



EMF Forms goes AngularJS

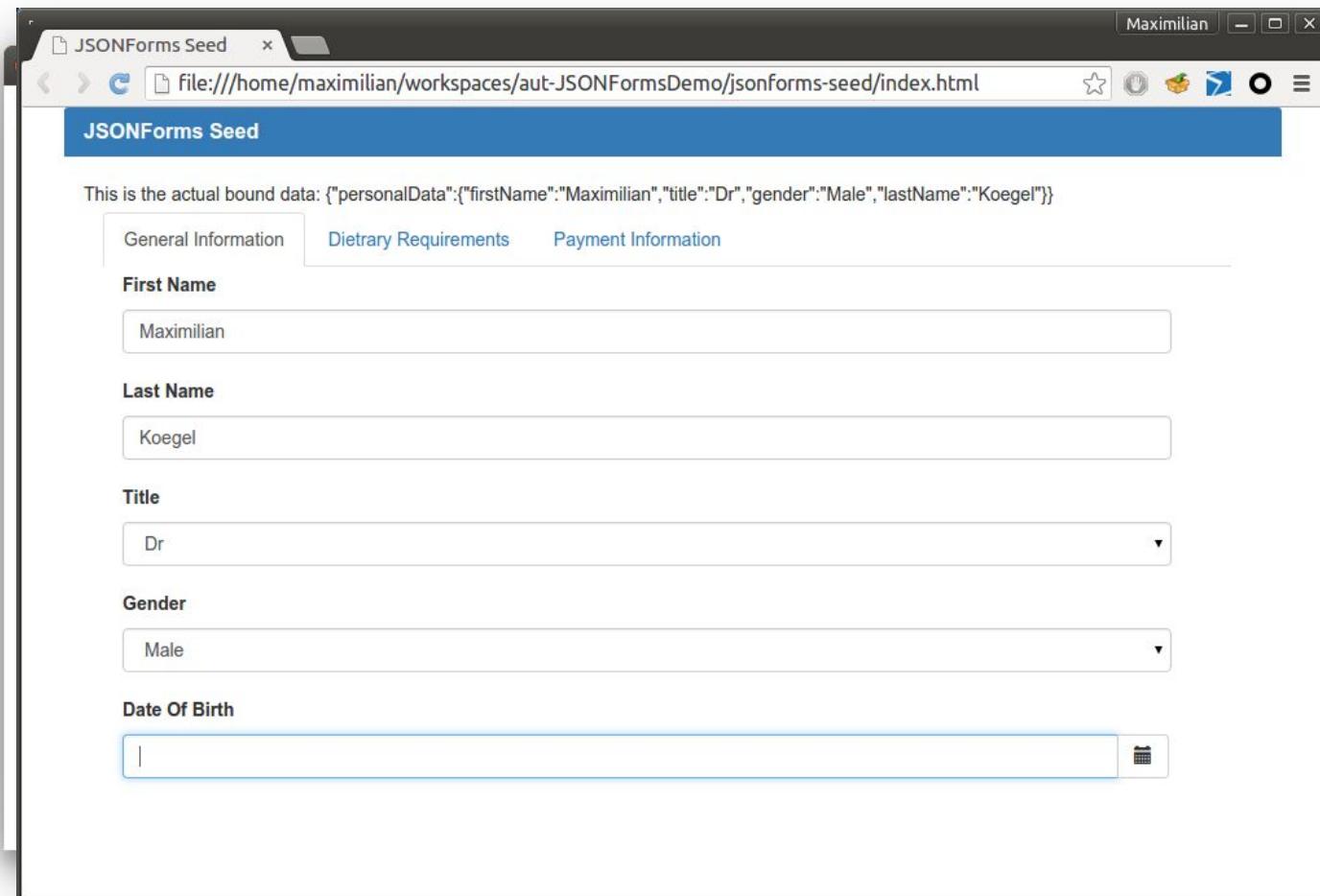
a.k.a. JSON Forms

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Data is often viewed/edited in a form-based UI

