

# 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
```