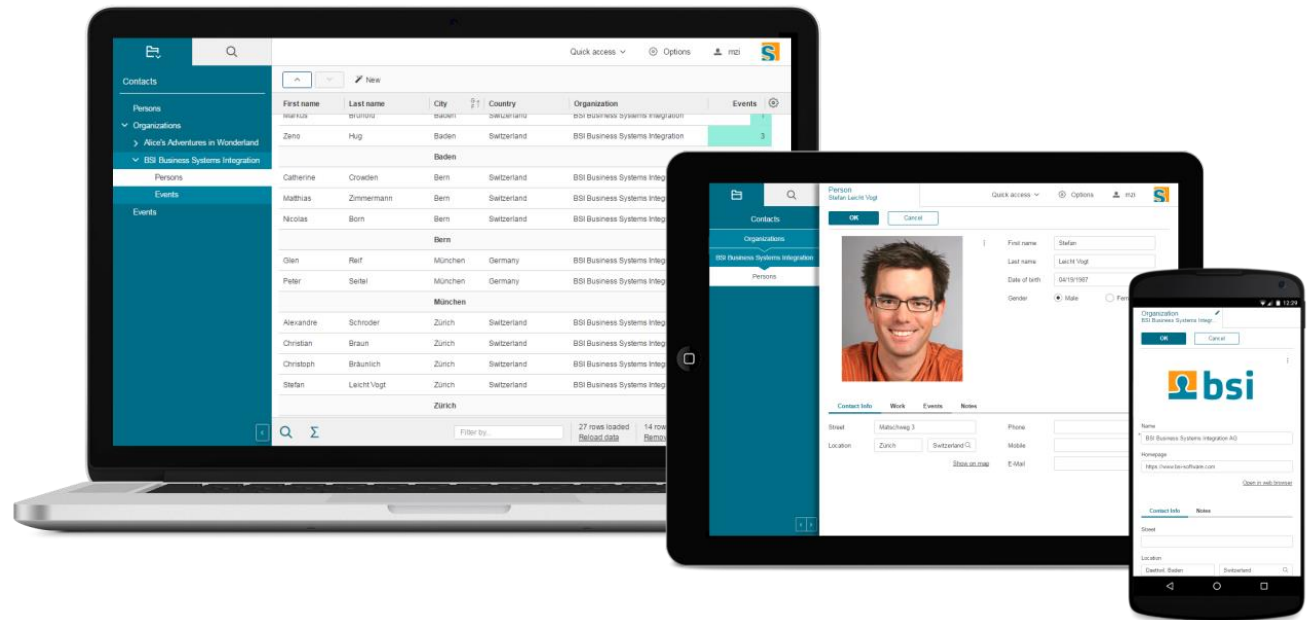
Framework Features

- Multi Device Support
- Modular Applications
- Java Application Model
- HTML5 Rendering

Multi Device Support

Single Code Base

- ➔ Desktop
- ➔ Tablet
- ➔ Mobile



Modular Applications

Clean Modularization

- Layers - Technical Modules
- Slices - Business Modules

Scout Application Model

Java Application Model

- Clean Business Code
- Long Term Maintainability

First name

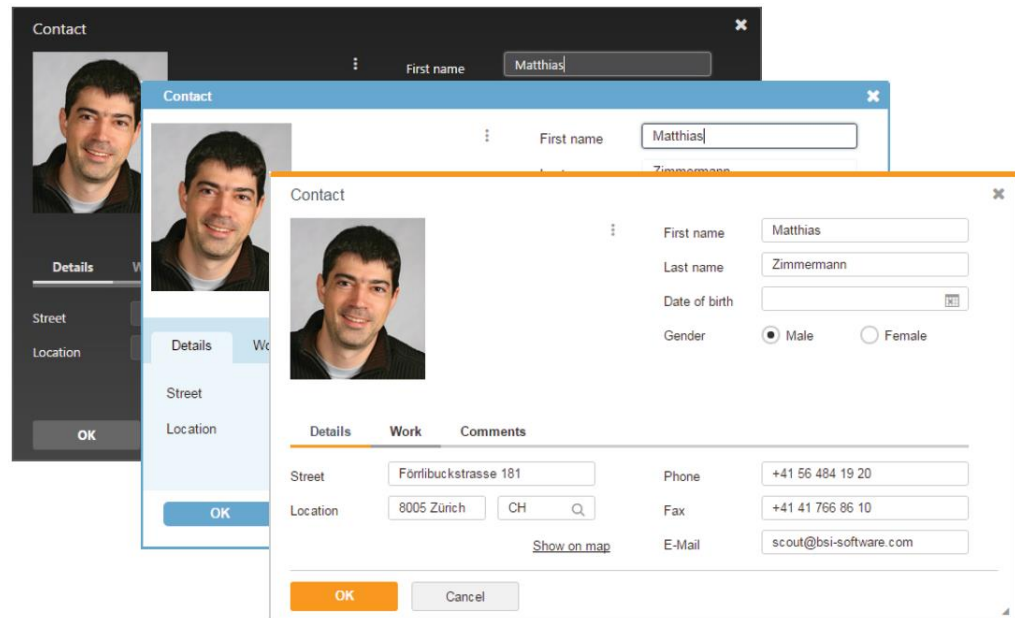
```
@Order(10)
public class FirstNameField extends AbstractStringField {

    @Override
    protected String getConfiguredLabel() {
        return TEXTS.get("FirstName");
    }
}
```


HTML5 Rendering

Current Standards

- HTML5, CSS3, JavaScript
- Styling and Theming



2 Lessons for the Future

Two Lessons for the Future

- UI Technologies are «short-lived»
- Scout Code is maintainable

UI Technologies are «short-lived»

Scout UI Technologies

- 2002 Swing
- 2006 SWT
- 2011 RAP
- 2015 HTML5

Substantial Framework Efforts

New UI Technology every 4 years

Minor Project Efforts

Usually < 3% of Project Codebase affected

JavaServer Fac...
Thema

Google Web To...
Software

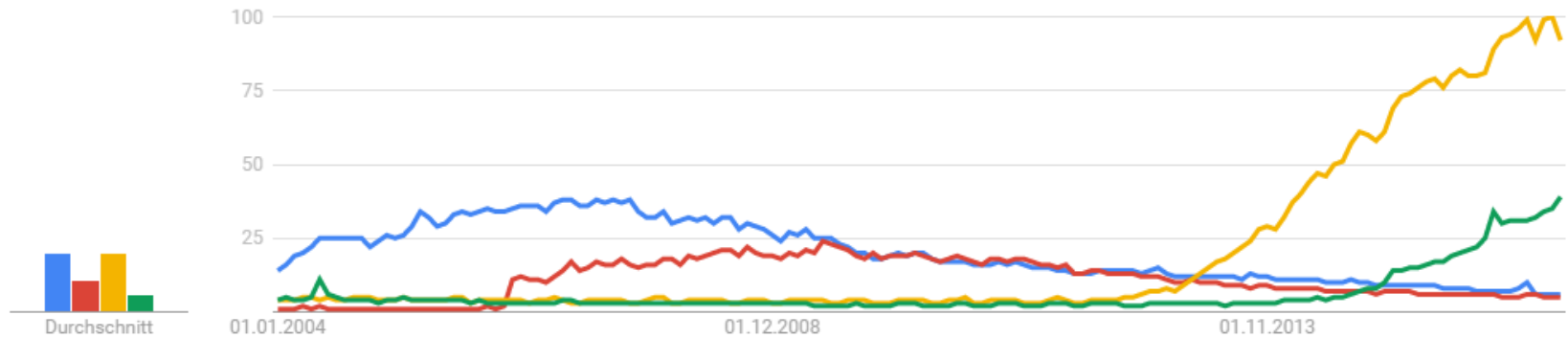
AngularJS
Software

React
JavaScript



Weltweit | 2004 - heute | Alle Kategorien | Websuche

Interesse im zeitlichen Verlauf



«Today's Trend is tomorrow's Legacy»

UI Dos and Don'ts

Don'ts

- Don't mix UI Technology and business code
- Don't «marry» specific UI Technologies

Dos

- Think long Term
- Abstract UI Technologies
- Use a Framework like Scout that enforces this Abstraction

Scout Code is Maintainable

Example: BSI CRM

- Based on Scout since 1999
- Scout defines an Application Model
- BSI CRM is based on this Model
- Screenshots over Time ...

