

Proposal for C2x
WG14 N2482

Title: Minor attribute wording cleanups
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Proposal category: Editorial & Bug Fixes
Target audience: People reading the standard

Abstract: Proposes minor editorial changes and small bug fixes to the attribute wording, based on feedback from the community.

Minor attribute wording cleanups

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Summary of Changes

N2482

- Original proposal.

Introduction

Now that attributes have been added to the working draft, implementers are starting to update their implementations accordingly. Through this process, some issues have been identified where the wording in the standard could be clarified. This proposal is an omnibus paper to clarify the wording in the standard without modifying the intent.

Proposed Wording

The wording proposed is a diff from WG14 N2454. **Green** text is new text, while **red** text is deleted text.

Allow `[[nodiscard]]` to be applied to a function regardless of the syntactic form of its declaration

Modify 6.7.11.2p1:

The `nodiscard` attribute shall be applied to the identifier in a function ~~declarator~~-**declaration** or to the definition of a structure, union, or enumeration type. It shall appear at most once in each attribute list and no attribute argument clause shall be present.

Clarify what an attribute appertains to in a declaration

Modify 6.7.6p5:

If, in the declaration "**T D1**", **D1** has the form

identifier attribute-specifier-sequence_{opt}

then the type specified for *ident* is *T* and the optional attribute specifier sequence appertains to ~~D1~~**the entity that is declared**.

Disallow declarations following a `[[fallthrough]]` attribute

Modify 6.7.11.5p1:

The attribute token `fallthrough` shall only appear in an attribute declaration (6.7); such a declaration is a *fallthrough declaration*. The attribute token `fallthrough` shall appear at most once in each attribute list and no attribute argument clause shall be present. A fallthrough declaration may only appear within an enclosing `switch` statement (6.8.4.2). The next ~~statement~~**block item** (6.8.2) that

would be ~~executed~~encountered after a fallthrough declaration shall be a labeled statement whose label is a case label or default label for the same switch statement.

Acknowledgements

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