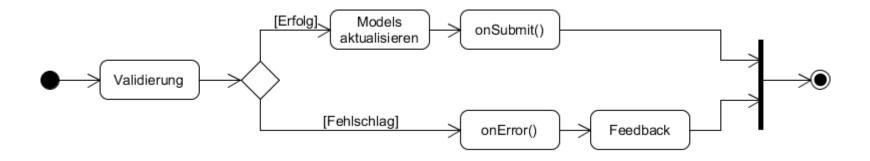




#### Grundlagen

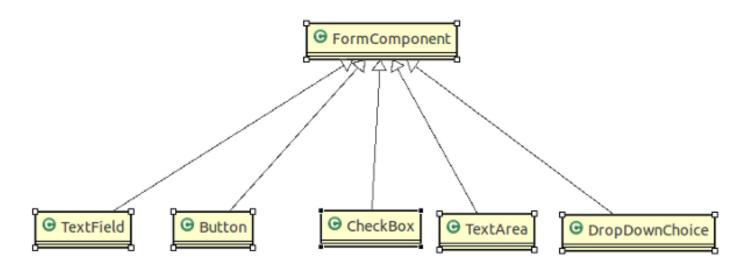
- Eigene Komponenten
- Handler auf Serverseite
  - onSubmit()
  - onError()
- Verarbeitung





#### Grundlagen

- Vorgefertigte Eingabekomponenten
  - Textfelder
  - CheckBoxen
  - DropDowns
  - Buttons
  - ...





#### Grundlagen

HTML: Page

```
<html>
<head><title>Person</title></head>
<body>
<form id="personForm" method="get" wicket:id="personForm">
  <span>Name: </span><input wicket:id="name" type="text" id="name"/>
  <span>Nachname: </span><input wicket:id="surname" type="text" id="surname"/>
  <input type="submit" name="Save" value="Speichern"/>
</form>
</body>
</html>
```



#### Grundlagen

Java: Page

```
public class PersonPage extends WebPage {
    public PersonPage() {
        super();
        add(new PersonForm("personForm"));
    }
}
```



#### Grundlagen

Java: Formular

```
public class PersonForm extends Form {
    private TextField nameField;
    private TextField surnameField;
    public PersonForm(String id) {
        super(id);
        nameField = new TextField("name", Model.of(""));
        surnameField = new TextField("surname", Model.of(""));
        add(nameField);
        add(surnameField);
    public final void onSubmit() {
        String name = (String) nameField.getDefaultModelObject();
        String surname = (String) surnameField.getDefaultModelObject();
        System.out.println("Hallo " + name + " " + surname);
```



#### Validierung

- Interface IValidator
- Vorgefertigte Validatoren
  - EmailAddressValidator
  - URLValidator
  - DateValidator
  - RangeValidator
  - •



#### **Validierung**

Eigene Validatoren

```
public class AgeValidator implements IValidator<Integer> {
    public void validate(IValidatable<Integer> validatable) {
        int age = validatable.getValue();

        if(age < 18 || age > 100){
            ValidationError error = new ValidationError(this);
            validatable.error(error);
        }
    }
}
```



#### **JSR 303**

- Definiert Annotationen zur Bean-Validierung
  - @Range
  - @Past
  - @NotNull
  - @Pattern
  - ...
- Nutzung in Wicket
  - Annotation der Beans
  - Aktivierung in Application-Klasse
  - Hinzufügen von PropertyValidator zu Feldern



#### **JSR 303**

Bean

```
public class Person implements Serializable {
   @NotNull
   private String name;
   @Pattern(regexp = "^...$")
   private String email;
   @Range(min = 18, max = 150)
   private int age;
   @Past @NotNull
   private Date birthDay;
   @NotNull
   private Address address;
```



#### **JSR 303**

Application-Klasse

```
@Override
public void init(){
    super.init();

    new BeanValidationConfiguration().configure(this);
}
```

PropertyValidator

```
Form<Person> form = new Form<>("personForm");

form.add(new TextField("name").add(new PropertyValidator()));
form.add(new TextField("email").add(new PropertyValidator()));
form.add(new TextField("age").add(new PropertyValidator()));
```



#### **Feedback**

- Rückmeldung an den Nutzer
- Überschreibbare Standardtexte
- Internationalisierung
- Speicherung in Resource Bundles



#### Feedback Panel

- Auflistung von Messages
- Interface IFeedbackMessageFilter
- HTML

```
<div wicket:id="successMessage" ></div>
<div wicket:id="feedbackMessage" ></div>
```

Java

```
add(new FeedbackPanel("feedbackMessage",
new ExactErrorLevelFilter(FeedbackMessage.ERROR)));
add(new FeedbackPanel("successMessage",
new ExactErrorLevelFilter(FeedbackMessage.SUCCESS)));
```



#### Flash Messages

- Nachrichten von Komponenten
- Levels (vgl. Logging)
  - debug
  - info
  - success
  - warn
  - error
  - fatal
- Definition eigener FeedbackMessageFilter



#### Flash Messages

```
public class CustomFeedbackMessageFilter implements IFeedbackMessageFilter {
    private int errorLevel;
    public CustomFeedbackMessageFilter(int errorLevel){
        this.errorLevel = errorLevel;
    public boolean accept(FeedbackMessage message) {
        boolean accept = false;
        // Überprüfen, ob eine Message ausgegeben werden soll...
        return accept;
  // Eventuell Berücksichtigung weiterer Level
```