... 1999



... 2002

The screenshot shows the 'ors X' application window. At the top, there is a menu bar with 'Datei' and 'Extras'. Below it is a toolbar with icons for 'Standardsicht', 'Eigene Sicht', 'Mgmt Reports', 'Marketing', 'Intern', and 'Stammdaten'. The main area is divided into a left sidebar, a top table, and a bottom details form.

Table Data:

Kennwort	Termin	Erledigt am	Verantwortlich	Projekt	Firma	Kontaktperson	Telefon
unterlagen bsi und projektsteuerung in orsZi	20.07.2004		Schmidt, Daniel		ARXES	Arndt, Detlef	+49 30

Details Form:

Kennwort:
Termin von: bis:
Erledigt am von: bis:
Verantwortlich:
Registriert von:
Pendenztyp:
 Nur hohe Priorität
 Offene
 Erledigte

Logo Overlay: A white box containing the Java logo (a red swirl) and the text 'JAVA™' in red, followed by the XML symbol '<xml />' in blue.

At the bottom left, it says '1 Datensatz'. At the bottom right, there are buttons for 'Zurücksetzen' and 'Suche'.

... 2005

The screenshot shows a Java application window titled "BSI: BSI AG". The interface includes a menu bar, a toolbar, and a sidebar with a tree view. The main area displays a table of company data. Overlaid on the interface are the Eclipse IDE logo and the Java logo with the text "<xml />". A search dialog is also visible at the bottom.

Firmenkurzname	Firmenname	Firmen-Nr.	Telefon	PLZ	Ort	Land	Region	Branche
BA BSI	Signalling	257	0046 9 691 9501	12096	Stockholm	Schweden	Europa	Industrie
BSI BADEN	BSI Business Systems Integ...	1	055 484 19 20	5405	Dakwei AG	Schweiz	Europa	Informatk.
BSI USA	BSI Business Systems Integ...	583	+1 308 252 0300	NJ 088...	Somerville	U.S.A.	Armenka	Informatk.
BSI ZUG	BSI Business Systems Integ...	2	055 484 19 20	6340	Beer	Schweiz	Europa	Informatk.

Eclipse 3.0 THE ECLIPSE PROJECT

Java <xml />

Firmen suchen

Firma:

Firmenkurzname:

Firmenname:

Firmen-Nr.:

Hauptbetriebsort:

Region:

Rating:

Sprache:

Konzernstruktur:

Installierte Basis:

aktive Firmen

inaktive Firmen

Buttons: Firma, Detail, Hauptadresse, Person, Interaktion, Sonderabfrage, Suche, Zurücksetzen

... 2007

The screenshot shows a web-based CRM application titled "BSI CRM". The interface includes a menu bar with "Datei", "Extras", "Prozesse", and "Favoriten". A secondary navigation bar contains icons for "Standardsicht", "Eigene Sicht", "Reports", "CPM", "Marketing", "Contact Center", "Human Resources", "Administration", and "Schnittstellen".

The main content area is divided into three sections:

- Contact Center:** A tree view on the left showing categories like "Geschäftsvorfälle", "Alle", "Eigene", "<Nicht identifiziert>", "Hug, Daniel (I-SOLUTIONS)", "Eskalierter", "Know-How", "Virtuelle Teams", "Prozessverwaltung", and "Statistiken".
- Prozess wählen - 11.04.09 11:25:** A central area with a "Detail" form containing input fields for "Nachname", "Vorname", "PLZ", and "Ort".
- Process Flow:** A vertical list of steps on the right: "1 Person wählen" (highlighted in orange), "2 Kundenübersicht", "3 Kundenidentifikation", "4 Prozess wählen", and "5 Prozessschritte unbekannt".

Overlaid on the center is a dialog box for "eclipse GALILEO". It features the Java logo on the left and the Eclipse Galileo logo on the right. Below the Eclipse logo is a copyright notice: "(c) Copyright Eclipse contributors and others, 2000, 2009. All rights reserved. Java and all Java-related trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. or other countries, or both. Eclipse is a trademark of the Eclipse Foundation, Inc."

At the bottom of the application, there are buttons for "Telefon", "Abbrechen", "Weiter", and "Abschliessen".

Eclipse Scout 2011

The screenshot shows the Eclipse Scout 2011 web application interface. The top navigation bar includes tabs for 'Standard view', 'Personal view', 'Reports', 'Marketing', 'Contact Center', 'Human Resources', 'Administration', 'CPM', and 'BSI IT'. A search bar and utility icons are also present.

The left sidebar contains a tree view with the following structure:

- Companies
 - BSI BADEN
 - Corporate structure
 - Contact person
 - Mandates
 - Relationships
 - Targeting plan
 - Projects
 - Marketing
 - Installed basis
 - Payments
 - Tickets
 - Business cases
 - Activities
 - Tasks
 - Persons
 - Projects
 - Tickets
 - Activities
 - Tasks
 - Documents

The main content area displays a table with the following columns: Name, Given name, Language, Main account manager, Phone, Mobile phone, and E-mail. The table contains 15 rows of contact data.

Name	Given name	Language	Main account manager	Phone	Mobile phone	E-mail
Fleseriu	Gabriel	Deutsch	Pedersen, Morten	+41 (56) 484 1...	+41 (79) 321 ...	gabriel.fleseriu@bsiag.com
Frei	Pascale	Deutsch	Isler, Claudia	+41 (56) 484 1...	+41 (79) 474 ...	pascale.frei@bsiag.com
Funk	Uwe	Deutsch	Pedersen, Morten	+41 (56) 484 1...	+41 (78) 920 ...	uwe.funk@bsiag.com
Geissmann	Matthias	Deutsch	Bernold, Martin	+41 (56) 484 1...		matthias.geissmann@bsia...
Gerhard	L David					lavid.gerhard@bsiag.com
Guglielmo	L audio					l audio.guglielmo@bsiag.c...
Hansen	Anders					nders.hansen@bsiag.com
Heymanns	Volger					olger.heymanns@bsiag.c...
Hilpert	Justav					justav.hilpert@bsiag.com
Hitz	Oger					oger.hitz@bsiag.com
Hochuli	Nuriel					nuriel.hochuli@bsiag.com
Hoegger	Andreas					andreas.hoegger@bsiag.c...
Huber	Mark					mark.huber@bsiag.ch
Hug	Eno					eno.hug@bsiag.com
Huws	Simon					ion.huws@bsiag.com
Isler	Claudia					l audia.isler@bsiag.com
Kirn	Revin					evin.kirn@bsiag.com
Koeflerli	Bruno					bruno.koeflerli@bsiag.com
Kristiansen	Sigrid					sigrid.kristiansen@bsiag.c...
Kristiansen	Ulrik					ulrik.kristiansen@bsiag.com
Leicht	Stephan					stephan.leicht@bsiag.com
Lenz	Alberto					alberto@lenz.net
Meer	Astrid					astrid.meer@bsiag.com
Merkli	Stephan					stephan.merkli@bsiag.com
Mittmann	Johannes Max					max.mittmann@bsiag.com
Mortasawi	Mazda					mazda.mortasawi@bsiag.c...
Moser	Adrian					adrian.moser@bsiag.com
Moser	Samuel					samuel.moser@bsiag.com

The central overlay features the following logos:

- Scout logo: A stylized 'S' in blue and orange.
- Java logo: The Java logo with a red flame above the word 'Java' in red.
- Eclipse logo: The Eclipse logo with a blue sphere and the word 'eclipse' in white.

