

# XForms 2.0 Cheatsheet

## Common Attributes

- id [not AVT],  
model [not AVT]
- context
- xml:lang
- class

## Binding Attributes

- bind [not AVT], ref

## The value and mediatype Attributes

- value, mediatype

## model

- instance
- bind
- function
- result
- var

## instance

- src [not AVT]
- resource [not AVT]
- response-mediatype [not AVT]

## bind

type, constraint, relevant, required,  
readonly, calculate, label, help, hint, p3ptype

```
<bind ref="action"
readonly=".. /status='accepted'"/>
```

## var

```
<var name="message"
value="instance('message')"/>
```

## function

- signature [not AVT]

- override

- type

- [var](#)\*,

- [result](#)?

```
<function signature="my:sumproduct($p as
xs:decimal*, $q as xs:decimal*) as
xs:decimal">
  sum(for $i in 1 to count($p) return
    $p[$i]*$q[$i])
</function>
<function signature="my:fibonacci($n as
xs:integer) as xs:integer">
  <var name="sqrt5" value="math:sqrt(5)"
  <result value="(math:power(1+$sqrt5,
    $n) - math:power(1-$sqrt5, $n)) div
    (math:power(2, $n) * $sqrt5)"/>
</function>
```

## Controls

- appearance: "full"|"compact"|"minimal"

- inputmode

- incremental

- UI Common: [label](#) (xs:string) | [help](#) (xs:string) | [hint](#) (xs:string) | [alert](#) (xs:string)

- naviindex

- accesskey

## Core Controls

### input

```
<input ref="order/shipTo/street"
label="Street"/>
```

### secret

```
<secret ref="/login/password"
label="Password" hint="The password you
enter will not be displayed"/>
```

### textarea

```
<textarea ref="message/body"
label="Message Body:"/>
```

### output

```
<output ref="age" label="Age:"/>
<output class="note">Deleted</output>
```

### upload

accept: Optional comma-separated list of  
suggested mediatypes

```
<upload ref="mail/attachment"
accept="video/*,image/*,.txt,.pdf"
label="Select attachment:">
  <filename ref="@filename"/>
  <mediatype ref="@mediatype"/>
</upload>
```

### range

- start, end

- step

- Types:xs:duration, xs:date, xs:time,  
xs:dateTime, xs:gYearMonth, xs:gYear,  
xs:gMonthDay, xs:gDay, xs:gMonth, xs:float,  
xs:double, and xs:decimal.

```
<range ref="/stats/balance" start="-2.0"
end="2.0" step="0.5" label="Balance"/>
```

## trigger

```
<trigger label="Click here">
  <message ev:event="DOMActivate">Hello!
</message>
</trigger>
```

## submit

Shorthand for a trigger with a send  
action.

- submission

```
<submit label="OK"/>
<submit submission="timecard"
label="Submit Timecard"/>
```

## Selection Controls (Select/Select1)

- selection: "open" or "closed"

- appearance: full | compact | minimal

## The (multiple) select Element

```
<select ref="flavors" label="Flavors">
  <item label="Vanilla">v</item>
  <item label="Strawberry">s</item>
  <item label="Chocolate">c</item>
</select>
```

## The (single) select1 Element

```
<select1 ref="icecream/flavor"
label="Flavour">
  <item label="Vanilla">v</item>
  <item label="Strawberry">s</item>
</select1>
```

## choices

```
<choices label="Cold">
  <item label="Water">water</item>
  <item label="Milk">milk</item>
</choices>
```

## itemset

copy: Optional, value to be copied.

```
<itemset model="flavors" ref="flavor"
label="{description}"
copy="description"/>
<copy ref="."/ />
```

## The Control

resource, initial

```
<control resource="today.xhtml"
label="Today's date:" />
```

## Container Controls

### group

collapse: One of ("open" | "closed").

```
<group ref="address" label="Shipping
Address" />
<input ref="line_1" label="Address
line 1" />
<input ref="line_2" label="Address
line 2" />
<input ref="postcode"
label="Postcode" />
</group>
```

### Switch / Case / Toggle

- case : selected (false) Initial status for the case (boolean)

- name

```
<switch ref="/payment/details/@method">
<case name="creditCard" label="Credit
Card Details">
...
</case>
<case name="cashCard" label="Bank
Account Card">
...
</case>
</switch>
```

### dialog

- level: "modeless" | "modal" | [PrefixedName](#) (def: "modal").
- hide: Optional boolean (def : true)

- Content: ([Controls](#) | [UI Common](#))\*

```
<dialog id="my-dialog" label="Please
enter your information">
...
<trigger label="Submit">
<hide ev:event="DOMActivate"
dialog="my-dialog" />
</trigger>
</dialog>
```

- Show / Hide

- dialog

### repeat

- indexref Optional [Single Item Binding](#) to simpleContent, with which the repeat index is synchronized.

