
Android Forms Documentation

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This library makes it easy to deal with views, especially if dealing with a large amount of views.

It provide a consistent and fluent way of setting, validating, retrieving and saving values from views.

With this library you not have to change or alter you layout in anyway, but you will be able to work with multiple forms on multiple fragments via *FormCollection*.

The library also comes an inbuilt *Data populator* to use when developing. This comes in handy when you want to prepopulate you form with sample data.

For validation the *Validation* is used.

CHAPTER 1

install

using Maven.

```
<dependency>
  <groupId>com.eddmash</groupId>
  <artifactId>android-form</artifactId>
  <version>1.0.7</version>
  <type>pom</type>
</dependency>
```

Using gradle

```
compile 'com.eddmash:android-form:1.0.7'
```


CHAPTER 2

Usage

To use this library is very easy

- Create *Form* class

```
private class BasicForm extends Form {
    public BasicForm() {
        super();
    }

    public BasicForm(ValidatorInterface validator) {
        super(validator);
    }

    @Override
    public void save() throws FormException {
        // implement the saving logic, you have access to
        // getValues() returns a map of where key is the name of the field and_
        ↪ the values
    }
}
```

- Create form object

```
BasicForm form = new BasicForm();
```

- Add *Field* to *FormInterface*

```
// get the views from the layout
Spinner genderSpinner = (Spinner) view.findViewById(R.id.gender);
EditText fName = (EditText) view.findViewById(R.id.firstname);
EditText phone_number = (EditText) view.findViewById(R.id.phone_number);

// add views to the form
form.addField("gender", genderSpinner);
form.addField("firstname", fName);
```

```
form.addField("phone_number", fName);

// add validation check
form.addCheck(new NotEmptyCheck(gender, "Gender cannot be blank"));
form.addCheck(new NotEmptyCheck(fName, "Firstname cannot be blank"));
```

- Run *validation* and get the *values*.

```
if(form.isValid()){
    form.getValues()// returns a map of where key is the name of the field and the_
    ↪ values
}else{

    LinearLayout errorSpace = (LinearLayout) findViewById(R.id.error_base);
    errorSpace.removeAllViews();// clear space first

    ErrorRenderer errorRenderer = new ErrorRenderer(this, form.getValidator());
    errorRenderer.render(errorSpace);
}
```

- Save form values

```
if(form.isValid()){
    try{
        form.save() // save
    } catch (FormException e) {
        e.printStackTrace();
    }
}else{

    LinearLayout errorSpace = (LinearLayout) findViewById(R.id.error_base);
    errorSpace.removeAllViews();// clear space first

    ErrorRenderer errorRenderer = new ErrorRenderer(this, form.getValidator());
    errorRenderer.render(errorSpace);
}
```

2.1 Form Collection

This library also supports dealing with multiple forms at once.

A *FormCollection* class accepts *InnerForm*

This makes it possible:

- **for forms to depend on each other**
 - that is a form A cannot be validated before form B is validated.
 - that is a form A cannot be saved before form B is saved.
- multiple forms get validated together.
- multiple forms get saved together.

2.1.1 Usage

To use this library is very easy

- Create *InnerForm* class

In this example, the *DependOnBasicForm* requires the *BasicForm* to have been validated on the validation stage and be saved on saving stage.

```
private class BasicForm extends InnerForm {
    public BasicForm() {
        super();
    }

    public BasicForm(ValidatorInterface validator) {
        super(validator);
    }

    @Override
    public String getIdentifier() {
        return "basic_form_id";
    }

    @Override
    public void save() throws FormException {
        // implement the saving logic, you have access to
        // getValues() returns a map of where key is the name of the field and_
        ↪ the values
    }
}

private class DependOnBasicForm extends InnerForm {
    public DependOnBasicForm() {
        super();
    }

    public DependOnBasicForm(ValidatorInterface validator) {
        super(validator);
    }

    @Override
    public void save() throws FormException {
        // implement the saving logic, you have access to
        // getValues() returns a map of where key is the name of the field and_
        ↪ the values
    }

    @Override
    public String getIdentifier() {
        return "depend_on_basic_form_id";
    }

    @Override
    public String[] requires() {
        return new String[]{"basic_form_id"}; // make this form depend on the_
        ↪ basicform
    }
}
```

