EMF Forms goes AngularJS

a.k.a. JSON Forms

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Data is often viewed/edited in a form-based UI
Data model needs to be mapped to UI
Modeling the UI

Modeling the UI involves creating a Domain Model (XSD, Ecore) which represents the data structure of the application. This Domain Model is then rendered into a User Interface (UI) using AngularJS. The process involves creating a View Model that connects the Domain Model to the UI through JSON Schema and UI Schema. The View Editor is used to visualize and interact with the data.
EMF Forms vs. JSON Forms

- **Domain Model (XSD, Ecore)**
- **View Model**
- **User Interface**

**EMF Forms**
- SWT/JavaFX/RAP/Tabris Renderer

**JSON Forms Exporter**
- JSON Schema
- UI Schema

**AngularJS Renderer**
- User Interface
JSON Forms Example Project

```
maximilian@zero:~/Example/jsonforms-seed$ 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

maximilian@zero:~/Example/jsonforms-seed$ bower install
bower cached  git://github.com/angular/bower-angular-loader.git#1.3.16
bower validate 1.3.16 against git://github.com/angular/bower-angular-loader
.git#1.3.16
bower cached  git://github.com/angular/bower-angular-route.git#1.3.16
bower validate 1.3.16 against git://github.com/angular/bower-angular-route.
.git#1.3.16
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
it#0.13.4
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#
3.0.1
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
```
**Demo**

![JSONForms Seed - Google Chrome](image)

**JSONForms Seed**

Bound data: `{"name":"John Doe","age":36,"height":1.85,"gender":"Male","personalData":{"firstName":"Maximilian","lastName":"Kögel","title":"Dr","gender":"Male"}}`

<table>
<thead>
<tr>
<th>GENERAL INFORMATION</th>
<th>DIETARY REQUIREMENTS</th>
<th>PAYMENT INFORMATION</th>
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<tr>
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<td>Kögel</td>
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<tr>
<td>Dr</td>
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</tr>
<tr>
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</tr>
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<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date Of Birth</td>
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</tr>
</tbody>
</table>

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
More Information

• JSON Forms: [http://jsonforms.org](http://jsonforms.org)
  => Getting started Tutorial
  => EMF Forms to JSON Forms Migration Tutorial

• EMF Forms: [http://emfforms.org](http://emfforms.org)
  => Getting started Tutorial

• Twitter: #jsonforms @JSONForms

• BOF today at 8pm Lake Anne B
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