Loops
The do-while Repetition Structure

do
{
    statement(s)
}
} while ( condition ) ;

- The body of a do-while is ALWAYS executed at least once. Is this true of a while loop? What about a for loop?
Example

do
{
    num = prompt("Enter a positive number: ");
    num = parseInt(num);
    if (num <= 0)
    {
        alert("That is not positive. Try again.");
    }
}while (num <= 0);
An Equivalent while Loop

```javascript
num = prompt("Enter a positive number: ");
num = parseInt(num);
while ( num <= 0 )
{
    alert("That is not positive. Try again.");
    num = prompt("Enter a positive number: ");
    num = parseInt(num);
}
```

- Notice that using a while loop in this case requires a priming read.
An Equivalent for Loop

```javascript
num = prompt("Enter a positive number: ");
num = parseInt(num);
for ( ; num <= 0; )
{
    alert("That is not positive. Try again.");
    num = prompt("Enter a positive number: ");
    num = parseInt(num);
}
• A for loop is a very awkward choice here because the loop is event-controlled.
```
So, Which Type of Loop Should I Use?

- Use a **for** loop for counter-controlled repetition.
- Use a **while** or **do-while** loop for event-controlled repetition.
  - Use a **do-while** loop when the loop must execute at least one time.
  - Use a **while** loop when it is possible that the loop may never execute.