

kolibri

AUSWAHLKOMPONENTE

IP6 Midterm Presentation
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Hallo
Wir sind...



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Rückblick IP5

Select | Datalist

Choose Country

Choose Country ^

All	Afghanistan
Africa	Armenia
Asia	Azerbaijan
Europe	Bahrain
North America	Bangladesh
Oceania	Bhutan
South America	Brunei

LIVE DEMO

K o m p o n e n t e



Rückblick IP5

Code

- Projector Pattern
- Master Detail View

```
<div id="dropdown">
  |  <!-- dynamic JS code -->
</div>
<script type="module" src="dropdown.js"></script>
```

```
const modelMaster = ChoiceMasterModel({
  elementList: [{country: "Switzerland", continent: "Europe"}, 
    |           | {country: "United States", continent: "North America"}, 
    |           | {country: "Germany", continent: "Europe"}],
  sectionElement: {continent: "All"}, 
  focusObject: {column: 1, value: "Germany"}
});

const modelDetail = ChoiceDetailModel({
  value: "", 
  placeholder: "Choose a country", 
  label: "Country", 
  name: "country"
};

const controllerDetail = ChoiceDetailController(modelDetail);
const controllerMaster = ChoiceMasterController(modelMaster);

const [labelElement, selectionElement] =
  projectChoiceInput(controllerDetail, controllerMaster, "countrySelection");
```



Integration

Select | Datalist

- Erweiterungen
- Projector Views
- Projector Bindings

```
/** @type InputTypeString */ const CHOICE = "choice";
/** @type InputTypeString */ const COMBOBOX = "combobox";

case CHOICE:
  [elements, labelElement, inputElement] =
    createChoiceView(id, inputController.getOptions());
  bindChoiceValue(inputElement, inputController);
  break;
case COMBOBOX:
  let datalistElement;
  [elements, labelElement, inputElement, datalistElement] =
    createComboboxView(id, inputController.getOptions());
  bindComboboxValue(inputElement, datalistElement, eventType, inputController);
  break;
```



Integration

Select | Datalist

- Erweiterungen
- Projector Views
- Projector Bindings

```
const createComboboxView = (id, options) => {
  const elements = createInputElements(id,
    <input type="text" id="${id}" list="${id}-list" />
    <datalist id="${id}-list"></datalist>
  );
  /** @type {HTMLLabelElement} */ const labelElement = elements[0]; // only for the sake of completeness
  /** @type {HTMLSpanElement} */ const spanElement = elements[1]; // only for the sake of completeness
  /** @type {HTMLInputElement} */ const inputElement = spanElement.firstChild;
  /** @type {HTMLDataListElement} */ const dataListElement = spanElement.children[1]; // ...

  createOptionElements(options, dataListElement);
  return [elements, labelElement, inputElement, dataListElement];
};

const createChoiceView = (id, options) => {
  const elements = createInputElements(id,
    <select id="${id}"></select>
  );
  /** @type {HTMLLabelElement} */ const labelElement = elements[0]; // only for the sake of completeness
  /** @type {HTMLSpanElement} */ const spanElement = elements[1]; // only for the sake of completeness
  /** @type {HTMLSelectElement} */ const selectElement = spanElement.firstChild;

  createOptionElements(options, selectElement);
  return [elements, labelElement, selectElement];
};
```