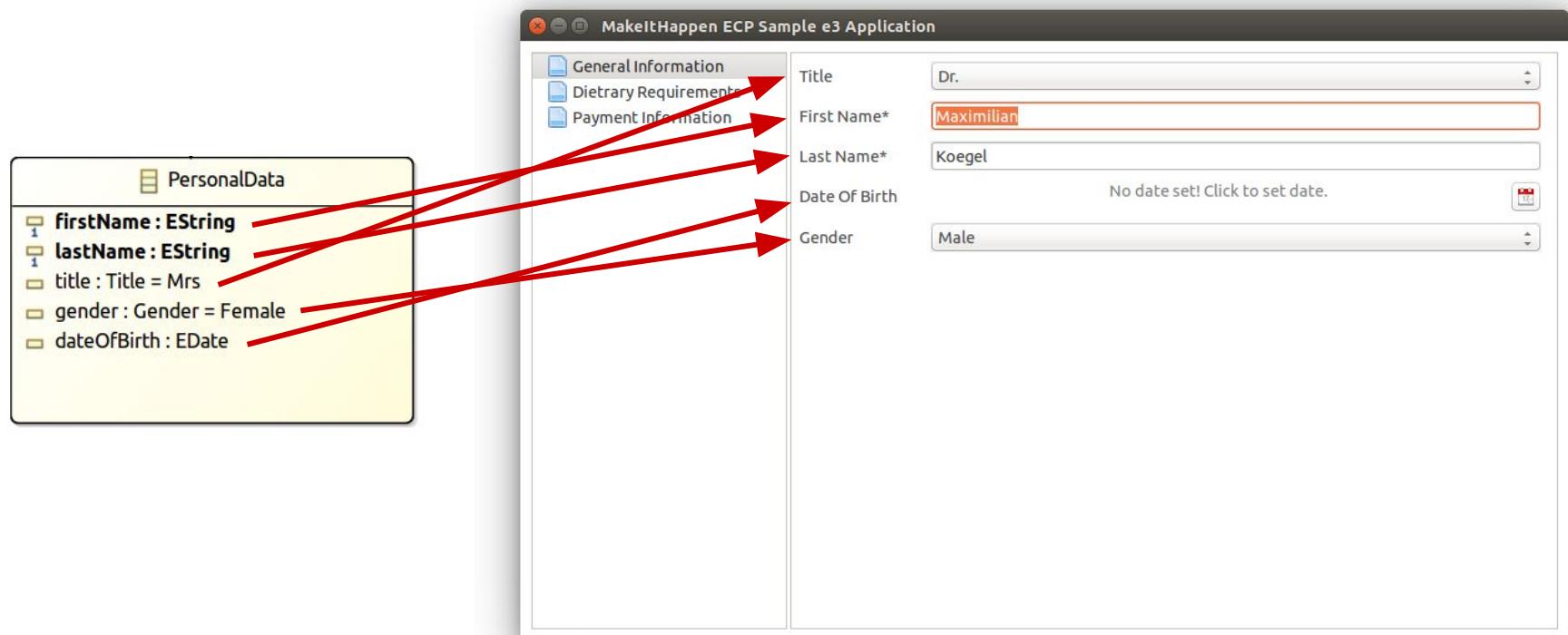


The screenshot shows a web browser window titled "JSONForms Seed" with the URL "file:///home/maximilian/workspaces/aut-JSONFormsDemo/jsonforms-seed/index.html". The page displays a form for editing personal data, with the following fields and values:

- First Name:** Maximilian
- Last Name:** Koegel
- Title:** Dr
- Gender:** Male
- Date Of Birth:** (empty input field)

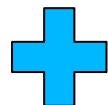
The form has tabs for "General Information", "Dietary Requirements", and "Payment Information", with "General Information" currently selected. The JSON data being edited is shown as: {"personalData":{"firstName":"Maximilian","title":"Dr","gender":"Male","lastName":"Koegel"}}

Data model needs to be mapped to UI

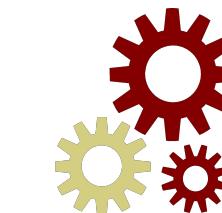


Modeling the UI

DS on a Model
(XSD, Ecore)