- Create *FormCollectionInterface* object

```
FormCollection formCollection = new FormCollection();
```

- Add *InnerForm* to *FormCollection*.

```
// create instance of inner form
BasicForm basicform = new BasicForm();
DependOnBasicForm dependOnBasicForm = new DependOnBasicForm();

// add inner form to collection
formCollection.addForm(basicform);
formCollection.addForm(dependOnBasicForm);
```

- Run *validation* and get the *values*.

```
if(formCollection.isValid()){
    formCollection.getValues()// returns a map of where key is the name of the field_
    ↪and the values
} else{

    LinearLayout errorSpace = (LinearLayout) findViewById(R.id.error_base);
    errorSpace.removeAllViews();// clear space first

    ErrorRenderer errorRenderer = new ErrorRenderer(this, formCollection.
    ↪getValidator());
    errorRenderer.render(errorSpace);
}
```

- Save form values

```
if(formCollection.isValid()){
    try{
        formCollection.save() // save
    } catch (FormException e) {
        e.printStackTrace();
    }
} else{

    LinearLayout errorSpace = (LinearLayout) findViewById(R.id.error_base);
    errorSpace.removeAllViews();// clear space first

    ErrorRenderer errorRenderer = new ErrorRenderer(this, formCollection.
    ↪getValidator());
    errorRenderer.render(errorSpace);
}
```

2.2 Data Population

When developing, especially when working with form we need to prepopulate the form with sample data to ease up our development.

The *faker* is meant to take care of this for us.

Lets populate our *basic form* from earlier with sample data.

```

form // the basicform from earlier example

// create a populator object
DummyDataPopulator populator = new DummyDataPopulator();

// format how the data should look
// this will generate data with the format a mobile number of we use here in kenya
// +254 722 472 447
populator.setFieldPopulator("phone_number", new Telephone().setFormat("(+###) ### ###
↪###"));

// tell populator to populate the form.
// it will use the provider we set above for the phone number instead of the default_
↪one which
// would be a random set of numbers
populator.populate(form);

// you could also populate single field on its own
populator.populate(form.getField("gender"));

```

The kind of data that is generated depends on the type of view and the name of the field. e.g. if a view is edittext of with inputtype of number then the populator will generated numbers for that particular view.

2.3 Javadoc

2.3.1 com.eddmash.form

Form

public abstract class **Form** implements *FormInterface*

Constructors

Form

public **Form**()

Form

public **Form**(ValidatorInterface *validator*)

Methods

addCheck

public void **addCheck**(CheckInterface *check*)

addField

public void **addField** (*String colName*, View *view*)

addField

public void **addField** (*FieldInterface field*)

disableCheck

public void **disableCheck** (CheckInterface *check*)

getErrors

public Map<String, List> **getErrors** ()

getField

public *FieldInterface* **getField** (*String fieldName*)

getFields

public Map<String, *FieldInterface*> **getFields** ()

getIdentifier

public String **getIdentifier** ()

getValidator

public ValidatorInterface **getValidator** ()

getValue

public Object **getValue** (*String fieldName*)

getValues

public Map<String, Object> **getValues** ()

isValid

public boolean **isValid** ()

removeField

```
public void removeField(String colName)
```

removeField

```
public void removeField(FieldInterface field)
```

setData

```
public void setData(Map data)
```

setValue

```
public void setValue(String fieldName, Object value)
```

validate

```
public void validate()
```

FormAwareInterface

```
public interface FormAwareInterface
```

Any class that implements this interface gets the form passed to it via the `setForm(FormInterface)`.

This class comes in handy when creating validation checks that need to be away from the form, especially when performing form-wide validations like on the `FormInterface.validate()` method.

A good example is the `Field` which implements this interface.

