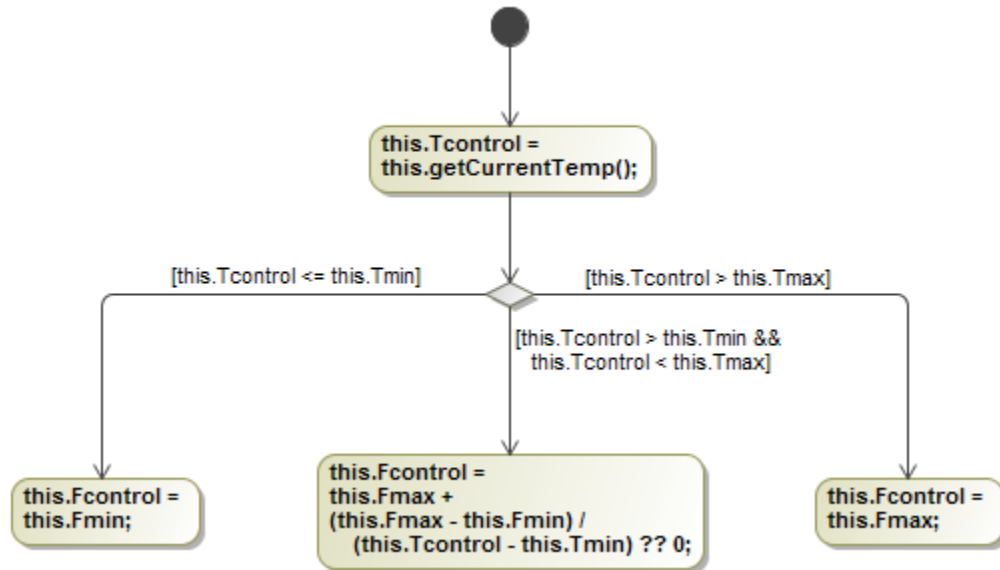


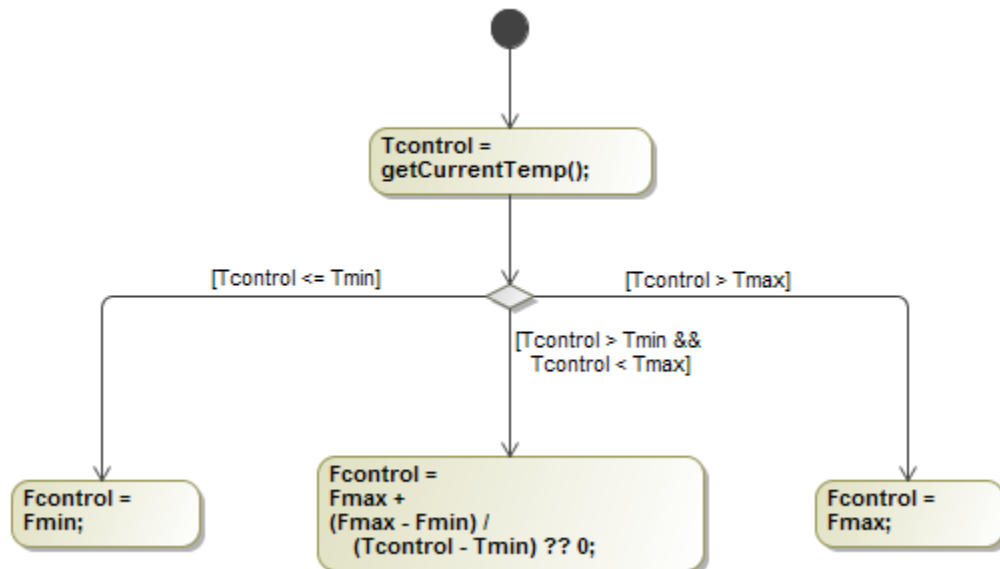
Accessing context features without using "this"

Like Java and JavaScript, Alf uses the keyword *this* to denote the current instance of the context Class in which the *this* expression occurs. Unlike Java and JavaScript, however, the Alf specification requires that *this* be used explicitly in order to access features (Properties, Operations and Receptions) of the context Class. For example, *this* is used extensively in the activity diagram shown below to access context Properties and to invoke the *getCurrentTemp* Operation.



Accessing context features using *this*.

Magic Alf Analyst implements an extension to the Alf language that allows context features to be accessed by name without explicitly using a *this* prefix. This is similar to what is allowed in Java and JavaScript. For example, the meaning of the Alf code in the above example remains the same if all the *this* expressions are dropped, as shown below.



Accessing context features without using *this*.



Note

Unlike Java and JavaScript, Alf allows new local names to be defined without an explicit declaration. This can result in the masking of errors if the name of a context attribute is misspelled on the left-hand side of an assignment statement. For instance, if the assignment in the action on the lower left in the activity above were changed to *Fcntrol* = *Fmin*; (with "*Fcontrol*" misspelled to "*Fcntrol*"), this would *not* be reported as an error. Rather, the assignment would simply define a new local name *Fcntrol* within the Opaque Action, which would be assigned *Fmin* as its initial value, with no effect on *Fcontrol*.