

RML Example 45: Codesnippets



RML (Report Markup Language) is ReportLab's own language for specifying the appearance of a printed page, which is converted into PDF by the utility `rml2pdf`.

These RML samples showcase techniques and features for generating various types of output and are distributed within our commercial package as test cases. Each should be self explanatory and stand alone.

Code snippets test

Python has a code-highlighting package named 'Pygments'. Pygments is installed, you can generate colored code snippets. If the sample below is in colour, you have it installed; otherwise, you can obtain it from pypi.python.org, or from the `python-pygments` package in Ubuntu. Pygments supports many, many different lexers.

Here is the code to insert a Python snippet...

```
<codesnippet language="python">...</codesnippet>
```

...and here is some sample output...

```
class code(MapNode):
    def evaluate(self, tagname, sdict, pcontent, extra, context):
        stylename = "pre.defaultStyle"
        if sdict.has_key("style"):
            stylename = sdict["style"]
        if sdict.has_key("syntax"):
            lang = sdict["syntax"]

        #clean up the block of code prior to display.

        src = ''.join(map(str, pcontent))
        #split line ends, strip trailing space

        lines = map(lambda x: x.rstrip(), src.split('\n'))
        #generally we trim off up to one leading and trailing blank lines
        #that's probably from indenting the XML
        if lines[0] == '':
            lines = lines[1:]
        if lines[-1] == '':
            lines = lines[:-1]
```

Now we'll show coloured XML:

```
<tag attr="value">
  <content>Foo bar!</content>
</tag>
```

If you don't specify a language parameter (or if pygments cannot be imported), it won't get coloured.

```
<tag attr="value">
  <content>Foo bar!</content>
</tag>
```

Because your XML might be indented, by default we remove an initial or final blank line, and we also 'dedent' to remove any whitespace on the left of your code block. However, the default paragraph style selected adds an indent on the left side.

The one below specifies a different paragraph style, defined in our document, to add a coloured backdrop...

```
def my_function(arg):
    foo, bar = do_stuff_to(arg)
    return [bar, foo[0]]
```

Empty code snippets below should have no ill effects and just vanish.