# Dependency Inversion Principle


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## Lab: 1

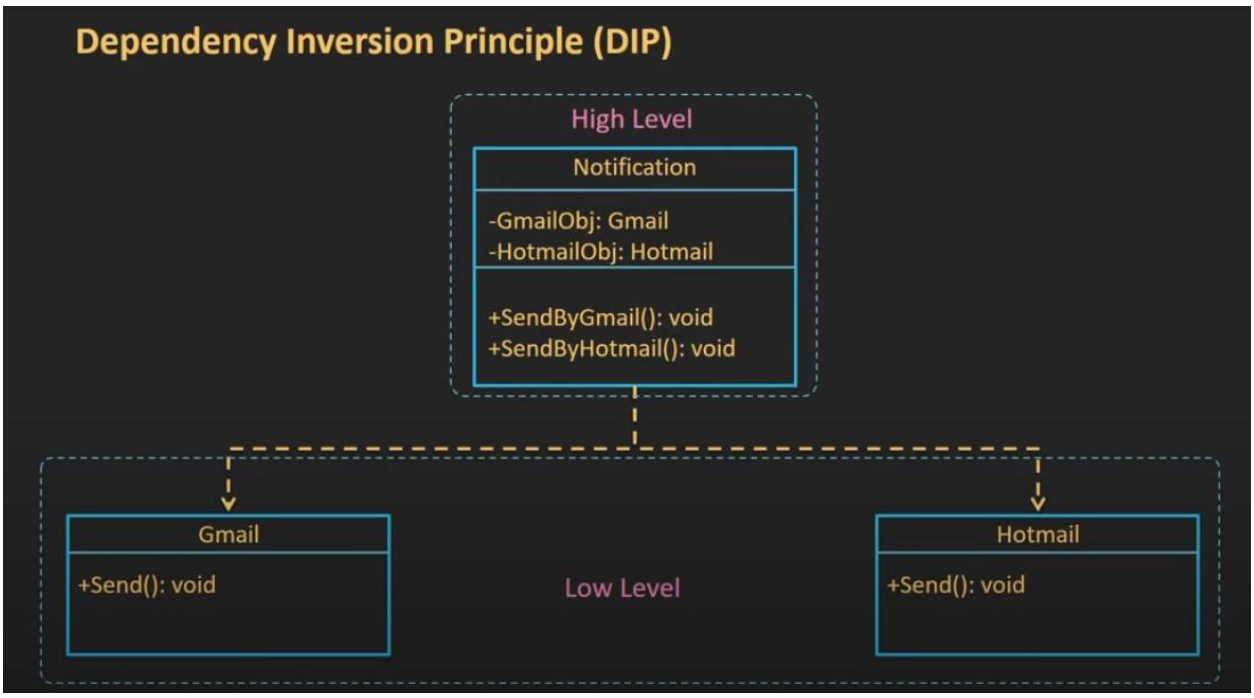
## Dependency Inversion Definition:

-High level modules should not depend on low-level modules. Both should depend on abstractions. Abstraction should not depend on details. Details should depend on abstraction.

*High level module: The module or class contain all properties and methods the low-level depends on them.

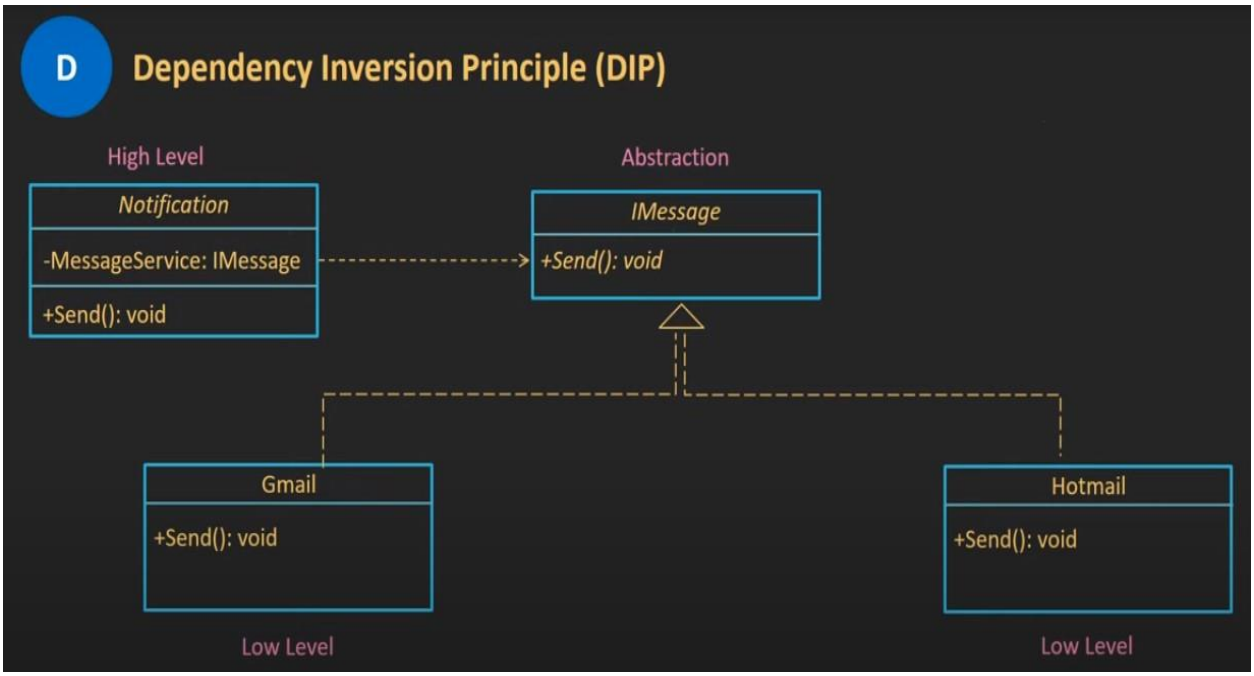
*Low level module: The module or class handle implementation details depends on high level class.

**Example:**




The problem in this example the dependency between modules this called **coupling**. This making changes to one module may require modification in many other modules.

**Solution:**




Abstraction allows high-level module to depend on abstract interface rather than connect low-level module. This reduce coupling between modules. High-level module can interact with multiple implementations through the same interface, without knowing the specific details of each implementation.