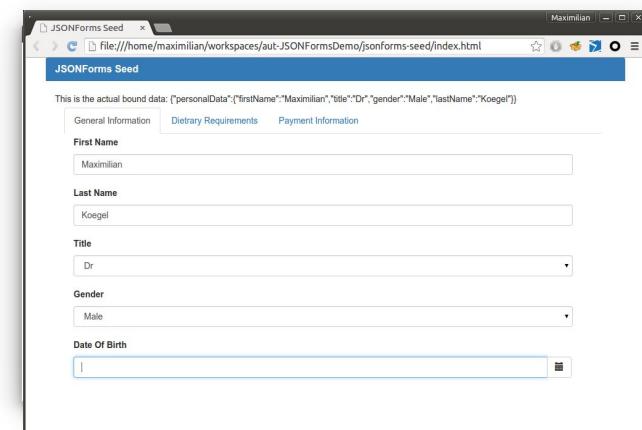
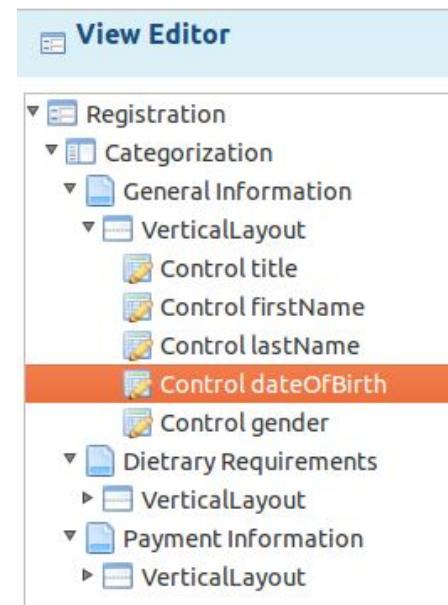
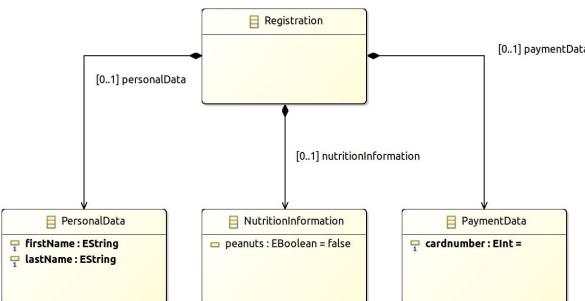


