**Code Guideline**

**Description**

Hi, below you can see the general guideline to be followed when writing code for our merger project. It is very similar to the currently existing ruleset, I only pruned away some of the unnecessary/unlikely to be seen warnings/errors. Try your best to abide by these guidelines so as to limit the editing that we will have to do upon completion of the code and before server deployment to eliminate all code rulesets.

**! This ruleset is NOT as of 28 Apr 2025 definitive. Certain rules will likely be eliminated from the ruleset. If you are working before the final update on this document, try your best to keep the readability, naming and spacing rules in mind, as they are MOST LIKELY to remain as they are/only see very slight changes !**

**Spacing Rules**

* **SA1000–SA1005, SA1008–SA1022, SA1024–SA1026, SA1028 (Error)**:
  + Correct spacing for keywords, commas, semicolons, symbols, parentheses, brackets, braces, generic/attribute brackets, nullable types, member access, increment/decrement, signs, colons.
  + Single space required for documentation and single-line comments.
  + No multiple whitespace in a row or trailing whitespace.
  + No space after new or stackalloc in implicitly typed arrays.

**Readability Rules**

* **SA1100, SA1102, SA1106–SA1108, SA1110–SA1115, SA1120–SA1122, SA1125, SA1127, SA1132, SA1136 (Error)**:
  + Avoid unnecessary base prefix unless local implementation exists.
  + Query clauses must follow prior clauses.
  + No empty statements or multiple statements on one line.
  + No embedded comments in block statements.
  + Parentheses/brackets must align with declarations/parameters.
  + Comments must contain text; use string.Empty for empty strings.
  + Use built-in type aliases (e.g., int over Int32).
  + Use shorthand for nullable types (e.g., int?).
  + Generic type constraints on separate lines.
  + No combined field declarations.
  + Enum values on separate lines.

**Ordering Rules**

* **SA1208, SA1212 (Error)**:
  + System using directives must precede other using directives.
  + Property accessors must follow a specific order (e.g., get before set).

**Naming Rules**

* **SA1300, SA1302–SA1304, SA1306–SA1309, SA1311–SA1313 (Error)**:
  + Elements, const fields, non-private readonly fields, accessible fields, static readonly fields must start with uppercase letters.
  + Interfaces must start with I.
  + Fields, variables, parameters must start with lowercase letters.
  + No underscores or prefixes in field/variable names.

**Maintainability Rules**

* **SA1119 (Warning)**: Avoid unnecessary parentheses in statements.
* **SA1400, SA1407–SA1408 (Error)**:
  + Access modifiers must be explicitly declared.
  + Arithmetic and conditional expressions must clarify precedence with parentheses.

**Layout Rules**

Code formatting is strictly regulated:

* **SA1500–SA1512, SA1514, SA1517, SA1520 (Error)**:
  + Braces for multi-line statements must not share lines and must be consistent.
  + No single-line statements or omitted braces.
  + Accessors must be consistently single- or multi-line.
  + No blank lines after opening braces, before closing braces, or in specific contexts (e.g., chained blocks, while-do footers).
  + No multiple blank lines in a row or at file start.
  + Element documentation headers must be preceded by a blank line.