At the bottom of the table, it indicates '85 objects, 1 selected'.

Eclipse Scout 2012

The screenshot displays the Eclipse Scout 2012 web application interface. The browser address bar shows the URL: [https://services.bsiag.com/bsicrm/web#com.bsiag.crm.client.core.desktop.PersonalOutline-Zimmermann-Matthias-\(BSI-Z%3%9CRICH\)-Persons-Leicht-Vogt-Stephan-\(BSI-BADEN\)](https://services.bsiag.com/bsicrm/web#com.bsiag.crm.client.core.desktop.PersonalOutline-Zimmermann-Matthias-(BSI-Z%3%9CRICH)-Persons-Leicht-Vogt-Stephan-(BSI-BADEN)). The main content area shows a 'Person' profile for 'Leicht Vogt, Stephan' from 'BSI BADEN'. A modal dialog box is overlaid on the profile, featuring the logos for Scout (a stylized 'S' in orange and blue), Java (the red Java logo), RAP (Rich Ajax Platform), and Eclipse. The dialog also contains a 'Person' form with fields for Name, First name, Company, and Main representative, along with an 'Active' checkbox. At the bottom of the dialog, there are 'OK' and 'Cancel' buttons. The background shows a navigation tree on the left and a list of tasks on the right.

Eclipse Scout 2015/16

The screenshot displays the Eclipse Scout CRM interface. The browser address bar shows the URL <https://services.bsi-software.com/bsicrm/>. The left sidebar contains a navigation menu with categories like 'Firmen', 'Personen', 'Aufträge', and 'Aufgaben'. The main content area shows the profile for 'Firma ECLIPSE FOUNDATION', managed by 'Person Stephan Leicht Vogt (BSI BA...)'. The profile includes fields for 'Kurzname' (ECLIPSE FOUNDATION) and 'Name 1' (Eclipse Foundation Inc.). A large image displays logos for Eclipse Scout, Java, HTML5, CSS3, and JavaScript. Below the image, there are tabs for 'Adressen', 'Bemerkungen', 'Informationen', 'Marketing', 'Finanzielle Daten', 'Dokumente', and 'Anderungen'. The 'Adressen' tab is active, showing contact information: Fax (+1 (613) 224-5172), E-Mail (info@eclipse.org), Website (www.eclipse.org), and Address (Eclipse Foundation Inc., 102 Centrepoin Drive, Ottawa, Ontario, K2G 6B1). The address form also includes fields for 'Adresszusatz 1', 'Adresszusatz 2', 'Postfachbezeichnung', and 'Postfachnummer'.

BSI CRM - mzi
https://services.bsi-software.com/bsicrm/

Daten

Firmen

Personen

Stephan Leicht Vogt (BSI BADEN)

BSI BADEN (Ansprechpartner)

Firmen

Betreuung

Netzwerk

Aufträge

Marketing

Zahlungen

Tickets

Geschäftsvorfälle

Kommunikationen

Aufgaben

Aufträge

Tickets

Geschäftsvorfälle

Kommunikationen

Aufgaben

Dokumente

Firma
ECLIPSE FOUNDATION

Person
Stephan Leicht Vogt (BSI BA...)

Assistent

Telefon

Matthias Zimmermann

Speichern

Abbrechen

Prüfung auf Doublette vornehmen

Kurzname * ECLIPSE FOUNDATION

Name 1 * Eclipse Foundation Inc.

Name 2

Nummer

Sprache

Rating

Segmente

Bee

Firm

Key

Kon

Adressen

Bemerkungen

Informationen

Marketing

Finanzielle Daten

Dokumente

Anderungen

Fax
Bevorzugt +1 (613) 224-5172

E-Mail
Bevorzugt info@eclipse.org

Website
Bevorzugt www.eclipse.org

Anschrift
Bevorzugt Eclipse Foundation Inc.
102 Centrepoin Drive
Ottawa, Ontario, K2G 6B1

Adresszusatz 1

Adresszusatz 2

102 Centrepoin Drive

Postfachbezeichnung

Postfachnummer

* CA

K2G 6B1

Ottawa

Scout Code is Maintainable

Example: BSI CRM

- Based on Scout since 1999
- Scout defines an Application Model
- BSI CRM is based on this Model

Observations

- CRM Code was never thrown away
- Migrations from Tech-Stack to Tech-Stack
- Scout had a big Part in this

Get Started

[Beginner's Guide](#)

[Technical Guide](#)

[Wiki](#)

Eclipse Scout

Future Proof Business Applications

- 2.2. Create a new Project
- 2.3. Run the Initial Application
- 2.4. Export the Application
- 2.5. Deploy to Tomcat
- 3. Scout Tooling
 - 3.1. Motivation for the Tooling
 - 3.2. Eclipse IDE tooling
 - 3.3. Scout SDK Overview
 - 3.4. Scout Wizards
 - 3.5. Scout Content Assistance
 - 3.6. Scout NLS Tooling
- 4. A One Day Tutorial
 - 4.1. The "Contacts" Application
 - 4.2. Tutorial Overview
 - 4.3. Setting up the Initial Project
 - 4.4. Adding the Person and Organization Page
 - 4.5. Creating and Accessing the Database

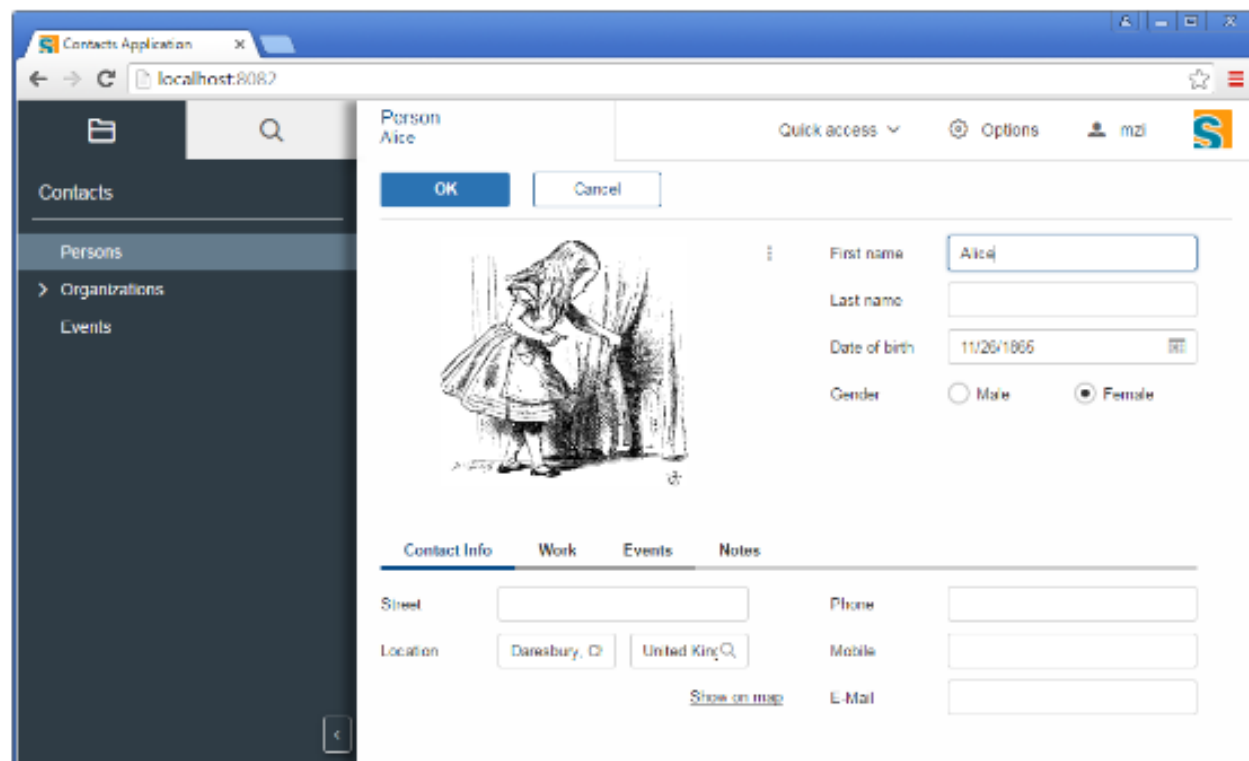


Figure 22. The "Contacts" application with a person opened in a form.