View Model

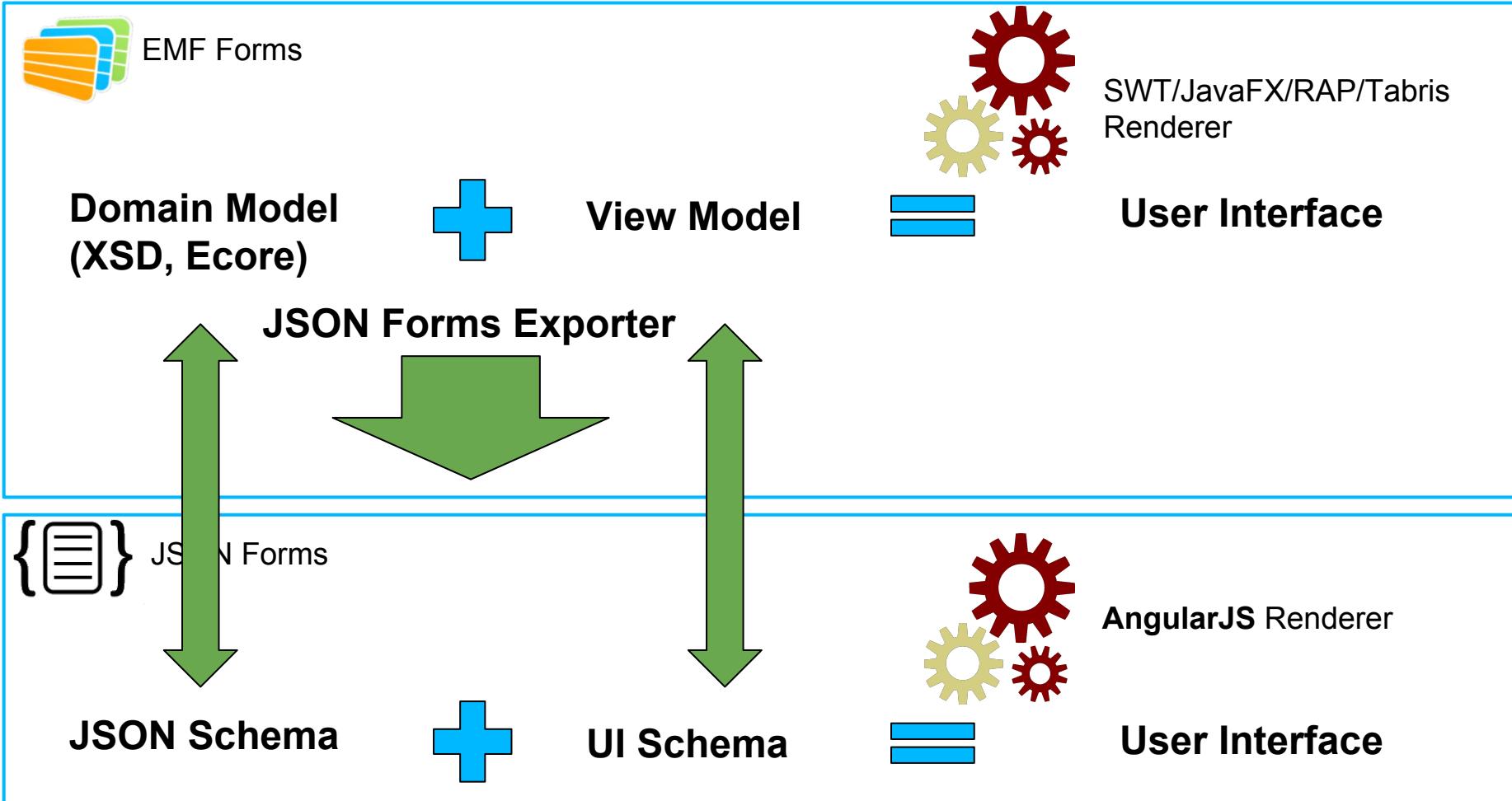


AngularJS Renderer

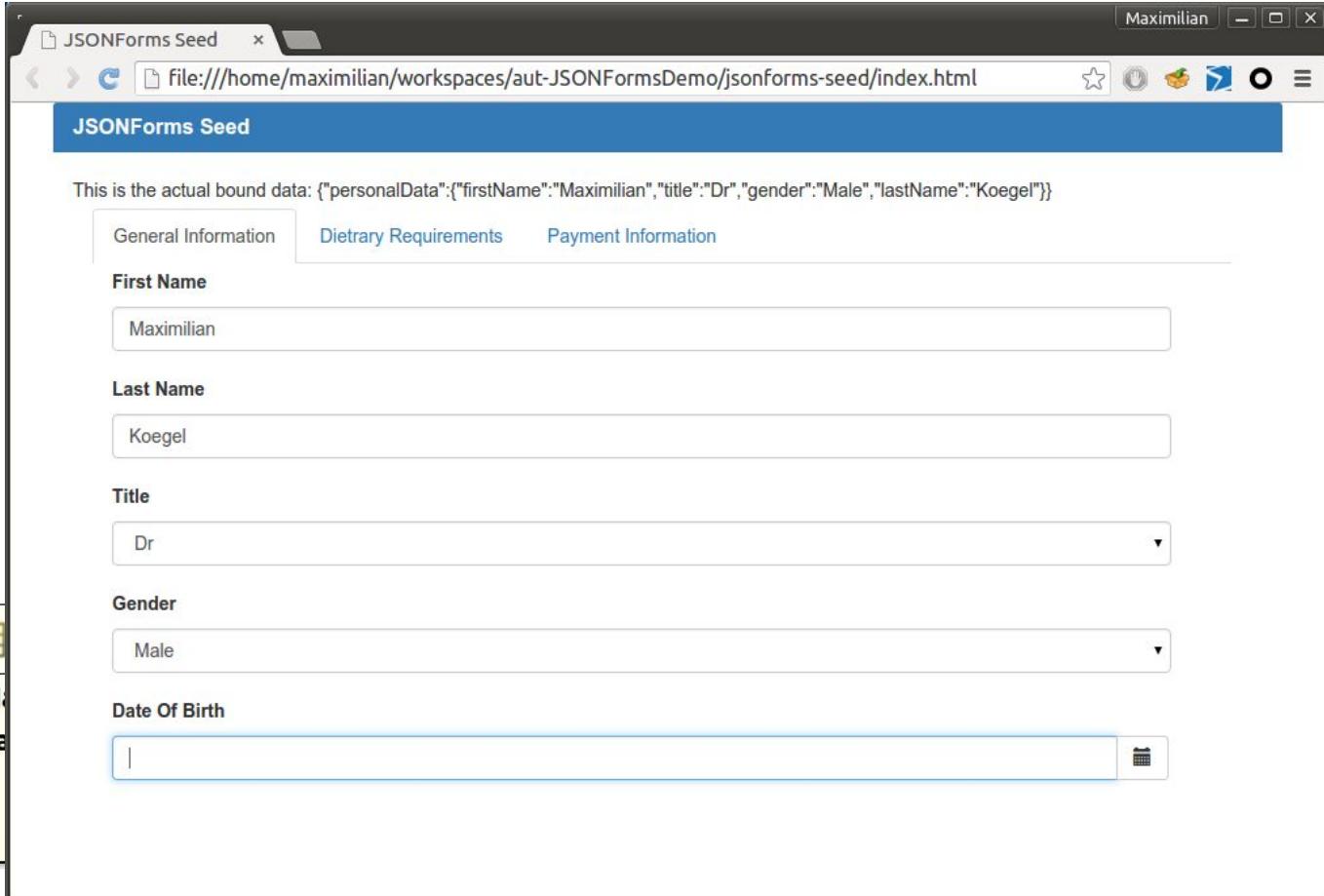
User Interface



EMF Forms vs. JSON Forms



Data Model and UI Model: Iteration 1



The screenshot shows the JSONForms Seed application interface. On the left, a sidebar displays the data model structure with nodes for 'personalData' (containing 'firstName', 'lastName', and 'title') and 'Dietary Requirements' (containing 'vegan', 'glutenFree', and 'dairyFree'). The main content area shows the UI model, which is a form for 'Maximilian' with fields for First Name, Last Name, Title, Gender, and Date Of Birth. The 'Dietary Requirements' section