Integration

Select | Datalist

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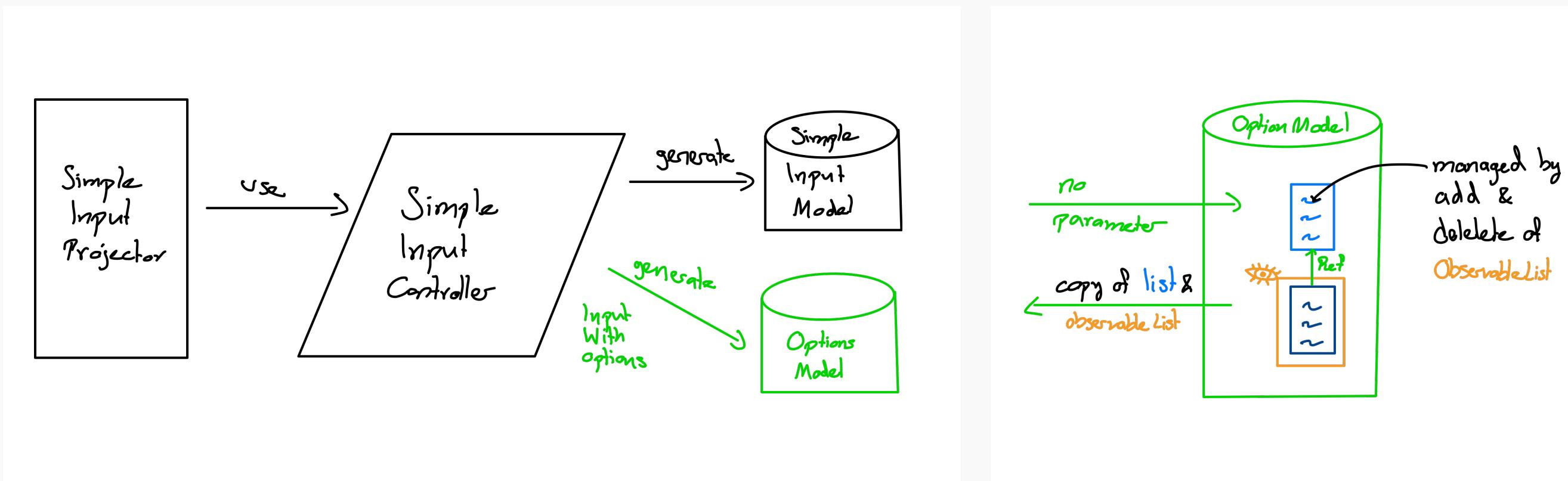
```
const bindOptionValue = (viewElement, optionContainer, eventType, inputController) => {
  viewElement.addEventListener(eventType, (_)>
    |   |   inputController.setValue/** @type { * } */(viewElement.value);
  inputController.onValueChanged((val) =>
    |   |   (viewElement.value = /** @type { * } */ val));
  inputController.onAddOption(option) => {
    |   // create new option as option tag in view
  });
  inputController.onDelOption(option) => {
    |   // remove option from option container in view
  });
};

const bindChoiceValue = (selectElement, inputController) => {
  bindOptionValue(selectElement, selectElement, CHANGE, inputController);
};

const bindComboboxValue = (inputElement, datalistElement, eventType, inputController) => {
  bindOptionValue(inputElement, datalistElement, eventType, inputController);
};
```



Update Model | Controller





Update Model | Controller

```
/**  
 * @typedef OptionType  
 * @property { !String } value - selectable value of the input  
 * @property { ?String } label - visible label of the input  
 */  
  
const OptionsModel = () => {  
  const list = [];  
  const list0bs = ObservableList(list);  
  
  return {  
    getList: () => [...list],  
    get0bsList: () => list0bs,  
  };  
};
```



Update Model | Controller

```
const SimpleAttributeInputController = (inputAttribute) => {
  if ( CHOICE === inputAttribute.getObs(TYPE).getValue()
    || COMBOBOX === inputAttribute.getObs(TYPE).getValue() ) {
    const optionsModel = OptionsModel();
    return {
      ...
      getOptions:      optionsModel.getList,
      addOption:       optionsModel.getObsList().add,
      delOption:       optionsModel.getObsList().del,
      onAddOption:    optionsModel.getObsList().onAdd,
      onDelOption:    optionsModel.getObsList().onDel,
    };
  }
}

/**
 * @typedef { SimpleInputControllerType<String> & OptionsControllerType } SimpleInputWithOptionsControllerType
 */
```



Update

Model | Controller

```
const SimpleFormController = inputAttributesArray => {
    // noinspection UnnecessaryLocalVariableJS
    const inputControllers = inputAttributesArray.map(inputAttr => {
        const ctrl = SimpleInputController(inputAttr);
        inputAttr.list?.forEach(ctrl.addOption);
        return ctrl;
    });

    // set up any business rules (we do not have any, yet)
    return inputControllers ;
};
```

LIVE
DEMO

Wo wir sind...

Browser Konsistenz

Buttons/Links (3)

- Switzerland
- Germany
- Austria

Select (6)

Austria ▾

Select (6)

- ✓ Austria
- France
- Germany
- Italy
- Lichtenstein
- Switzerland

Datalist (52)

Choose Country ▾

Datalist (52)

Choose Country ▾

- Albania
- Andorra
- Austria
- Belarus
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Faroe Islands
- Finland
- France

Personas

- Benutzer
- Entwickler

Personas



Planung

- Projector
- Research Browser Inkonsistenz
- Design
- Zuschneiden auf Personas
- Testing





Thank you
Diskussion & Fragen