

Glossary

- predicate** – a Boolean-valued expression, typically indicating whether some particular property holds; see also **predicate function**. [Lambdas \(575\)](#)
- predicate function** – one that returns a Boolean value; see also **predicate functor**. [Local Types '11 \(86\)](#)
- predicate functor** – a callable object that returns a Boolean value; see also **predicate**. [Lambdas \(575\)](#)
- primary-class-template declaration** – a declaration that introduces a class template into the current scope (and, hence, is neither a specialization nor a partial specialization). [Variadic Templates \(881\)](#)
- primary declaration** – short for **primary-class-template declaration**. [Variadic Templates \(881\)](#)
- private inheritance** – derivation (e.g., using the **private** keyword) from a base class such that inheritance does not afford programmatic access to the base class to any further derived classes or **public** clients. [final \(1029\)](#)
- procedural** – implies, for a given **imperative** programming paradigm or language, that the basic building blocks are functions that operate on raw data rather than, say, objects that encapsulate raw data along with relevant functionality; see also **object orientation**. [Generalized PODs '11 \(448\)](#)
- proctor** – an object of a **proctor class**. [noexcept Operator \(646\)](#), [noexcept Specifier \(1139\)](#)
- proctor class** – one that, like a **scoped guard**, uses **RAII** to take temporary ownership of a resource and ensure that the held resource is released when the flow of control exits scope unexpectedly, e.g., via a thrown exception. Unlike a **scoped guard**, however, a **proctor class** necessarily has an explicit *release* operation that allows ownership of the resource to be adopted by another (longer-lived) **entity** before the **proctor** is destroyed. **Proctor** objects are used for writing exception-safe code in an **exception-agnostic** programming style. [noexcept Operator \(646\)](#)
- production build** – one that employs a compilation mode that prioritizes the performance required of a production system, perhaps sacrificing niceties such as **defensive checks** or **debugging information**. [Generalized PODs '11 \(469\)](#)
- programmatically accessible** – implies, for a given (logical) **entity** (e.g., within some other **entity**), that it can be manipulated, accessed, or detected *programmatically* (i.e., using the C++ language) by clients. [noexcept Specifier \(1085\)](#)
- protocol** – a class whose (user-declared) **members** — apart from an empty destructor, possibly defined out of line in a source (.cpp) file — consist of only **pure virtual functions** and that does not inherit (either directly or indirectly) from any other class that is not itself a **protocol**. [Generalized PODs '11 \(440\)](#), [Inheriting Ctors \(540\)](#), [final \(1018\)](#)
- protocol hierarchy** – an inheritance hierarchy consisting exclusively of **protocols**, whereby higher-level **protocols** serve only to widen and augment the functionality available to **public** clients; see **lakos96**, Appendix A, “The Protocol Hierarchy Design Pattern,” pp. 737–768. [final \(1020\)](#)
- prvalue** – short for *pure rvalue*; an expression of this value category — such as a function that returns *by value* or a numeric literal — has a **value** but no inherent **identity**; see also *lvalue* and *xvalue*. [decltype \(25\)](#), [nullptr \(99\)](#), [auto Variables \(206\)](#), [constexpr Functions \(282\)](#), [enum class \(346\)](#), [Generalized PODs '11 \(513\)](#), [Range for \(692\)](#), [Rvalue References \(711\)](#), [decltype\(auto\) \(1206\)](#)
- publicly accessible** – implies, for a given member of a user-defined type, that its access level is *public*. [Generalized PODs '11 \(489\)](#)