- startindex Optional 1-based initial value

- number

- Content: ([Controls](#) | [Action](#))\*

```
<repeat ref="/products/product"
class="list">
<output ref="."/ /><html:br />
</repeat>
```

### Submission

- Header

- nonrelevant ("keep" | "remove" | "empty")

- relevant (xs:boolean) [deprecated]

- validate (xs:boolean)

- resource (xs:anyURI)

- action (xs:anyURI) [deprecated]

- mode ("asynchronous" | "synchronous")

- method ("post" | "get" | "put" | "delete" | "multipart-post" | "form-data-post" |

"urlencoded-post" | Any other [NCName](#) | [PrefixedName](#))

- serialization (xs:string)

- mediatype (xs:string)

- encoding (xs:string)

- separator (";" | "&")

- version (xs:NMTOKEN)

- indent (xs:boolean)

- omit-xml-declaration (xs:boolean)

- standalone (xs:boolean)

- cdata-section-elements (QnameList)

- includenamespaces (xs:NMTOKENS)

- response-mediatype (xs:string)

- replace ("all" | "instance" | "text" | "none" | [PrefixedName](#))

- instance (xs:IDREF)

- targetref ([Single Item Binding](#))

- target ("\_self" | "\_blank" | xs:string)

```
<submission
ref="instance('address')"
resource="http://example.com/new-
address"
method="post"
replace="none">
<header name="Accept"
```

```
combine="replace">application/sparql-
results+xml</header>
</submission>
```

## Events

### Initialization Events

xforms-model-construct, xforms-model-construct-done, xforms-ready, xforms-model-destruct

### Interaction Events

xforms-focus, xforms-previous, xforms-next, xforms-help, xforms-hint, DOMActivate, xforms-submit, xforms-submit-serialize, xforms-dialog-show, xforms-dialog-hide

### Notification Events

xforms-insert, xforms-delete, xforms-value-changed, xforms-invalid, xforms-valid, xforms-readonly, xforms-readwrite, xforms-required, xforms-optional, xforms-enabled, xforms-disabled, DOMFocusIn, DOMFocusOut, xforms-select, xforms-deselect, xforms-in-range, xforms-out-of-range, xforms-scroll-first, xforms-scroll-last, xforms-submit-done, xforms-dialog-shown, xforms-dialog-hidden

### Error Handling

xforms-binding-error, xforms-expression-error, xforms-action-error, xforms-compute-error, xforms-version-error, xforms-link-error, xforms-load-error, xforms-output-error, xforms-submit-error

## Actions

### Common attributes:

- if

```
<setfocus
  ev:event="xforms-value-changed"
  control="LocalControl"
  if="string-length(.)=3 and . > 0"/>
```
- while

```
<action
while="instance('temps')/counter <=
count(/some/nodes)">
```
- iterate (node-sequence)

```
<setvalue iterate="*/total" ref="."
value="0"/>
```

## XML Events

- event(NMTOKEN)
- observer (IDREF)
- target (IDREF)
- handler (URI)
- phase ("capture" | "default"\*)
- propagate ("stop" | "continue"\*)
- defaultAction ("cancel" | "perform"\*)

## action

- type: Optional MIME type of the language of the script.
  - Content: ([Action|var](#))\* | [param](#)\*, [body](#)
- ```
<action ev:event="DOMActivate">
  <setvalue ref="ready">yes</setvalue>
```

```
</send/>
</action>
```

## param

- name
- value

## body

```
<action ev:event="DOMActivate"
type="text/javascript">
  <param name="star"
value="instance()/star"/>
  <param name="planet"
value="instance()/planet"/>
  <body>
    alert('I was just passed a few
parameters: star = "' + star + '" and
planet = "' + planet + '".');
  </body>
</action>
```

## setvalue

```
<setvalue ref="a" value="0"/>
<setvalue iterate="player/score" ref="."
value="0"/>
```

## insert

- origin: items to be inserted.
- at: index where items are to be inserted.
- position: before and after.

```
<insert context="/purchaseOrder"
ref="item" at="index('R') "
origin="/item" />
```

## delete

- at
- ```
<delete ref="list/a" at="1"/>
<delete ref="list/a" />
```

## setindex

- repeat

- index

```
<setindex repeat="R" index="index('R')
+1" />
```

## toggle

- case

```
<toggle case="home"/>
```

## setfocus

- control

```
<setfocus ev:event="xforms-ready"
control="start"/>
```

## previousfocus

```
<previousfocus/>
```

## nextfocus

```
<input ref="." incremental="true"
label="4 chars:">
<nextfocus ev:event="xforms-value-
changed" if="string-length(.)=4"/>
</input>
```

## dispatch

- name
- targetid
- control
- delay
- bubbles
- cancelable
- property

```
<dispatch name="DOMActivate"
targetid="zoomin">
  <property name="person"
value="instance('person')"/>
</dispatch>
```

## property

## rebuild

## recalculate

## revalidate

## update

## refresh

## reset

## retain

## load

- resource
- target ("\_self" | "\_blank")

```
<load><resource>http://example.com/
index.html</resource></load>
```

## send

- submission

```
<send submission="s1"/>
<send model="m"/>
```

## return

- nonrelevant

## renew

- control

```
<renew control="game"/>
```

## message

- level: ephemeral | modeless | modal