The following examples show how this interface can be used to create form-wide checks.

```
public class BasicForm extends Form {

    @Override
    public void validate() {
        try {
            addCheck(new PasswordCheck(password1EditText, password2EditText,
                "Password should match"));
        } catch (FormException e) {
            e.printStackTrace();
        }
    }

    @Override
    public void save() throws FormException {

    }

}
```

A sample check that uses the FormAwareInterface interface

```
class PasswordCheck extends CheckSingle implements FormAwareInterface {
    private final EditText view;
    private final String errorMsg;
    private FormInterface form;

    public PasswordCheck(EditText view, String errorMsg) {
        this.view = view;
        this.errorMsg = errorMsg;
    }

    @Override
    public boolean run() {
        try {
            Map val = form.getValues();
            Object pass1 = val.get("password_1");
            Object pass2 = val.get("password_2");
            if (pass1.equals(pass2)) {
                return true;
            }
        } catch (FormException e) {
            e.printStackTrace();
        }
        return false;
    }

    @Override
    public String getErrorMsg() {
        return errorMsg;
    }

    @Override
    protected TextView getView() {
        return view;
    }

    @Override
    public void setForm(FormInterface form) {
        this.form = form;
    }
}
```

Methods

setForm

void **setForm** (*FormInterface form*)

The form that will hold this class is passed in.

Parameters

- **form** –

FormException

public class **FormException** extends [Exception](#)

Constructors

FormException

```
public FormException (String message)
```

FormInterface

```
public interface FormInterface
```

Methods

addCheck

```
void addCheck (CheckInterface check)  
    Add a validation check.
```

Parameters

- **check** –

addField

```
void addField (FieldInterface field)
```

addField

```
void addField (String colName, View view)
```

disableCheck

```
void disableCheck (CheckInterface check)  
    Disable a validation check
```

Parameters

- **check** –

getErrors

```
Map<String, List> getErrors ()  
    Returns all the errors on the form after validation.
```

Returns the key is the form identifier and the values is a list of all the validation errors related with the form.

getField

```
FieldInterface getField (String fieldName)
```

getFields

`Map<String, FieldInterface> getFields ()`

getIdentifier

`String getIdentifier ()`
A unique identifier for this form.

getValidator

`ValidatorInterface getValidator ()`
The validator this form will be using to validate the inner forms.

getValue

`Object getValue (String fieldName)`
Returns the value a particular field.

The returned values depends on the *field* some fields the values is a string whilst others its a list of string.

Consult the specific *field* to get the returned value.

Parameters

- **fieldName** –

Throws

- *FormException* –

getValues

`Map<String, Object> getValues ()`
Return the values of each field on the form.

The returned values depends on the *field* some fields the values is a string whilst others its a list of string.

Consult the specific *field* to get the returned value.

Throws

- *FormException* –

Returns a map, where keys a field identifier used when adding field to form and values are the fields respective values.

isValid

`boolean isValid ()`
This is the entry point for form validations.

It firstly invokes the *validate()* to get the form wide validation .

It then tells the validator to run the validation check.

Returns true only if the validation checks passed.

removeField

void **removeField**(*String replace*)

removeField

void **removeField**(*FieldInterface field*)

save

void **save**()

This is where you should put you saving logic.

throw FormException if validation fails.

Throws

- *FormException* –

setData

void **setData**(*Map data*)

setValue

void **setValue**(*String fieldName, Object value*)

Set value for a specific.

Parameters

- **fieldName** – the identifier to use to locate the field being set.
- **value** – the value being set, this depends on specific *field*.consult specific *field* to find expected value.

validate

void **validate**()

This is the right place to perform form wide validations. That is validating fields against each other, also validate against parent form fields.

At this point you have access to the `getValues()` of both parent form and current form you can use this values to compare against.

The recommend approach is to a create check that implements `FormAwareInterface` and add it to the validator.

This method is invoked before the field specific validations have been run.

2.3.2 com.eddmash.form.collection

FormCollection

public class **FormCollection** implements *FormCollectionInterface*
Use this class when you want to deal on multiple forms all at once.

Constructors

FormCollection

```
public FormCollection ()
```

FormCollection

```
public FormCollection (ValidatorInterface validator)
```

Methods

addForm

```
public void addForm (InnerFormInterface form)
```

getForm

```
public InnerFormInterface getForm (String identifier)
```

getValidator

```
public ValidatorInterface getValidator ()
```

isValid

```
public boolean isValid ()
```

removeForm

```
public void removeForm (InnerFormInterface form)
```

save

```
public boolean save ()
```

FormCollectionInterface

public interface **FormCollectionInterface**

Use this class when you want to deal on multiple forms all at once.

