Creating Radio Buttons

We've saved the best one for last. Creating a radio button dynamically via JavaScript is a particularly arduous task because Internet Explorer's method of creating a radio button is far different from any other browser's method.

All modern browsers except Internet Explorer allow a radio button to be created using the following expected methods:

```javascript
var radioButton = document.createElement("input");
radioButton.setAttribute("type", "radio");
radioButton.setAttribute("name", "radioButton");
radioButton.setAttribute("value", "checked");
```

The radio button will be created and behave normally in all modern browsers except Internet Explorer. In Internet Explorer, the radio button will be displayed, but it's unable to be checked, because clicking the radio button does not check the radio button as it should.

The method for creating an Internet Explorer radio button is different from the other browsers and totally incompatible. You can build the radio button built previously as follows for Internet Explorer:

```javascript
var radioButton = document.createElement("<input type='radio' name='radioButton' value='checked'>");
```

The good news is that it is possible to create a radio button dynamically via JavaScript in Internet Explorer—it's just that it's difficult and incompatible with other browsers.

How can you overcome this limitation? The short answer is that some type of browser-sniffing mechanism is required so the script knows which method to use when creating the radio button. Fortunately, you don't need to check for a multitude of different browsers. Assuming only modern browsers are in use, the script needs to differentiate only between Internet Explorer and everything else.

Internet Explorer recognizes a proprietary attribute of the `document` object named `uniqueID`. Internet Explorer is the only browser that recognizes this property, which makes `uniqueID` a perfect fit for determining whether the browser in which the script is running is Internet Explorer.

Using the `document.uniqueID` property to determine the browser in which the script is running, you can combine the Internet Explorer–specific method with the standards-compliant method to produce this code:

```javascript
if(document.uniqueID) {
   // Internet Explorer
   var radioButton = document.createElement("<input type='radio' name='radioButton' value='checked'>");
}
else {
   // Standards Compliant
   var radioButton = document.createElement("input");
   radioButton.setAttribute("type", "radio");
   radioButton.setAttribute("name", "radioButton");
   radioButton.setAttribute("value", "checked");
}
```