is currently inactive. The browser address bar shows the local file path: 'File:///home/maximilian/workspaces/aut-JSONFormsDemo/jsonforms-seed/index.html'. The JSON data in the browser's developer tools console is:

```
JSONForms Seed
This is the actual bound data: {"personalData":{"firstName":"Maximilian","title":"Dr","gender":"Male","lastName":"Koegel"}}

General Information Dietary Requirements Payment Information

First Name
Maximilian

Last Name
Koegel

Title
Dr

Gender
Male

Date Of Birth

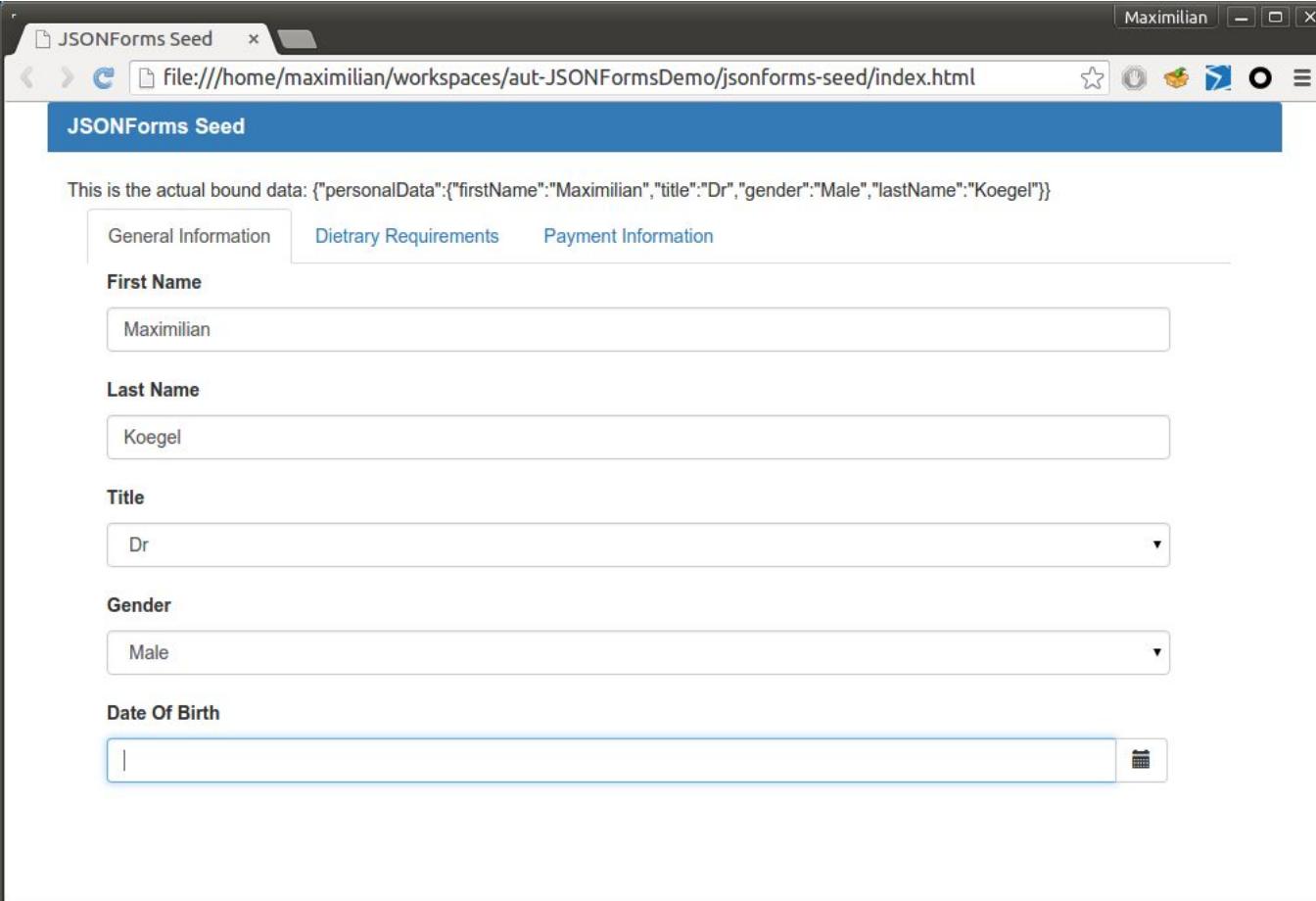
mentData
```

```
{"personalData": {"firstName": "Maximilian", "title": "Dr", "gender": "Male", "lastName": "Koegel"}}
```