Methods

addForm

void **addForm** (*InnerFormInterface form*)

Add a form into the collection.

Parameters

- **form** –

Throws

- *FormException* –

getForm

InnerFormInterface **getForm** (*String identifier*)

Get a form in the collection by its identifier.

Parameters

- **identifier** –

Throws

- *FormException* –

getValidator

ValidatorInterface **getValidator** ()

The validator this collection will be using to validate the inner forms.

This is basically a parent validator which calls the individual validators bound to each of the inner forms.

isValid

boolean **isValid** ()

Entry point for validation of all the innerforms on this collection.

Runs validation for each of the inner forms.

removeForm

void **removeForm** (*InnerFormInterface form*)

REmove a from the collection.

Parameters

- **form** –

save

boolean **save** ()

The entry point of form saving.

This method calls the save() of each innerform attached to this collection

Wrap this method in a transaction to ensure if any of the inner form fails to save, All the other innerforms arent saved. for consistency sake.

Throws

- *FormException* –

InnerForm

public abstract class **InnerForm** extends *Form* implements *InnerFormInterface*

This is basically *form* that has the capability of being used with a form collection.

Fields

form

protected *FormCollectionInterface* **form**

Constructors

InnerForm

public **InnerForm** ()

InnerForm

public **InnerForm** (ValidatorInterface *validator*)

Methods

getParent

public *FormCollectionInterface* **getParent** ()

setParent

public void **setParent** (*FormCollectionInterface* *form*)

InnerFormInterface

public interface **InnerFormInterface** extends *FormInterface*

This is basically *Form* that has the capability of being used with a form collection.

This form also has the added capability of depending on another form that's in the same collection as the one it belongs to.

Methods

getParent

FormCollectionInterface **getParent** ()

The collection form in which this form belongs to.

requires

String[] **requires** ()

An string array of other inner forms that this form should depend on i.e. those forms should be validated before this during the validation stage and should be saved before this is saved.

2.3.3 com.eddmash.form.faker

Callback

public abstract class **Callback**

Methods

invoke

public abstract *String* **invoke** ()

DummyDataPopulator

public class **DummyDataPopulator** implements *PopulatorInterface*

This is a minimalistic go at data faker.

This intention is to populate the *FormInterface* and *FieldInterfaces*.

Constructors

DummyDataPopulator

public **DummyDataPopulator** ()

Methods

populate

public void **populate** (*FormInterface form*)

populate

public void **populate** (*FieldInterface field*)

setFieldProvider

public void **setFieldProvider** (*String name, ProviderInterface provider*)

FakerException

public class **FakerException** extends *Exception*

Constructors

FakerException

public **FakerException** ()

FakerException

public **FakerException** (*String message*)

Guess

class **Guess**

Constructors

Guess

Guess (*PopulatorInterface populator*)

Methods

guess

public *String* **guess** (*String name, View view*)

PopulatorInterface

public interface **PopulatorInterface**

Its responsible for populating the *FormInterface* or *FieldInterface* provided.

The populator uses *providers* to populate each field presented to the populator.

Methods

populate

void **populate** (*FormInterface* form)

Tell the populator to start the population on the specified form.

Parameters

- **form** –

Throws

- *FormException* –

populate

void **populate** (*FieldInterface* field)

Tell the populator to start the population on the specified field.

Parameters

- **field** –

Throws

- *FormException* –

setFieldProvider

void **setFieldProvider** (*String* name, *ProviderInterface* provider)

Set the provider to use the populator a specific field.

Parameters

- **name** – the name of the field that will use the provider given.
- **provider** – the provider to use instead of the default ones.

2.3.4 com.eddmash.form.faker.provider

Company

public class **Company** extends *Provider*

Created by eddmash on 12/20/17.

