Advanced Programming Language (630501)
Fall 2011/2012 – Lecture Notes # 5

Hyperlinking

Outline of the Lecture
  ➢ **Characterizing the Element with Attributes**
  ➢ **Linking**
      o **The <a> Element**
      o **The <anchor> Element**

Characterizing the Element with Attributes

- Further information about the element's characteristics is provided by adding attributes to the element, as necessary. Thus, if you want to right-align a paragraph, the attribute would read as follows:

  `<p align="right">Right-aligned text</p>`

- All attributes must be enclosed in quotation marks (either single or double)

Linking

Hyperlinking
      o *Internal Linking*
      o *External Linking*

The <a> Element
  - The **<a>** element is an abbreviated form of the **<anchor>** element. Text within the **<a>** element forms a hyperlink to another card or deck.
  - It is preferable to use <a> instead of <anchor> wherever possible.
  - An example of the syntax for the <a> element:

      `<a href="deck2.wml">A Link to Deck 2</a>`

  - The **href** attribute is required

Example 5.1

```
<?xml version = "1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.2//EN"
"http://www.wapforum.org/DTD/wml12.dtd">
<!-- Using local icons      -->
<wml>
<card id = "index" title = "Icons">
<p>Local Icons<br />
<!-- link to second card -->
```

```
<a href = "#card2">
<img src = "" alt = "Link" localsrc = "link" />
</a>Link<br />
<!-- link to third card -->
<a href = "#card3">
<img src = "" alt = "Wrench" localsrc = "wrench" />
</a>Wrench<br />
<!--link to external card -->
<a href = "52.wml#card4">
<img src = "" alt = "Football" localsrc = "football" />
</a>Football<br />
<a href = "52.wml#card5">
<img src = "" alt = "Boat" localsrc = "boat" />
</a>Boat </p>
</card>
<!-- card named card2 -->
<card id = "card2" title = "Icons">
<p>You choose the link!</p></card>
<!-- card named card3 -->
<card id = "card3" title = "Wrench Link">
<p>You choose the wrench!</p></card>
</wml>
```

Example 5.2

```
<?xml version = "1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.2//EN"
"http://www.wapforum.org/DTD/wml12.dtd">
<!-- Linking to an external card -->
<wml>
<card id = "card4" title = "Football Link">
<p>You chose the football!</p></card>
<card id = "card5" title = "Boat Link">
<p>You chose the boat!</p></card></wml>
```

The <anchor> Element
- The **<anchor>** element anchors a task to a string of formatted text, often called a link. You can specify a link within any formatted **text** or **image**. When a user selects the link and presses ACCEPT, the device executes the task.

Syntax

```
<anchor title="label">task text</anchor>
```

- The **task** represents the action to perform when the user activates the link
- The **text** is the text the device will display to represent the link:

task	You must anchor *one* of the following task elements to a link: • **<go>** • **<prev>** • **<refresh>** • **<noop>**
text	Devices typically set this text off from surrounding text, for instance, by enclosing it in square brackets or underlining it if the device can display bitmap images.

- The following is an example of the syntax for the <anchor> element:

```
<anchor>A link to Deck 2 <go href="deck2.wml"></anchor>
```

<div align="center">

Example 5.3

</div>

```
<?xml version = "1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.2//EN"
"http://www.wapforum.org/DTD/wml12.dtd">
<wml>
<card>
<p>Some links:<br/>
<anchor title="Link1">
<go href="d1.wml"/>News</anchor><br/>
<anchor title="Link2">
<go href="d2.wml"/>Sports</anchor>
</p></card></wml>
```

Specifying URLs

- As in HTML, navigation in WML occurs by specifying URLs. To navigate between multiple cards and decks, you simply specify the URL you want to open.
- To navigate to a particular card, specify a URL with the following syntax:
  <div align="center">

  deck_URL#card_id
  </div>
- If you do not specify a card, the device automatically displays the first card in the deck.