4.2. Tutorial Overview

This tutorial walks you through the implementation of a Scout application consisting of a frontend and a backend application. The frontend application contains outlines with navigation trees, pages to present information in tabular form and forms to view and edit data.

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Introduction

1. Overview

2. Scout Platform

2.1. Application Lifecycle

2.2. Class Inventory

2.3. Bean Manager

2.4. Configuration Management

2.5. Testing

3. Texts

3.1. Text properties files

3.2. Text Provider Service

4. Icons

5. Lookup Call

5.1. Description

5.2. Input

5.3. Members

5.4. Type of lookup calls

6. Code Type

6.1. Description

Eclipse Scout: Technical Guide

Scout Team – scout-dev@eclipse.org – Version 6.0

Introduction

This technical guide documents the Scout architecture and describes important concepts used in Scout.



This document is not complete. Contributions are welcome!

If you like to help, please create a pull request.

Thanks!

Repository:

<https://github.com/BSI-Business-Systems-Integration>



This repository Search

[Pull requests](#) [Issues](#) [Gist](#)BSI-Business-Systems-Integration-AG / [org.eclipse.scout.docs](#)forked from [eclipse/org.eclipse.scout.docs](#)

Unwatch 35

Code

Pull requests 0

Projects 0

Pulse

Graphs

Settings

Scout project documentation — Edit

861 commits

29 branches

55 releases

Branch: releases/6.1.x

New pull request

Create new file

Upload files

Find

This branch is 858 commits ahead of eclipse:master.



judithgull remove unnecessary fielddata

Latest

code

remove unnecessary fielddata

docs

Document "preventInitialFocus" property

license_files

update license headers

chall_scripts

shellscript correction

Eclipse Community Forums

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	Topic	Replies	Views	Last message
	Doubts operation By: Nelson Florez on Mon, 17 October 2016	2	2315	Wed, 19 October 2016 13:24 By: Nelson Florez ↕
	PlannerField in 6.0 By: Stefan Mutschler on Sun, 16 October 2016	1	1084	Mon, 17 October 2016 22:27 By: Stefan Mutschler ↕
	[neon] M6 mobile support By: René Eigenheer on Thu, 31 March 2016	30	17401	Fri, 14 October 2016 03:22 By: Peter Pfeifer ↕
	[neon] Login page fails to show for french By: Urs Beeli on Mon, 29 August 2016	6	1287	Wed, 12 October 2016 14:29 By: Urs Beeli ↕



TWEETS 885 FOLLOWING 110 FOLLOWERS 293 LIKES 26 MOMENTS 0

Edit profile

Scout Framework

@EclipseScout

Boost your productivity. Framework and tooling for writing business applications.

- Switzerland
- eclipse.org/scout
- Joined November 2009

129 Photos and videos



Tweets Tweets & replies Media



Scout Framework @EclipseScout · 5h

the style.css is EPL you may do with it what fits your needs ;-)

Jay Jay Billings @jayjaybillings

@EclipseScout Is there a license for the style.css file at eclipse.org/scout? I would like to modify/reuse it for #eclipseice's site.



You Retweeted

Exercise 1

«Hello World» add Form Fields



File

Favorites

Help



Work

Hello World

Message from Server

Message

Hello mzi!

Server Time

10/20/2016

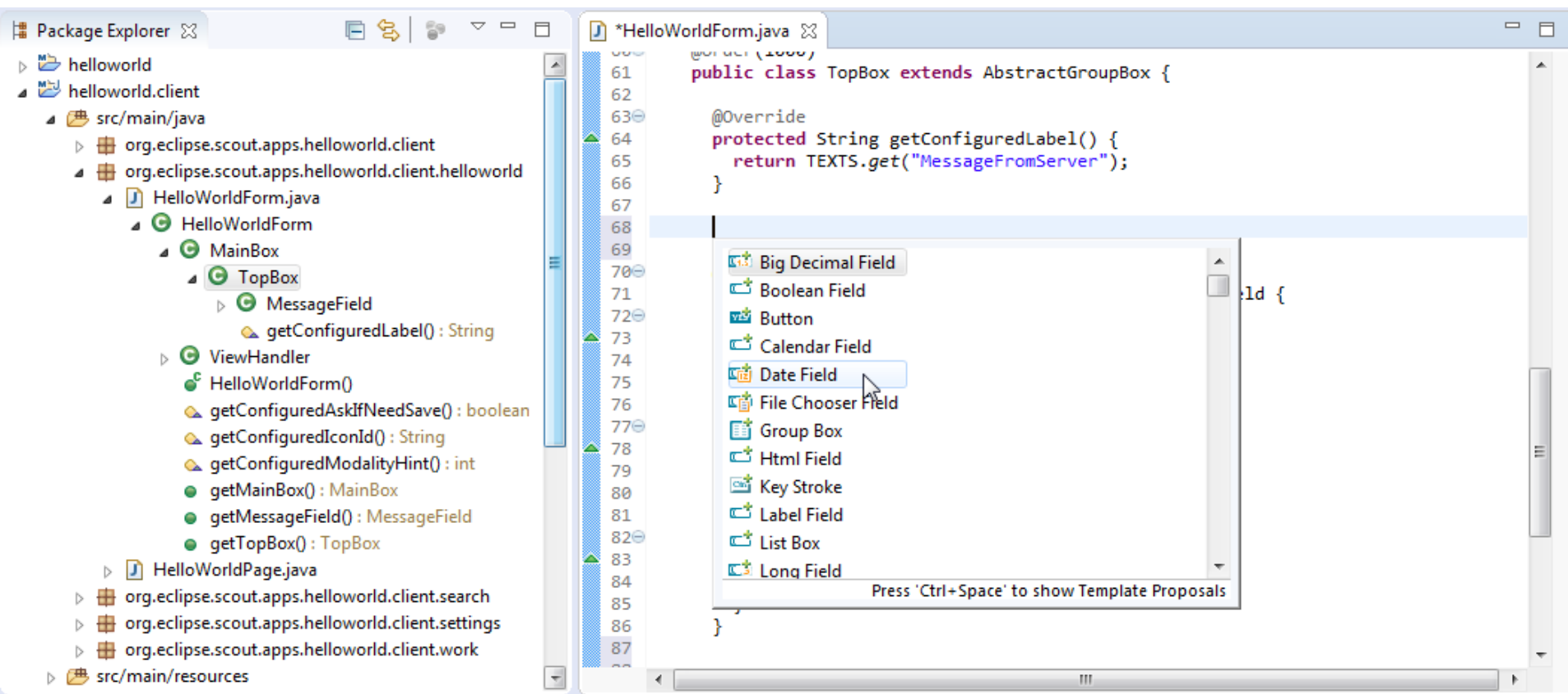


23:04 PM



Show Time





1. Find form class
2. Find layout container class
3. Position cursor at location to add the field
4. Use Content Assist <Ctrl><Space>
5. Select form field type and fill in boxes
6. Update the form service method

Exercise 1: Add Form Fields

Recommended

- Add `DateTimeField` «**ServerTime**»
 - Overwrite `getConfiguredGridW`
 - Set the current time in the form service method `load`
- Add `BooleanField` «**ShowTime**»
 - Overwrite `execChangedValue` to control visibility of time field. **Hint**: `getServerTimeField().setVisibility(...)`

Optional

- Add some more fields
- Change rendering to tablet or mobile. **Hint**: Use browser developer tools (e.g. <Ctrl><Shift><i> with Chrome)

Exercise 2

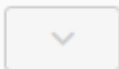
«Hello World» add your Styling



File

Favorites

Help



Message from Server

Message

Hello mzi!