Fields

NAME

String **NAME**

SUFFIX

String **SUFFIX**

type

String **type**

Methods

generate

public String **generate** ()

getCompany

public *Company* **getCompany** ()

getCompanySuffix

public *Company* **getCompanySuffix** ()

Coordinates

public class **Coordinates** extends *Provider*

Fields

LATITUDE

String **LATITUDE**

LONGITUDE

String **LONGITUDE**

Constructors

Coordinates

```
public Coordinates ()
```

Methods

generate

```
public String generate ()
```

getLatitude

```
public ProviderInterface getLatitude ()
```

getLongitude

```
public ProviderInterface getLongitude ()
```

DateProvider

```
public class DateProvider extends Provider
```

Fields

TIME_NOW

```
public static final String TIME_NOW
```

TODAY

```
public static final String TODAY
```

dateFormat

```
protected String dateFormat
```

timeFormat

```
protected String timeFormat
```

Constructors

DateProvider

```
public DateProvider ()
```

Methods

generate

```
public String generate ()
```

getDate

```
public String getDate (String format)
```

getTime

```
public ProviderInterface getTime ()
```

setDateFormat

```
public DateProvider setDateFormat (String dateFormat)
```

setTimeFormat

```
public DateProvider setTimeFormat (String timeFormat)
```

timeNow

```
public String timeNow ()
```

today

```
public String today ()
```

InternetProvider

```
public class InternetProvider extends Provider
```

Fields

DOMAIN

public static final [String](#) **DOMAIN**

EMAIL

public static final [String](#) **EMAIL**

TLD

public static final [String](#) **TLD**

Constructors

InternetProvider

public **InternetProvider** ()

Methods

generate

public [String](#) **generate** ()

setType

public [InternetProvider](#) **setType** ([String](#) *type*)

LocationsProvider

public class **LocationsProvider** extends [Provider](#)

Fields

ADDRESS

public static final [String](#) **ADDRESS**

CITY

public static final [String](#) **CITY**

COUNTRY

```
public static final String COUNTRY
```

Constructors

LocationsProvider

```
public LocationsProvider ()
```

Methods

generate

```
public String generate ()
```

getCity

```
public LocationsProvider getCity ()
```

LoremProvider

```
public class LoremProvider extends Provider
```

Methods

generate

```
public String generate ()
```

getWord

```
public ProviderInterface getWord ()
```

getWords

```
public ProviderInterface getWords ()
```

getWords

```
public ProviderInterface getWords (int noOfWords)
```

Person

public class **Person** extends *Provider*

Fields

EMAIL

public static final *String* **EMAIL**

FIRSTNAME

public static final *String* **FIRSTNAME**

LASTNAME

public static final *String* **LASTNAME**

NAME

public static final *String* **NAME**

PROVIDER_NAME

public static final *String* **PROVIDER_NAME**

Constructors

Person

public **Person** ()

Methods

generate

public *String* **generate** ()

getFirstName

public *ProviderInterface* **getFirstName** ()

getFirstName

public *ProviderInterface* **getFirstName** (*String* gender)

getFullName

public *ProviderInterface* **getFullName** ()

getFullName

public *ProviderInterface* **getFullName** (*String* gender)

getLastName

public *ProviderInterface* **getLastName** ()

getLastName

public *ProviderInterface* **getLastName** (*String* gender)

setGender

public *Person* **setGender** (*String* gender)

setType

public *Person* **setType** (*String* type)

Provider

public abstract class **Provider** implements *ProviderInterface*

Fields

PATTERN

public static final *String* **PATTERN**

RANDOM_INT

public static final *String* **RANDOM_INT**

SEPARATOR

public static final `String` **SEPARATOR**

format

protected `String` **format**

populator

protected `PopulatorInterface` **populator**

Methods

getIdentifier

public `String` **getIdentifier** ()

getPersonName

protected `String` **getPersonName** (`String` *type*)

getPopulator

public `PopulatorInterface` **getPopulator** ()

mergeArrays

protected `String[]` **mergeArrays** (`String[]` *first*, `String[]` *second*)

parseFormat

protected `String` **parseFormat** (`String` *format*, `Callback` *callback*)

randomDouble

protected `Double` **randomDouble** ()