JSON Forms Example Project

```
maximilian@zero: ~/Example/jsonforms-seed
maximilian@zero:~/Example$ cd jsonforms-seed/
maximilian@zero:~/Example/jsonforms-seed$ bower install
bower cached git://github.com/eclipsesource/jsonforms.git#0.0.8
bower validate 0.0.8 against git://github.com/eclipsesource/jsonforms.git#*
bower cached git://github.com/angular-ui/angular-ui.git#0.4.0
bower validate 0.4.0 against git://github.com/angular-ui/angular-ui.git#0.4
/bower
bower cached git://github.com/bower-angular-loader.git#1.3.16
bower validate 1.3.16 against git://github.com/bower-angular-loader
/bower cached git://github.com/bower-angular-route.git#1.3.16
bower validate 1.3.16 against git://github.com/bower-angular-route
bower cached git://github.com/angular-ui/bootstrap-bower.git#0.13.4
bower validate 0.13.4 against git://github.com/angular-ui/bootstrap-bower.g
bower cached git://github.com/angular-ui/bower-ui-grid.git#3.0.1
bower validate 3.0.1 against git://github.com/angular-ui/bower-ui-grid.git#
bower cached git://github.com/twbs/bootstrap.git#3.3.4
bower validate 3.3.4 against git://github.com/twbs/bootstrap.git#3.3.4
bower cached git://github.com/whitlockjc/json-refs.git#0.2.0
bower validate 0.2.0 against git://github.com/whitlockjc/json-refs.git#~0.2
/bower
```