Normal Text

*

hello

Console Text

> hello



Set text mandatory

Server Time

10/21/2016



1:47 PM



Show Time



Scout Styling and Theming

Technology

→ **CSS3 + Less**

CSS Organisation

- Global Less files (colors, fonts, sizes, ...)
- Component specific Less files (Form, Field, Button...)
- **Optional**: Project specific Less files
- **Themes**: Named set of Less files

«Contacts» Styling Demo

Two Examples

Global Styling

- Globally change application colors, fonts, ...
- Simple and low effort
- **Example**: Color of data fields

Styling of Components

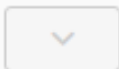
- Change individual elements
- Powerful but more CSS knowledge required
- **Example**: Appearance of dialogs



File

Favorites

Help



Message from Server

Message

Hello mzi!

Normal Text

*

hello

Console Text

> hello

Set text mandatory

Server Time

10/21/2016



1:47 PM



Show Time



The screenshot shows an IDE with two main panes. The left pane is the Package Explorer, showing a project named 'helloworld.ui.html'. The project structure includes folders for 'src/main/java', 'src/main/resources', and 'src/main/js'. Under 'src/main/js', there is a 'scout' folder containing 'form', 'style', and 'fields' subfolders. The 'style' folder contains 'colors-application.css' and 'colors-my-theme.css'. The 'fields' folder contains 'FormField-my-theme.css'. Other folders include 'JRE System Library [JavaSE-1.8]', 'Maven Dependencies', 'src', 'target', and 'pom.xml'. The right pane shows the 'config.properties' file with the following content:

```
1### Application theming
2scout.ui.theme=my-theme
3
4### Application Config
5scout.application.version=1.0.0-SNAPSHOT
6scout.application.name=My Application
7
8### Service tunnel
9scout.server.url=http://localhost:8080
10# scout.server.url=http://app-server:8080/helloworld
11scout.auth.privatekey=MD0CAQAwEAYHKOZiZj0CAQYFK4EEAAoEJjAkAgEBBB9TsmjaGpeY2T4XD7kJpaG
12
13### Login Credentials
14scout.auth.credentials=admin:admin;scott:tiger
15scout.auth.credentials.plaintext=true
16
17### Application Data Area
18user.area=${user.home}/org.eclipse.scout.apps.helloworld.html.ui.dev
19
20### Development Settings
21scout.dev.mode=true
22scout.auth.cookie.session.validate.secure=false
23scout.ui.prebuild.files=/index.html,/login.html,/logout.html,/popup-window.html
24
```

1. CSS/Less files in module `helloworld.ui.html` folder `src/main/js`
 2. Global styling CSS files in folder `scout/style`
 3. Component specific CSS in folders `scout/...` (eg. `Scout/form/fields`)
 4. Theme specified in app's `config.properties`
- ➔ Check `org.eclipse.scout.rt.ui.html-6.0.100.RC4.jar` (see Maven dep.)
- ➔ Work with browser's developer (e.g. `<Ctrl><Shift><i>` with Chrome)

Exercise 2: Add your Theme and Style

Recommended

- Add Theme **«my-theme»**
 - Copy `colors-application.css` to `colors-my-theme.css`
 - In `config.properties`, set `scout.ui.theme=my-theme`
- Global Styling: Set navigation background color to **orange**
 - `@navigation-background-color: #FE9A0D;`
- Component Styling: Set form field input color to **blue**
 - Add file `FormField-my-theme.css`
 - `@import (less) "scout/form/fields/FormField.css";`

Optional

- Add fields «Normal Text», «Console Text» and «Set mandatory» and set background for mandatory fields to **yellow**
- Style console text field different to normal text field
 - Hint: Overwrite `getConfiguredCssClass` on console text field

Exercise 3

«Contacts» add your Entity



Quick access ▾

⚙️ Options

👤 mzi



Events



✎ New

✎ Edit

Name

City

Country



Forum am Schlosspark

Ludwigsburg

Germany

> Locations

Location



Name *

San Jose Convention Center

City

San Jose, CA

Country

United States



OK

Cancel



Filter by...

One row loaded
[Reload data](#)

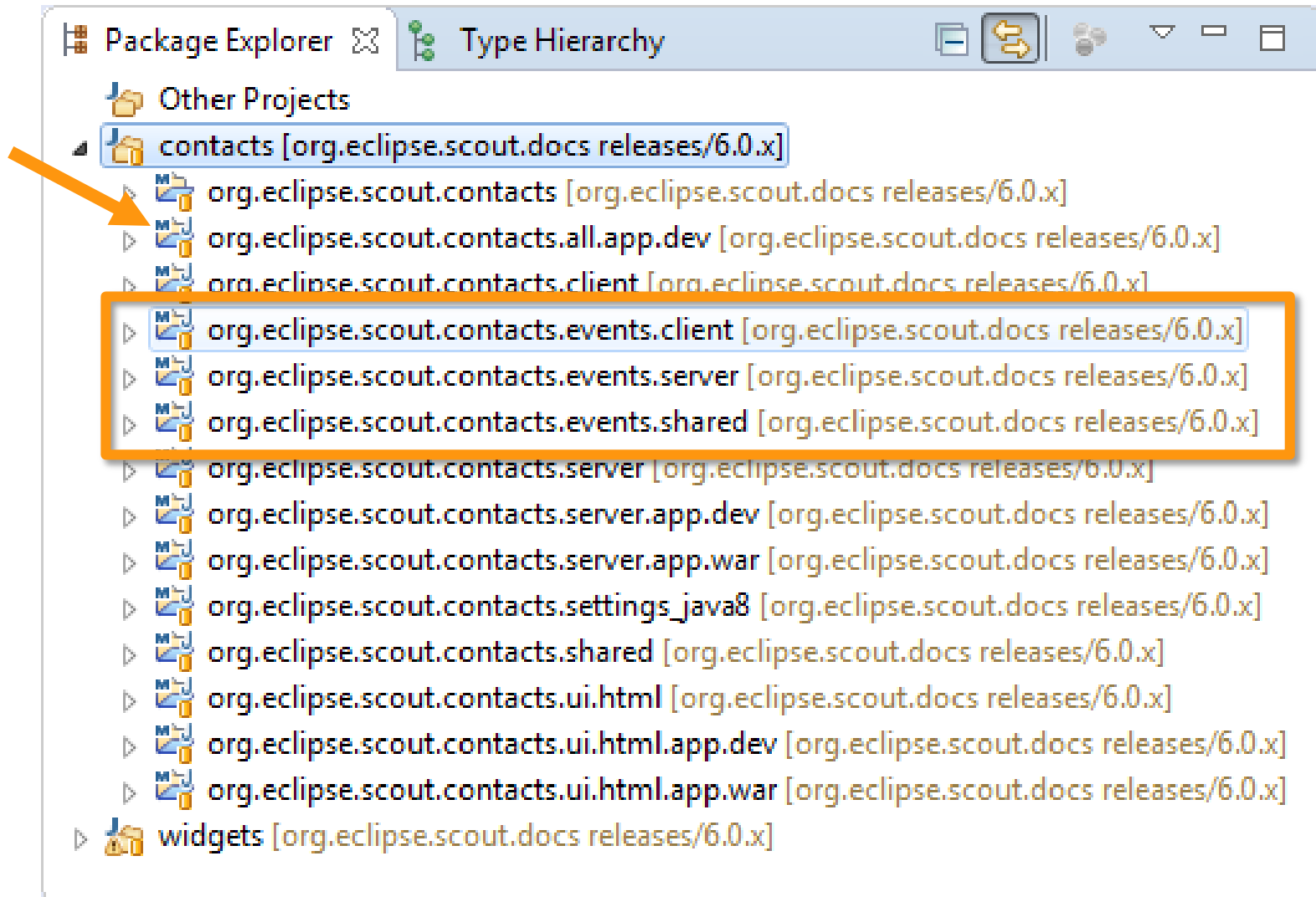
One row selected
[Select none](#)

