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Summary

In this chapter, we have unveiled the implementation details of reference types and value types, and how these details affect application performance. Value types exhibit superb memory density, which makes them a great candidate for large collections, but are not equipped with features required of objects such as polymorphism, synchronization support, and reference semantics. The CLR introduces two categories of types to provide a high-performance alternative to object orientation where it is required, but still demands a formidable effort from developers to implement value types correctly.