Demo



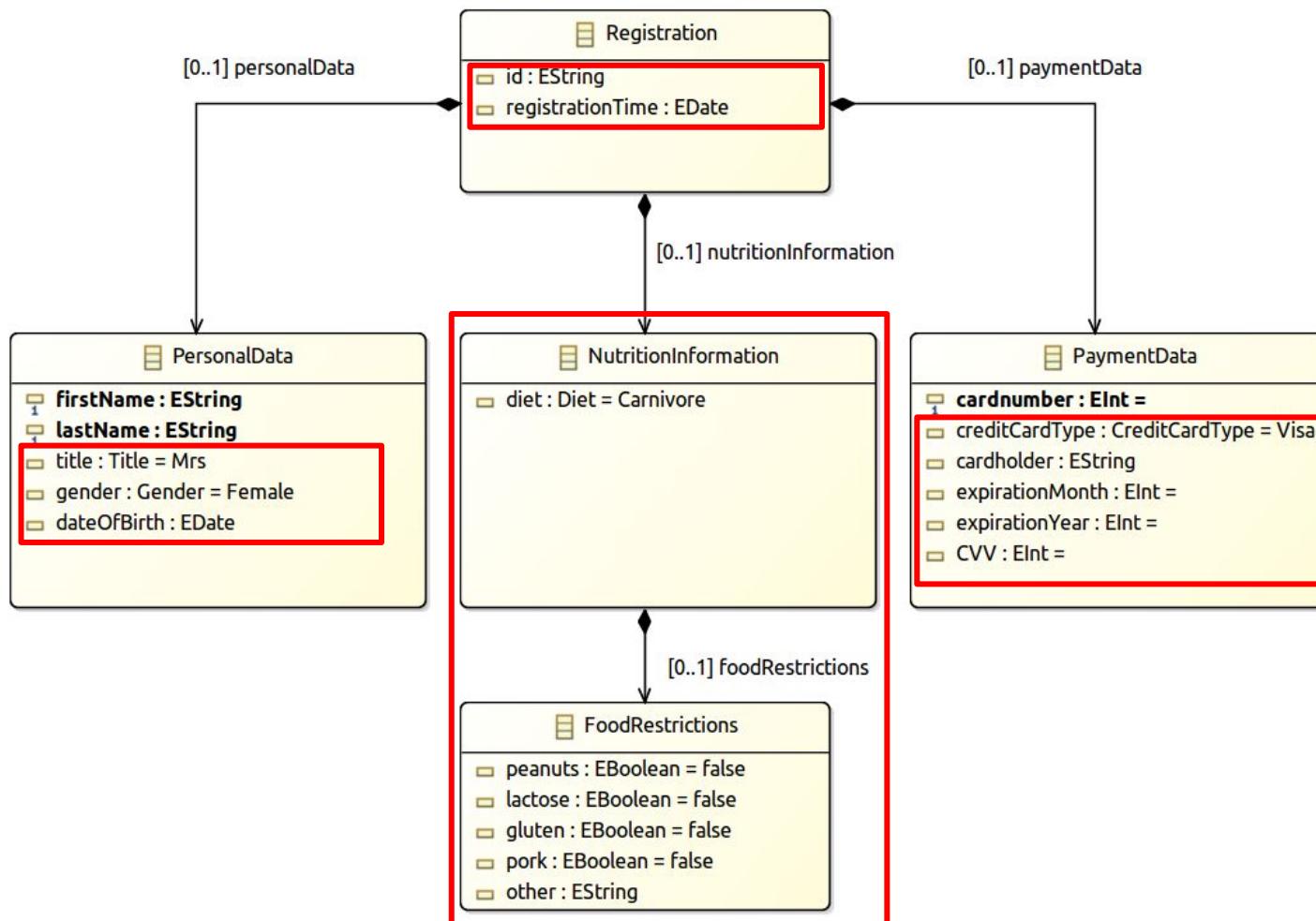
The screenshot shows a web browser window titled "JSONForms Seed" with the URL "File:///home/maximilian/workspaces/aut-JSONFormsDemo/jsonforms-seed/index.html". The page displays a form for "personalData" with the following fields and values:

- First Name:** Maximilian
- Last Name:** Koegel
- Title:** Dr
- Gender:** Male
- Date Of Birth:** (Input field with a calendar icon)