«Contacts» add your Entity (Page + Form)

Topics

- Install «Contacts»
- Repo Organization
- Exercise Steps in Events Module
 1. Client: Add **LocationTablePage** and Columns
 2. Client: Add **LocationForm**
 3. Client: Add **{New | Edit}Menu** for Location Table Page
 4. Client: Add Form Fields
 5. Server: Implement **LocationService**
.getLocationTableData, .create, .load and **.store**

«Contacts» Repo Organisation





Quick access



Options



mzi



Events



Events

Name

City

Country



> Location

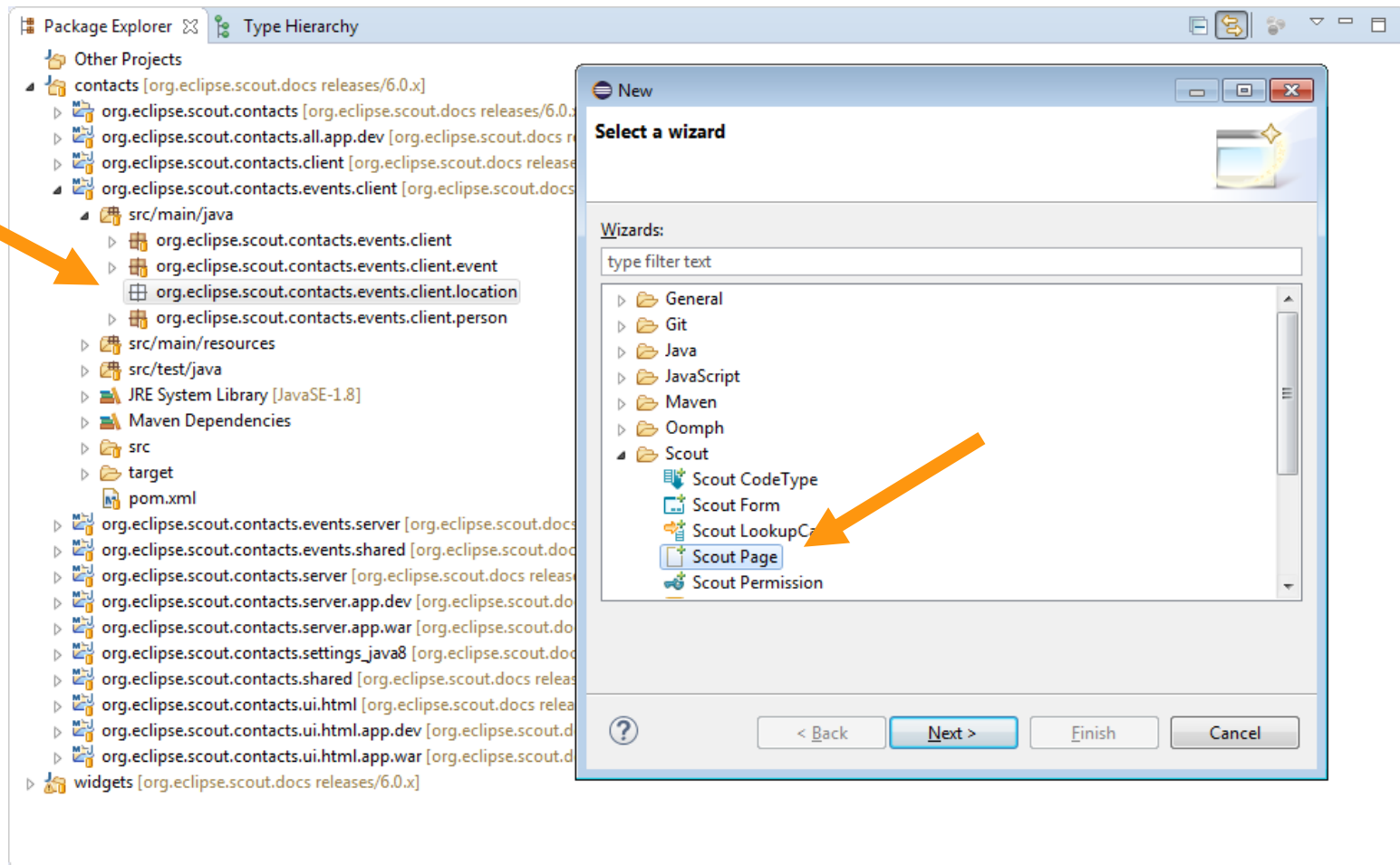


Filter by...

No row loaded
[Reload data](#)

No row selected
[Select all](#)

«Contacts» add LocationTablePage



1. New package `...event.client.location`
2. New Wizard, select Scout Page

The screenshot displays the Eclipse IDE interface. On the left, the Package Explorer shows the project structure for 'org.eclipse.scout.contacts.events.client'. The package 'org.eclipse.scout.contacts.events.client.location' is expanded, showing 'LocationTablePage.java' highlighted. Below it, the package 'org.eclipse.scout.contacts.events.server.location' is also expanded, showing 'LocationService.java' highlighted. On the right, the Source Editor shows the code for 'LocationTablePage.java'. The code includes imports for 'org.eclipse.scout.contacts.events.client.location.LocationTablePageData' and 'org.eclipse.scout.contacts.events.client.location.LocationTablePageData'. It also shows the class definition for 'LocationTablePage' extending 'AbstractPageWithTable<Table>'. The code includes methods for 'getConfiguredTitle()' and 'execLoadData()'. A 'New text...' dialog box is open over the code, with the text 'New text...' visible.

1. Events Client: **LocationTablePage**: Set Title, add Columns to Table
2. Events Server: **LocationService**
3. Events Client: **EventOutline**: In **execCreateChildPages** Add location table page → **pageList.add(new LocationTablePage())**;

LocationTablePage

Columns and Link to Event Outline

- Read «Beginners Guide»: Creating the Person Page
- Create the following Columns:
 - `LocationIdColumn`: Primary Key
see `EventTablePage.EventIdColumn`
 - `NameColumn`: String column
 - `CityColumn`: String column
 - `CountryColumn`: Smart column
see `EventTablePage.CountryColumn`
- Add the Location Table Page to the Events Outline
 - Read Link the Person Page to the Contacts Outline
 - Adapt method `execCreateChildPages`



Quick access ▾

Options

mzi



Events



New

Edit

Name

City

Country



Forum am Schlosspark

Ludwigsburg

Germany

Events

> Location

Location



OK

Cancel



Filter by...

One row loaded
Reload data

One row selected
Select none

«Contacts» add LocationForm

The screenshot shows the Eclipse IDE interface. On the left, the Package Explorer displays the project structure. The package `org.eclipse.scout.contacts.events.client.location` is expanded, showing the newly created `LocationForm.java` and `LocationTablePage.java`. The Type Hierarchy view shows the methods `create(LocationFormData) : LocationFormData`, `getLocationTableData(SearchFilter) : LocationTablePageData`, `load(LocationFormData) : LocationFormData`, `prepareCreate(LocationFormData) : LocationFormData`, and `store(LocationFormData) : LocationFormData` associated with the `LocationService` class.

