**Comparison of Enum, Class, Interface, Inner Class, and Nested Class in Java**

| **Feature** | **Enum** | **Class** | **Interface** | **Inner Class** | **Nested Class** |
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| **Definition** | A special data type that represents a fixed set of constants. | A blueprint for creating objects (instances). | A reference type that defines a contract for classes to implement. | A class defined within another class, can access its enclosing class's members. | A class defined within another class, can be static or non-static. |
| **Instantiation** | Cannot be instantiated directly; uses predefined constants. | Can be instantiated using the new keyword. | Cannot be instantiated directly; must be implemented by a class. | Can be instantiated like a normal class or via its enclosing class. | Can be instantiated like a normal class if non-static; static nested classes are instantiated independently. |
| **Access Modifiers** | Implicitly public, static, and final. | Can have various access modifiers (public, private, etc.). | Cannot have access modifiers; all members are implicitly public. | Can have access modifiers; depends on its enclosing class. | Can have access modifiers; can be static or non-static. |
| **Members** | Can have fields, methods, and constructors. | Can have fields, methods, constructors, and blocks. | Can have abstract methods, default methods, static methods, and constants. | Can have fields, methods, and constructors. | Can have fields, methods, and constructors. |
| **Purpose** | To define a set of related constants. | To model real-world entities and behaviors. | To define a contract for implementing classes. | To logically group classes that are closely related to their enclosing class. | To logically group classes, can be independent of the enclosing class. |
| **Use Cases** | Days of the week, states of a process, etc. | Represents objects, encapsulates data and behavior. | API design, callbacks, event handling, etc. | GUI components, utility classes related to another class. | Utility classes, helper classes, or configurations related to the enclosing class. |