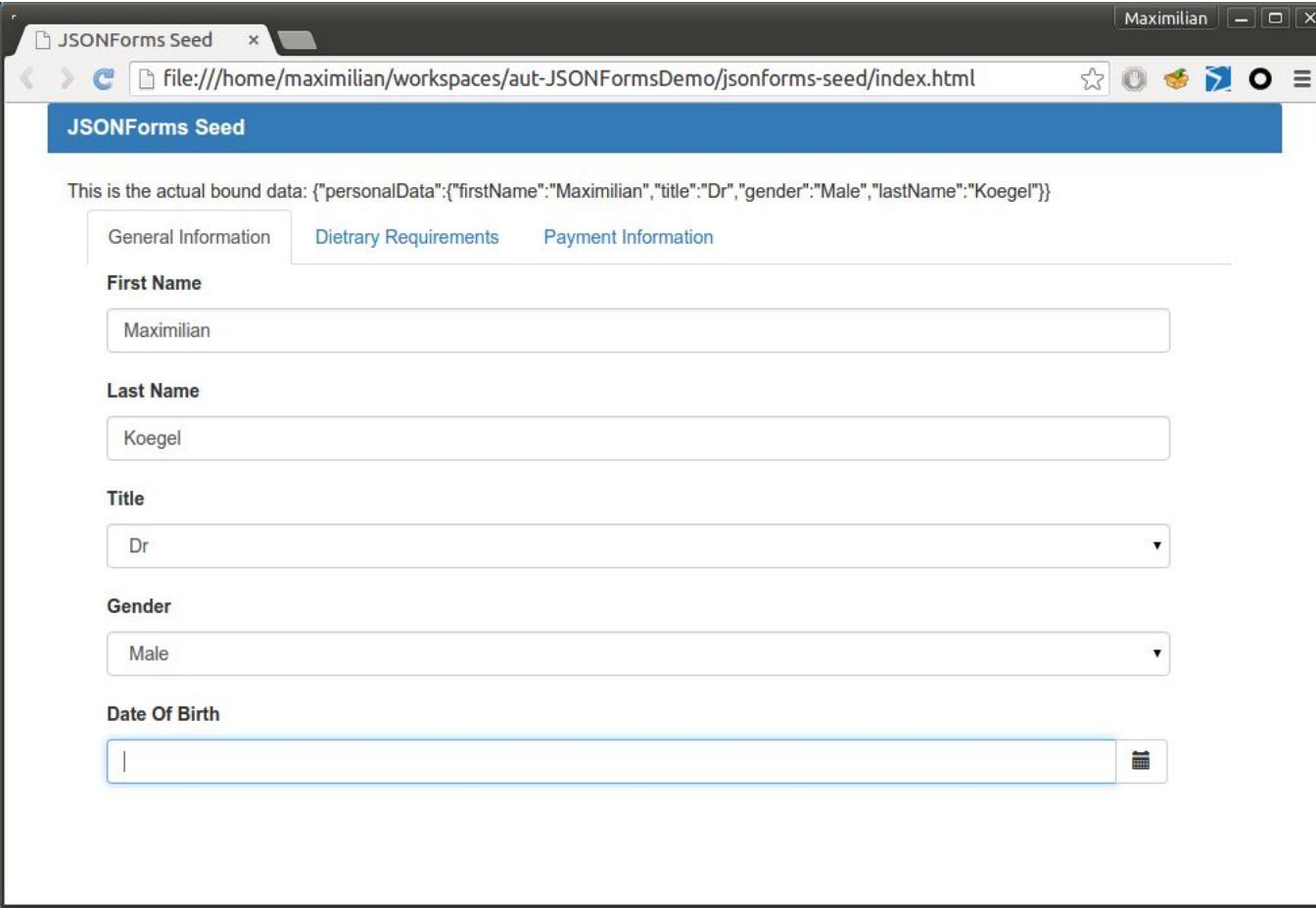
The "Dietary Requirements" tab is currently selected. The JSON data for the form is shown at the top of the page:

```
personalData:{"firstName":"Maximilian","title":"Dr","gender":"Male","lastName":"Koegel"}
```

Data Model and UI Model: Iteration 2



More Demo



The screenshot shows a web browser window titled "JSONForms Seed" displaying a form. The URL in the address bar is "File:///home/maximilian/workspaces/aut-JSONFormsDemo/jsonforms-seed/index.html". The page content includes a message: "This is the actual bound data: {"personalData":{"firstName":"Maximilian","title":"Dr","gender":"Male","lastName":"Koegel"}}". Below this, there are five input fields: "First Name" (Maximilian), "Last Name" (Koegel), "Title" (Dr), "Gender" (Male), and "Date Of Birth" (an empty input field with a calendar icon). The "Dietary Requirements" and "Payment Information" tabs are visible but not active.

Personal Data	Value
First Name	Maximilian
Last Name	Koegel
Title	Dr
Gender	Male

When to use UI Modeling

- Large Domain Model
- Many different Views
- Frequent Domain Model changes
- Homogenous UI
- UI Technology Independence
- Improved Customer Involvement
 - Fast Turnaround + Rapid Prototyping
 - Easy-to-grasp UI concepts

The screenshot illustrates the EMF Forms tool's workflow. At the top, a domain model class 'User' is shown with attributes: firstName, lastName, gender, active, timeOfRegistration, weight, height, nationality, dateOfBirth, and eMails. Below this, the 'User View Model' is displayed, showing a 'UserView' structure with a 'HorizontalLayout' containing a 'VerticalLayout Left Column' that includes controls for 'firstName', 'weight', 'nationality', 'timeOfRegistration', and 'active'. The 'UserView' is further detailed with 'First Name', 'Last Name', 'Gender', 'Date Of Birth', 'Weight', 'Height', 'Nationality', 'Time Of Registration', and 'EMails' fields. At the bottom, a preview window shows a user instance 'Maximilian Kögel' with populated values for these fields.

More Information

- JSON Forms: <http://jsonforms.org>
=> [Getting started Tutorial](#)
=> [EMF Forms to JSON Forms Migration Tutorial](#)
- EMF Forms: <http://emfforms.org>
=> Getting started Tutorial
- Twitter: #jsonforms @JSONForms



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