On the right, the source code for `LocationForm.java` is displayed. It shows the `MainBox` class extending `AbstractGroupBox`, and the `ModifyHandler` class extending `AbstractFormHandler`. The `ModifyHandler` class implements the `execLoad()` and `execStore()` methods, which interact with the `ILocationService` interface to load and store location form data.

```
71
72
73 @Order(1000)
74 public class MainBox extends AbstractGroupBox {
75
76     @Order(100000)
77     public class OkButton extends AbstractOkButton {
78     }
79
80     @Order(101000)
81     public class CancelButton extends AbstractCancelButton {
82     }
83
84     public class ModifyHandler extends AbstractFormHandler {
85
86         @Override
87         protected void execLoad() {
88             ILocationService service = BEANS.get(ILocationService.class);
89             LocationFormData formData = new LocationFormData();
90             exportFormData(formData);
91             formData = service.load(formData);
92             importFormData(formData);
93
94             setEnabledPermission(new UpdateLocationPermission());
95         }
96
97         @Override
98         protected void execStore() {
99             ILocationService service = BEANS.get(ILocationService.class);
100            LocationFormData formData = new LocationFormData();
101            exportFormData(formData);
102            service.store(formData);
103        }
104    }
105 }
```

1. Select package `..events.client.location`
2. New Wizard: Select Scout Form → «LocationForm»
3. Result: `LocationForm` and new `LocationService` methods

«Contacts» link Location Form with Page

The screenshot shows the Eclipse IDE interface. On the left, the Package Explorer displays the project structure:

- src/main/java
 - org.eclipse.scout.contacts.events.client
 - org.eclipse.scout.contacts.events.client.event
 - LocationForm.java
 - LocationForm
 - MainBox
 - ModifyHandler
 - NewHandler
 - locationId (highlighted with an arrow)
 - getCancelButton(): CancelButton
 - getConfiguredTitle(): String
 - getLocationId(): String
 - getMainBox(): MainBox
 - getOkButton(): OkButton
 - setLocationId(String): void
 - startModify(): void
 - startNew(): void
 - LocationTablePage.java
 - LocationTablePage
 - Table
 - CityColumn
 - CountryColumn
 - EditMenu (highlighted with an arrow)
 - LocationIdColumn
 - NameColumn
 - NewMenu (highlighted with an arrow)
 - execLoadData(SearchFilter): void
 - getConfiguredTitle(): String

On the right, the Source Editor shows the code for the EditMenu and NewMenu classes:

```
53 @Order(1)
54 public class EditMenu extends AbstractEditMenu {
55
56     @Override
57     protected void execAction() {
58         final LocationForm form = new LocationForm();
59         form.setLocationId(getLocationIdColumn().getSelectedValue());
60         form.addFormListener(new FormListener() {
61
62             @Override
63             public void formChanged(FormEvent e) {
64                 if (FormEvent.TYPE_CLOSED == e.getType() && form.isFormStored()) {
65                     reloadPage();
66                 }
67             }
68         });
69
70         form.startModify();
71     }
72 }
73
74 @Order(2)
75 public class NewMenu extends AbstractNewMenu {
76
77     @Override
78     protected void execAction() {
79         final LocationForm form = new LocationForm();
80         form.addFormListener(new FormListener() {
81
82             @Override
83             public void formChanged(FormEvent e) {
84                 if (FormEvent.TYPE_CLOSED == e.getType() && form.isFormStored()) {
85                     reloadPage();
86                 }
87             }
88         });
89
90         form.startNew();
91     }
92 }
```

Orange arrows point to the `locationId` field in `LocationForm` and the `EditMenu` and `NewMenu` classes in the source editor.

1. Add member field `locationId` to `LocationForm`
2. Add `EditMenu` and `NewMenu` to `LocationPage`
Hint: Copy from `EventPage` and `EventForm` and modify ...

Contacts Application

localhost:8082/?dl=outline-26411&i=events

Quick access Options mzi

Events

Events

> Location

Name	City	Country
Forum am Schlosspark	Ludwigsburg	Germany

Location

Name

City

Country

OK Cancel

Filter by...

One row loaded Reload data

One row selected Select none

«Contacts» LocationForm

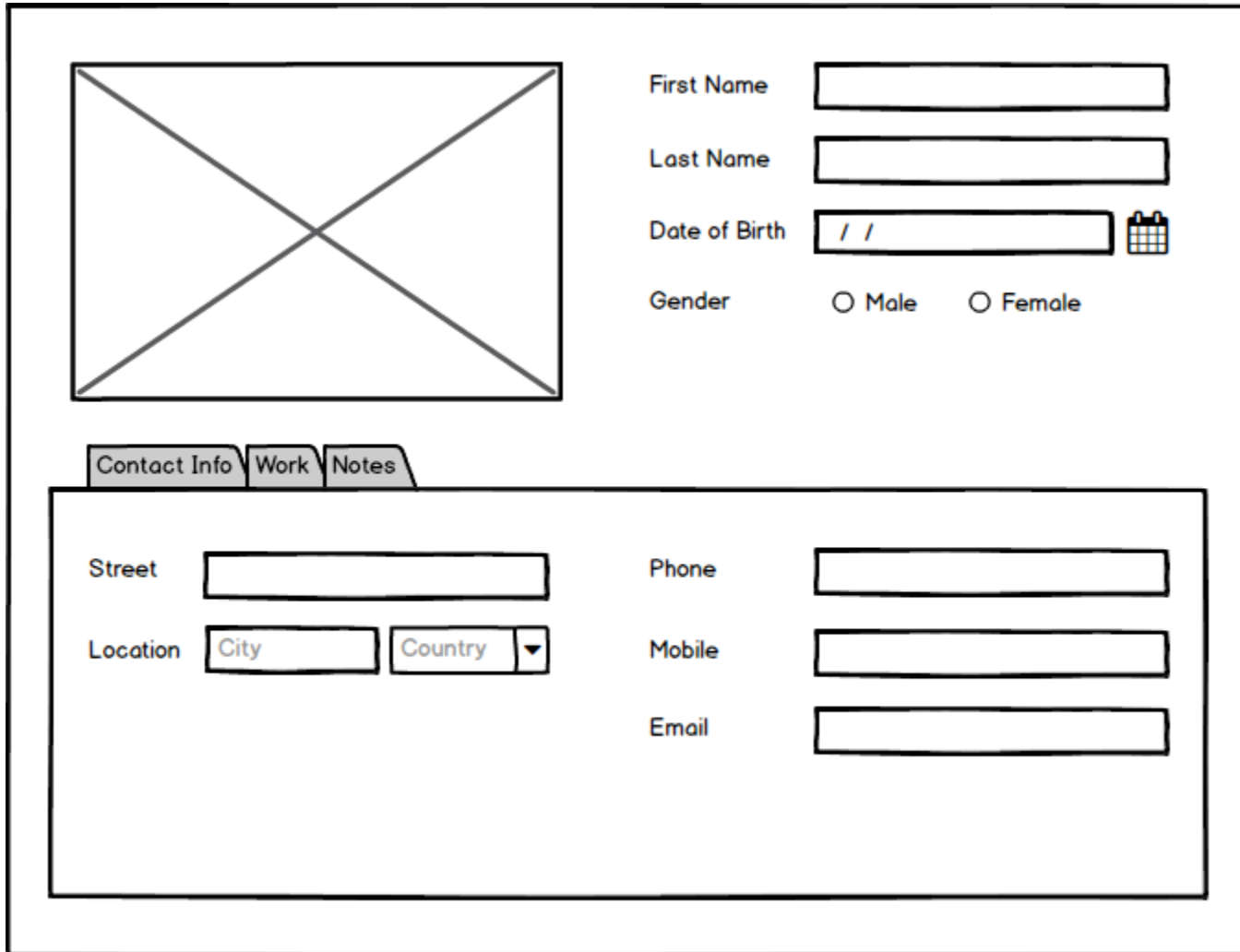
Form Layout

- Scout Form Layout Intro
- Target Layout for `LocationForm`
- Add Container Fields and Value Fields

Form Field Validation

- NameField: `getConfiguredMandatory`
- Read «Beginners Guide»: Form Field Validation
- CityField: `execValidateValue`, city to start with «L»


Scout Form Layout Intro



The diagram illustrates the layout of a Scout form. It features a large rectangular area on the left with a diagonal cross, representing a photo or logo. To the right of this area are input fields for 'First Name', 'Last Name', 'Date of Birth' (with a calendar icon), and 'Gender' (with radio buttons for 'Male' and 'Female'). Below these fields are three tabs: 'Contact Info', 'Work', and 'Notes'. The 'Contact Info' tab is active, showing a sub-form with fields for 'Street', 'Phone', 'Location' (with sub-fields for 'City' and 'Country'), 'Mobile', and 'Email'.