randomDouble

protected `Double` **randomDouble** (int *minNumber*, int *maxNumber*)

randomElement

protected `String` **randomElement** (`String[]` *strings*)

randomElement

protected `String` **randomElement** (`String[]` *strings*, int *count*)

randomElements

protected `String[]` **randomElements** (`String[]` *strings*)

randomElements

protected `String[]` **randomElements** (`String[]` *strings*, int *count*)

randomInt

protected `Integer` **randomInt** ()

randomInt

protected `Integer` **randomInt** (int *minNumber*, int *maxNumber*)

setFormat

public `Provider` **setFormat** (`String` *format*)

setPopulator

public `ProviderInterface` **setPopulator** (`PopulatorInterface` *populator*)

toString

public `String` **toString** ()

ProviderInterface

public interface **ProviderInterface**

This class is responsible for generating data.

Methods

generate

`String generate ()`

getIdentifier

`String getIdentifier ()`

setPopulator

`ProviderInterface setPopulator (PopulatorInterface populator)`

RandomNumberProvider

public class **RandomNumberProvider** extends *Provider*

Fields

DECIMAL

public static final `String` **DECIMAL**

INTEGER

public static final `String` **INTEGER**

Constructors

RandomNumberProvider

public **RandomNumberProvider ()**

Methods

generate

public `String` **generate ()**

getDecimal

public *ProviderInterface* **getDecimal ()**

setMax

public *RandomNumberProvider* **setMax** (int *min*)

setMin

public *RandomNumberProvider* **setMin** (int *max*)

Telephone

public class **Telephone** extends *Provider*

Constructors

Telephone

public **Telephone** ()

Methods

generate

public *String* **generate** ()

2.3.5 com.eddmash.form.fields

BaseField

public abstract class **BaseField**<V, E> implements *FieldInterface*<V, E>

Fields

form

protected *FormInterface* **form**

isEditable

protected boolean **isEditable**

Constructors

BaseField

BaseField (boolean *isEditable*)

Methods

getForm

```
public FormInterface getForm()
```

getValue

```
public abstract E getValue()
```

getView

```
public abstract V getView()
```

isEditable

```
public boolean isEditable()
```

setForm

```
public FieldInterface setForm(FormInterface form)
```

setValue

```
public abstract void setValue(E o)
```

CollectionField

```
public class CollectionField extends BaseField<List<View>, Object> implements CollectionFieldInterface<List<View>, Object>
    Field that manipulates multiple individual views together.
```

Its important to note that the specific fields don't loose there individuality and the values return will be values for each single view.

Setting will be attempted on each single view if its value is found in the map of values passed in.

Constructors

CollectionField

```
public CollectionField(String tag)
```

CollectionField

```
public CollectionField(String name, boolean isEditable)
```

Methods

addField

```
public void addField (String name, View view)
```

addField

```
public void addField (FieldInterface field)
```

addField

```
public void addField (String name, View view, boolean editable)
```

getFields

```
public Map<String, FieldInterface> getFields ()
```

getName

```
public String getName ()
```

getValue

```
public Map<String, Object> getValue ()
```

getView

```
public List<View> getView ()
```

setValue

```
public void setValue (Object o)
```

CollectionFieldInterface

```
public interface CollectionFieldInterface<T, E> extends FieldInterface<T, E>
```

Field that manipulates multiple views together.

Its important to note that the specific fields don't loose there individuality and the values return will be values for each single view.

Setting will be attempted on each single view if its value is found in the map of values passed in.

Methods

addField

void **addField** (*String name*, View *view*)

Add view to the collection.

Parameters

- **name** – identify the view uniquely
- **view** – the view instance

addField

void **addField** (*String name*, View *view*, boolean *editable*)

Add view to the collection.

Parameters

- **name** – identify the view uniquely
- **view** – the view instance
- **editable** – indicate if view allows having its values being set, true if view is editable, else false.

addField

void **addField** (*FieldInterface field*)

Add field to the collection.

