4. Declarations

4.1 Declaration Syntax

Function definitions have the form:

function-definition:

type identifier(parameter-listopt) compound-statement

parameter-list:

type-specifier identifier

parameter-list, type-specifier identifier

Type is one of the following keywords: int, bool, note, chord, stanza, scale, score

Identifier is a non-reserved alpha-numeric sequence as described in section X.X

Compound-statement is any legal code that returns a value of agreeable type with the declaration.

4.2 Blocks

A block is a section of code enclosed by Meth and End keywords. Blocks can be nested within other blocks. Identifiers visible in an outer block are visible in the inner block, but identifiers declared in the inner block will not be visible in the outer block when the inner block ends.

EXAMPLE CODE MAYBE??

4.3 Scope

The scope of an identifier is the subsequent statements within the block of code where it is declared including blocks nested in that block.  Declarations can appear after certain keywords that open a block of code.   These keywords are meth, while, and foreach. When identifiers are declared in these expressions, the scope of the identifiers is the block opened by the keyword.  Scope does not extend to the execution of function calls.  At the beginning of a function’s execution, its parameters will be the only identifiers in scope.

EXAMPLE CODE MAYBE??

4.4 Identifier Naming

All identifiers within a block of code must be unique and a nested block’s identifiers must not conflict with the identifier names in its parent block.  This means that an identifier is visible over its entire scope and cannot be hidden by a subsequent re-declaration of the identifier.

EXAMPLE CODE MAAYBE??