First Name

Last Name


Date of Birth 

Gender Male Female

Contact Info Work Notes

Street

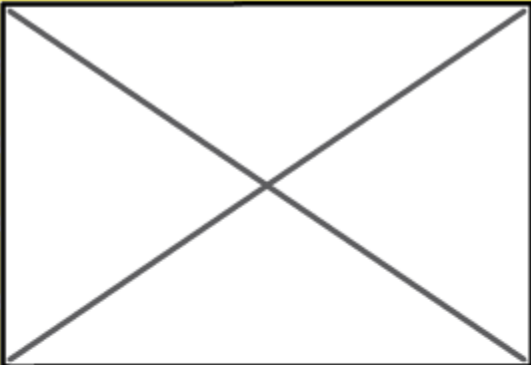

Phone

Location 

Mobile

Email

Scout Form Layout Intro

	First Name	<input type="text"/>		
	Last Name	<input type="text"/>		
	Date of Birth	<input type="text" value="//"/> 		
	Gender	<input type="radio"/> Male <input type="radio"/> Female		
Contact Info Work Notes				
Street	<input type="text"/>	Phone	<input type="text"/>	
Location	<input type="text" value="City"/>	<input type="text" value="Country"/>	Mobile	<input type="text"/>
		Email	<input type="text"/>	

Scout Form Layout Intro

The diagram illustrates a Scout form layout with the following components:

- GeneralBox (Group Box):** A light green container containing:
 - A large square placeholder with an 'X' inside, likely for a photo.
 - Form fields for: First Name, Last Name, Date of Birth (with a calendar icon), and Gender (radio buttons for Male and Female).
- DetailsBox (Tab Box):** A light blue container containing three tabs: Contact Info, Work, and Notes.
 - AddressBox (Group Box):** A darker blue container within the Contact Info tab containing:
 - Street (text input)
 - Location (Sequence Box) containing City (text input) and Country (dropdown menu)
 - ContactInfoBox (Group Box):** A light blue container within the Contact Info tab containing:
 - Phone (text input)
 - Mobile (text input)
 - Email (text input)

«Contacts» LocationForm Layout

MainBox (GroupBox)

TopBox (GroupBox with getConfiguredGridColumnCount = 1)

Name

City

Country

LocationBox (SequenceBox)

«Contacts» LocationForm Layout

```
LocationTabl... LocationServ... LocationForm... EventTableP... »1
88
89 @Order(1000)
90 public class MainBox extends AbstractGroupBox {
91
92     @Order(1000)
93     public class TopBox extends AbstractGroupBox {
94
95     }
96     protected int getConfiguredGridColumnCount() {0}
99
100     @Order(1000)
101     public class NameField extends AbstractStringField {
102     }
103     protected String getConfiguredLabel() {0}
106
107
108     @Order(2000)
109     public class LocationBox extends AbstractSequenceBox {
110
111     }
112     protected boolean getConfiguredAutoCheckFromTo() {0}
115
116     @Order(1000)
117     public class CityField extends AbstractStringField {
118     }
119     protected String getConfiguredLabel() {0}
122
123
124     @Order(2000)
125     public class CountryField extends AbstractSmartField<String> {
126     }
127     protected String getConfiguredLabel() {0}
130
131     @Override
132     protected Class<?> extends ILookupCall<String>> getConfiguredLookupCall() {
133         return CountryLookupCall.class;
134     }
135 }
136 }
137
---
```



Quick access



Options



mzi



Events



New

Edit

Name

City

Country

Forum am Schlosspark

Ludwigsburg

Germany

> Location

Location

Name *

Values for the

City

Stuttgart



OK

Cancel

The following fields are required:

- Name

The following fields are invalid:

- City: Values for the City field need to start with "L".

OK



Filter by...

One row loaded
Reload data

One row selected
Select none

«Contacts» Form Field Validation

The screenshot shows an IDE with the Package Explorer on the left and the Source Editor on the right. The Package Explorer displays the project structure for `org.eclipse.scout.contacts.client`, with `LocationForm.java` selected. The Source Editor shows the code for `NameField` and `CityField`. Two orange arrows point to the `getConfiguredMandatory()` method in `NameField` and the `execValidateValue()` method in `CityField`.

```
100
101
102 public class NameField extends AbstractStringField {
103     protected String getConfiguredLabel() {}
104
105
106
107
108
109     @Override
110     protected boolean getConfiguredMandatory() {
111         return true;
112     }
113
114
115
116
117
118
119
120
121
122
123 public class LocationBox extends AbstractSequenceBox {
124
125     protected boolean getConfiguredAutoCheckFromTo() {}
126
127
128
129
130
131     @Order(1000)
132     public class CityField extends AbstractStringField {
133         @Override
134         protected String getConfiguredLabel() {
135             return TEXTS.get("City");
136         }
137
138
139
140
141
142
143
144
145
146
147
148
149     @Override
150     protected String execValidateValue(String rawValue) {
151         if (rawValue != null && !rawValue.startsWith("L")) {
152             throw new VetoException(TEXTS.get("VetoCityNotWithL"));
153         }
154
155         return rawValue;
156     }
157 }
```

1. NameField: `getConfiguredMandatory`
2. Read «Beginners Guide»: [Form Field Validation](#)
3. CityField: `execValidateValue`, city to start with «L»



Quick access ▾

⚙️ Options

👤 mzi



Events



✎ New

✎ Edit

Name

City

Country



Forum am Schlosspark

Ludwigsburg

Germany

> Locations

Location



Name *

San Jose Convention Center

City

San Jose, CA

Country

United States



OK

Cancel



Filter by...

One row loaded
Reload data

One row selected
Select none

«Contacts» update Persistence for Locations

The screenshot shows an IDE with the Package Explorer on the left and the Source Editor on the right. The Package Explorer shows the project structure for org.eclipse.scout.contacts, with DatastoreLocation.java highlighted under the org.eclipse.scout.contacts.events.server.location package. The Source Editor shows the code for DatastoreLocation.java and LocationService.java. The store method in DatastoreLocation.java is highlighted, and an orange arrow points to the BEANS.get(DatastoreLocation.class).store(formData); call. Another orange arrow points to the DatastoreLocation.java file in the Package Explorer.

```
27 @Override
28 public LocationFormData create(LocationFormData formData) {
29     if (!ACCESS.check(new CreateLocationPermission())) {
30         throw new VetoException(TEXTS.get("AuthorizationFailed"));
31     }
32     BEANS.get(DatastoreLocation.class).store(formData);
33     return formData;
34 }
35
36 @Override
37 public LocationFormData load(LocationFormData formData) {
38     if (!ACCESS.check(new ReadLocationPermission())) {
39         throw new VetoException(TEXTS.get("AuthorizationFailed"));
40     }
41     return BEANS.get(DatastoreLocation.class).load(formData);
42 }
43
44 @Override
45 public LocationFormData store(LocationFormData formData) {
46     if (!ACCESS.check(new UpdateLocationPermission())) {
47         throw new VetoException(TEXTS.get("AuthorizationFailed"));
48     }
49     BEANS.get(DatastoreLocation.class).store(formData);
50     return formData;
51 }
52
53 @Override
54 public LocationTablePageData getLocationTableData(SearchFilter filter) {
55     LocationTablePageData pageData = new LocationTablePageData();
56
57     BEANS.get(DatastoreLocation.class).loadAllInto(pageData);
58     return pageData;
59 }
60 }
61
```

1. Uncomment **DatastoreLocation**
2. Implement Methods in LocationService
.getLocationTableData, .create, .load and .store

Thanks

and please, cast your Vote



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- 1 0 + 1