Parameters

- **field** – field to be added to the collection

getFields

Map<*String*, *FieldInterface*> **getFields** ()

The fields that make up the collection

Returns map of fields. that are the in the collection field.

getValue

E **getValue** ()

getView

T **getView** ()

setValue

void **setValue** (E o)

FieldInterface

public interface **FieldInterface**<T, E> extends *FormAwareInterface*

This provides a consistent way of dealing with the different views provided by android.

Methods

getForm

FormInterface **getForm** ()

The form instance this field is attached to.

Returns form

getName

String **getName** ()

A name that uniquely identify the view. this is use when you need to pull a specific field from the form instance.

Returns name

getValue

E **getValue** ()

Returns the value of the view

Throws

- *FormException* –

Returns Object

getView

T **getView** ()

The actual view object(s) we are operating on.

Note this may return a list of view objects in case of CollectionField

Throws

- *FormException* – in case it not possible to retrieve the view object

Returns a view instance

isEditable

boolean **isEditable** ()

Is the view editable, this tells the form not to set values for the view and also tells the populator not to populate it.

Returns true if editable, false otherwise

setValue

void **setValue** (E o)

Set view value.

Parameters

- o –

Throws

- *FormException* –

MultiField

public class **MultiField** extends *BaseField*<*List*<View>, *Map*> implements *MultiFieldInterface*

This fields deals with multi fields but they are each treated as one.

This mean the values return are for those fields that have values, the setting also happens to those fields who data is provided.

Constructors

MultiField

public **MultiField** (*String* name, boolean isEditable)

MultiField

public **MultiField** (*String* name)

Methods

addView

public void **addView** (*String* id, View view)

getChildCount

public int **getChildCount** ()

getField

```
public FieldInterface getField(String id)
```

getFields

```
public List<FieldInterface> getFields()
```

getName

```
public String getName()
```

getValue

```
public Map getValue()
```

getView

```
public List<View> getView()
```

removeView

```
public void removeView(String id)
```

setValue

```
public void setValue(Map o)
```

MultiFieldInterface

```
public interface MultiFieldInterface
```

Methods

addView

```
void addView(String id, View view)
```

getChildCount

```
int getChildCount()  
    Get the number of views the multifield contains.
```

getField

FieldInterface **getField** (*String id*)

getFields

List<FieldInterface> **getFields** ()

removeView

void **removeView** (*String id*)

SimpleField

public class **SimpleField** extends *BaseField*<Object, Object>

Constructors

SimpleField

public **SimpleField** (*String name*, *Object value*)

SimpleField

public **SimpleField** (*String name*, *Object value*, boolean *isEditable*)

Methods

getName

public *String* **getName** ()

getValue

public *Object* **getValue** ()

getView

public *Object* **getView** ()

setValue

public void **setValue** (*Object o*)

ViewField

public class **ViewField** extends *BaseField*<View, String>

Constructors

ViewField

public **ViewField** (String name, View view)

ViewField

public **ViewField** (String name, View view, boolean isEditable)

Methods

getName

public String **getName** ()

getSpinnerValuePosition

public int **getSpinnerValuePosition** (Spinner spinner, Object val)

getValue

public String **getValue** ()

getView

public View **getView** ()

setIsEditable

public void **setIsEditable** (boolean isEditable)

setValue

public void **setValue** (String val)

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Value

public class **Value** implements *ValueInterface*<String>

Constructors

Value

```
public Value (String value, String label)
```

Methods

getItem

```
public String getItem ()
```

getLabel

```
public String getLabel ()
```

getValue

```
public String getValue ()
```

toString

```
public String toString ()
```

ValueInterface

```
public interface ValueInterface<T>
```

Methods

getItem

```
T getItem ()
```

getLabel

```
String getLabel ()
```

getValue

```
String getValue ()
```

ViewValue

public class **ViewValue** implements *ValueInterface*<Map>

Constructors

ViewValue

public **ViewValue** (Map *item*, String *labelCol*, String *valueCol*)

Methods

fromCollection

public static List<*ValueInterface*> **fromCollection** (List<Map> *data*, String *colKey*, String *valueKey*)
Take list of maps and prepares them for use as values on a spinner.

Parameters

- **data** –

getItem

public Map **getItem** ()

getLabel

public String **getLabel** ()

getValue

public String **getValue** ()

toString

public String **toString** ()

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