

# How to modify an attribute on a HTML tag

There are three different approaches to adding or updating a Components HTML attributes.

**The first approach is the simplest approach which overrides the Components "onComponentTag" method. In your WebPage:**

```
...

// this can be any Component
new TextField("my-text-field", myModel){

    @Override
    protected void onComponentTag(final ComponentTag tag){
        super.onComponentTag(tag);
        tag.put("onmouseover", "foo();return false;");
    }
};

...
```

You can also add to existing tag attributes using the onComponentTag:

```
Image img = new Image("my-img-id") {
    @Override
    protected void onComponentTag(ComponentTag tag) {
        // illustrates how to prevent an image from caching by adding a random value to the src
        attribute
        // This is similar to the code thats in NonCachingImage and would be the preferable solution
        for this
        super.onComponentTag(tag);
        String src = (String) tag.getAttributes().get("src");
        src = src + "&rand=" + Math.random();
        tag.getAttributes().put("src", src);
    }
};
```

**A decoupled approach is to use a generic AbstractBehavior. In your WebPage:**

```
...

new TextField("my-text-field", myModel).add(new AbstractBehavior(){

    @Override
    public void onComponentTag(Component component, ComponentTag tag) {
        tag.put("onmouseover", "foo();return false;");
    }
});

...
```

**Another decoupled approach is to use an AttributeModifier/AttributeAppender.**

To modify a tag attribute, one can use a AttributeModifier. Just add an instance of AttributeModifier to the tag's Java component. When creating the AttributeModifier class the name of the attribute you want to modified must be passed, along with a model containing the value to use. For example:

In your HTML you would have something like this:

```
<span wicket:id="alarm" class="unknown"/>Alarm Status</span>
```

And in your WebPage Java something like this:

```
Label alarmLabel = new Label("alarm", new PropertyModel(test, "alarmState"));
alarmLabel.add(new AttributeModifier("class", new Model() {
    public Object getObject(final Component component) {
        String cssClass;
        if ( test.getAlarmState() )
            cssClass = "alarm";
        } else {
            cssClass="noAlarm";
        }
        return cssClass;
    }
}));
add(alarmLabel);
```

If the attribute is not already present it will not, by default, be created. To quote the [Javadoc](#): "If an attribute is not in the markup, this modifier will add an attribute to the tag only if addAttributeIfNotPresent is true and the replacement value is not null." (see constructor `AttributeModifier` for more details).

There is a `SimpleAttributeModifier` which always adds/replaces the attribute, but like the name suggests it is pretty simple and requires the attribute value upfront. If your attribute value is changing all the time you need a modifier that accepts a model, like `AttributeModifier`.

```
// adds or replaces the class attribute on a component with my-css-class
component.add(new SimpleAttributeModifier("class", "my-css-class"));
```

Another example would be to use the `AttributeAppender`:

```
...

new TextField("my-text-field", myModel).add(new AttributeAppender("onmouseover", new Model("foo();return
false;"), ";"));

...
```



#### Raw Markup

Use `IMarkupFilter` if you are using markup that is not attached to any component