CheckingForNull

Q: I want to check for null, something like this:

```
#if ($car.fuel == null)
```

A: There are several approaches. Select the one most suitable depending on what you really want to do. (Thanks, everybody, for all the feedback on the user list.) See also:
Bugzilla #20999, Bugzilla #27741, VelocityNullSupport.

Approach 1: Use the fact that null is evaluated as a false conditional. (cf. http://velocity.apache.org/engine/devel/user-guide.html#Conditionals)

```
#if( ! $car.fuel )
```

Note: The conditional will also pass if the result of $car.fuel is the boolean false. What this approach is actually checking is whether the reference is **null or false**.

Approach 2: Use the fact that null is evaluated as an empty string in quiet references. (cf. http://velocity.apache.org/engine/devel/user-guide.html#quietreferencenotation)

```
#if( "$!car.fuel" == "" )
```

Note: The conditional will also pass if the result of $car.fuel is an empty String. What this approach is actually checking is whether the reference is **null or empty**. BTW, just checking for **empty** can be achieved by:

```
#if( "$car.fuel" == "" )
```

Approach 3: Combine Approach 1 and 2. This will check for **null and null only**.

```
#if ((! $car.fuel) && ("$!car.fuel" == ""))
```

Note: The logic underlying here is that: "(null or false) and (null or > empty-string)" => if true, must be null. This is true because "false and empty-string and not null" is never true. IMHO, this makes the template too complicated to read.

Approach 4: Use a Tool that can check for null (NullTool,ViewNullTool).

```
#if( $null.isNull($car.fuel) )
```

Note: Of course, NullTool must be in the Context as $null in this case.

Approach 5: Don't check for null directly, use a self-explaining method.

```
#if( $car.fuelEmpty )
```

Note: This is my (Shinobu Kawai's) recommended solution. You have to implement the method, but it makes the template so easy-to-read.

```
public boolean isFuelEmpty()
{
  // return true if fuel is empty.
}
```

Approach 6: Use a custom directive. cf. IfNullDirective, IfNotNullDirective

```
#ifnull( $car.fuel )
#ifnotnull( $car.fuel )
```

Note: You will have to register the directive in your velocity.properties.

```
userdirective = org.apache.velocity.tools.generic.directive.Ifnull
userdirective = org.apache.velocity.tools.generic.directive.Ifnotnull
```