

Section 2.2 C++14

Generic Lambdas

- “Forwarding References” (§2.1, p. 377) provides the most general way to declare a generic lambda’s parameters, preserving their types and value categories.
- “Lambdas” (§2.1, p. 573) introduces the facility for locally defined anonymous function objects that generic lambdas expand on.
- “Variadic Templates” (§2.1, p. 873) demonstrates how templated entities, such as generic lambdas, can accommodate a variable number of arguments.
- “Lambda Captures” (§2.2, p. 986) describes the init-capture syntax added to lambda captures in C++14.
- “**auto** Return” (§3.2, p. 1182) explains how a function, including the function-call operator for a lambda expression, can deduce its return type from its **return statements**.

Further Reading

- A thorough introduction to the underlying theory of combinators and lambda calculus can be found in **hindley86**.
- Adding Y combinators to the generic lambda feature to facilitate recursion is proposed in **derevenets16**.