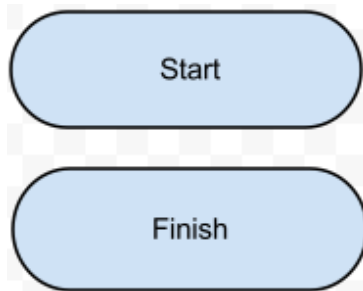


Flowchart Symbols and Their Uses

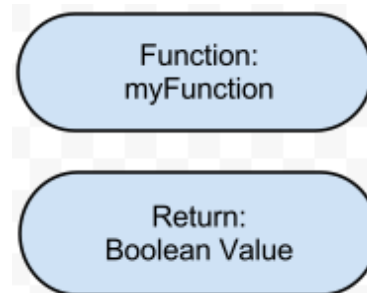
Below is a partial list of flowchart symbols, how they are used, and what kind of support details they should include.

Terminators

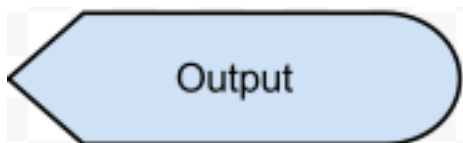


Terminators are used to show the beginning and the end of a process. Every flowchart, whether it's your main code or a function, will begin and end with a terminator. However, only your main code will have Start and Finish in the terminators. This is because these terminators signify where the code begins and where the code ends.

Terminators in function flowcharts will have **Support Details** to indicate the name of the function as it appears in the code. The example to the right would be the Start terminator for a function called myFunction. Similarly, the end terminator shows that control is being returned to the main code along with a Boolean value.

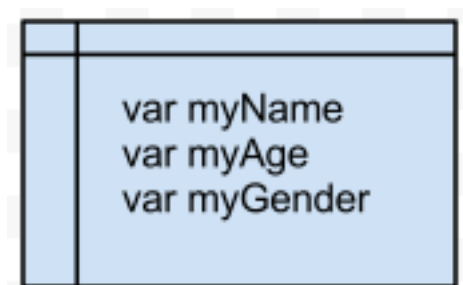


Output/Display



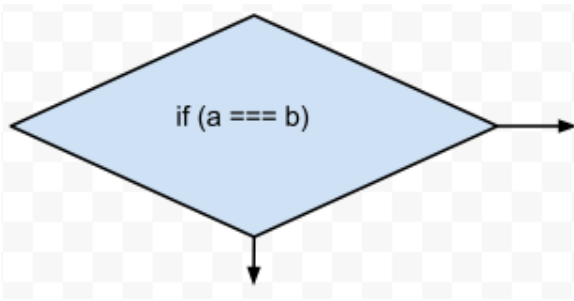
The **Output/Display** symbol indicates that something is going to be output to the screen. In the case of SDI, this output indicates a console.log.

Internal Storage



The **Internal Storage** symbol is used to indicate the variables that are used within your code. The example to the left indicates that we have defined three variables. You also can use Global Variables and Local Variables to indicate the scope of the variables you are declaring.

Conditional/Decision



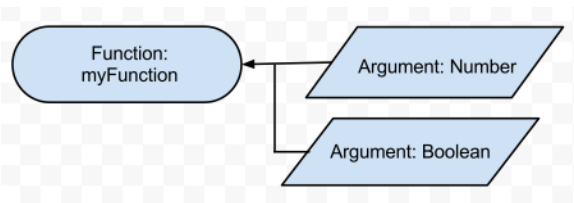
The **Conditional** or **Decision** symbol is used any time you are comparing two or more items. The conditional with ALWAYS have at least two arrows coming out of it, as shown in the example on the left. This is because a conditional, by its very nature will have at least two different outcomes, one outcome if it is true and one outcome if it is false. The symbol should contain information about the conditional used in the code.

Predefined Process



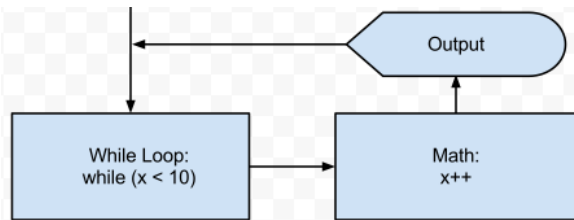
The **Predefined Process** symbol indicates that control of the code is going to move to a function. Whenever you use this symbol, you should have a matching flowchart for the function. So, if your flowchart contained the symbol to the left, you should also have a flowchart that begins with a terminator that has the myFunction name within it.

Data/Argument



The **Data/Argument** symbol is used to indicate that information is being retrieved or accessed from an external source. For example, the symbol is used to indicate that information is being retrieved from user input, such as through the use of a prompt. It is also used to indicate that an argument is being passed into a function. In this example, two arguments are being passed into the function, myFunction. One argument is a number and the other is a Boolean. You should include the name of the argument variable as your support details. You also can indicate the values that are being passed if you know what they will be.

Process



The **Process** symbol is used when you are performing a code-defined process within the code. For example, if you need your code to push a value into an array, you can use the Process symbol and put the array name and method inside. As indicated by the example to the left, the Process symbol can be used to indicate a loop or math process. Keep in mind that when you are using it to indicate a loop, such as a for loop or a while loop, you **MUST** show the logical flow of that loop. In the example to the left, the loop goes through a math process, performs output, and then goes back to the loop. Notice also that the support details indicate what the comparison is within the while loop and what math is being performed.
