# Oni Scripting: Language and Syntax

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# Language and Syntax

## 1 What is Scripting?

Scripting is alteration of \*.bsl files in the IGMD folder. Before you begin messing around with files, make a back-up. To install scripts, simply replace the old \*.bsl files with the new ones. The scripting language is very easy and very flexible.

### 2 Commentary Lines

Any line beginning with a # is a commentary line and is not executed.

# This line is not executed.

But this line is.

If a piece of code does not make sense, it maybe ignored or if does not match the structure then the whole file will be ignored and you might just start in the default location in an empty level.

### 3 Variables

To create a new variable, use the following lines. Booleans equal to false or true. If a function requires a 0 or 1 as a parameter, you may use the Boolean variable. To declare a Boolean, you use:

var bool variable\_name;

You can also declare integer variables. You may assign the initial value in the same line when you declare the variable by:

```
var int variable_name = initial_value;
```

In general to declare a variable you use:

```
var variable_type variable_name
```

### 4 Functions

This is the structure of a function:

```
func void function_name (parameters)
{
function_body
}
```

If you do not have any parameters, you leave the parameter field as **void**. To call this function, If you do not have any parameters just leave the parameter field blank.

```
function_name (parameters);
```

Parameters may be listed in order without any brackets and commas as well.

### **5** Forking Functions

To run a function in parallel, you would have to fork it by:

```
fork function_name (parameters)
```

#### 6 If Statements

To call an **if** statement, you use:

```
if (condition)
{
  if_body
}
```

The if\_body executes only if the condition is true. If the condition is false nothing will happen.

Conditions are of the type: (variable\_name eq value) or (variable\_name neq value) where eq means equal to and neq means not equal to.

# 7 Compilation

In every single set of \*.bsl files, there is a function called main. The main function is executed automatically as soon as the level begins. Some other functions are executed automatically by some \*.sep triggers. If you delete the main function or any of the \*.sep trigger functions, your script will not run. If you want the functions to do nothing, just remove the body. Other than that, you must call all your functions in one way or another through the main function or any function triggered by \*.sep files.

Oni scripting permits cyclic or recurring functions. Make sure that the cyclic functions are forked or end at some point so that the main line of the code could run.