
PROGRAMMING ADVICES
LEARN THE RIGHT WAY
26+ Years of Experience
Mohammed Abu-Hadhoud
MBA, PMOC, PgMP®, PMP®, PMI-RMP®, CSE, ITILF, MCPD, MCSD
لا تنسى الاشتراك في قناتنا على اليوتيوب ومشاركة القناة مع اصدقائك
لتعم الفائدة للجميع وانقاذ الاف الناس من التشتت وجزاكم الله خيرا
لا تنسونا من دعائكم وادعو لوالدي بالرحمة
www.ProgrammingAdvices.com


مهم جداً
هذا الملف للمراجعة السريعة واخذ الملاحظات عليه فقط ،لانه يحتوي
على اقل من 20٪ مما يتم شرحه في الفيديوهات
الاستعجال والاعتماد عليه فقط سوف يجعلك تخسر كميه معلومات
وخبرات كثيره
يجب عليك مشاهدة فيديو الدرس كاملا
لاتنسى عمل لايك ومشاركة القناة لتعم الفائدة للجميع
لا تنسونا من دعائكم
ProgrammingAdvices.com
Mohammed Abu-Hadhoud
STOP
PROGRAMMING
ADVICES
LEARN THE
RIGHT WAY

ProgrammingAdvices.com

SOLID PRINCIPLES

Dr. Mohammed Abu-Hadhoud
DBA, MBA, PMOC, PgMP®, PMP®, PMI-RMP®, CM, ITILF, MCPD, MCSD

Liskov Substitution Principle (LSP)

5 Solid Principles

Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMPD, PMPD, PMI-RMPD, CM, ITILF, MCPD, MCSD
28+ years of experience

ProgrammingAdvices.com

SOLID PRINCIPLES

Dr. Mohammed Abu-Hadhoud
DBA, MBA, PMOC, PgMP®, PMP®, PMI-RMP®, CM, ITILF, MCPD, MCSD

Analogies

Analogy 1: Rent a Car.




Imagine you rent a car, and the company offers different models. No matter which model you choose, you expect it to function like a regular car, you expect to drive, use the brakes, and turn the steering wheel.

Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMP□, PMP□, PMI-RMP□, CM, ITILF, MCPD, MCSD
28+ years of experience

Now Imagine:

Now imagine that one model has a completely different control system that requires special training. You wouldn’t want that because it doesn’t meet the basic expectations of a car.

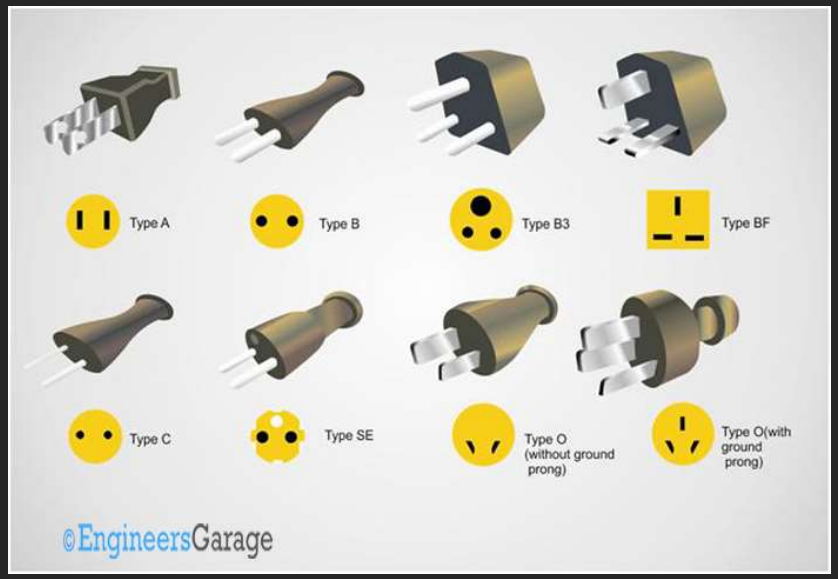
Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMP□, PMP□, PMI-RMP□, CM, ITILF, MCPD, MCSD
28+ years of experience

Liskov Substitution Principle (LSP)

LSP ensures that subclasses (the different car models) behave consistently when replacing the base class (the concept of a car).

Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMP□, PMP□, PMI-RMP□, CM, ITILF, MCPD, MCSD
28+ years of experience

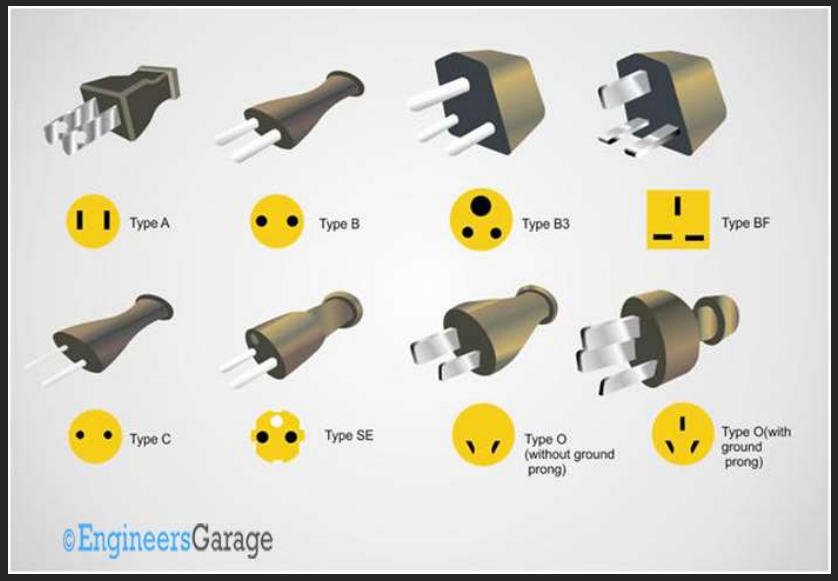
Analogy 2: Replacing a Plug Socket.



Imagine you have a standard electrical socket, and any electrical device (like a lamp or a toaster) should plug into it and work seamlessly.

Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMPD, PMPD, PMI-RMPD, CM, ITILF, MCPD, MCSD
28+ years of experience

Analogy 2: Replacing a Plug Socket.



Now, imagine you replaced the socket with one that only supports certain plugs, suddenly, only specific devices work, and others may break or cause issues.

Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMPD, PMPD, PMI-RMPD, CM, ITILF, MCPD, MCSD
28+ years of experience

Liskov Substitution Principle (LSP)

In programming, the LSP is about ensuring that subclasses can replace their base class without "breaking the socket." If a class is derived from another, it should still work as expected when substituted.

Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMP□, PMP□, PMI-RMP□, CM, ITILF, MCPD, MCSD
28+ years of experience

What is LSP?

- Objects of a superclass should be replaceable with objects of a subclass without affecting the correctness of the program.

- In simpler terms, if a class B is a subclass of class A, then B should be able to replace A without breaking the behavior of the system. Any subclass should only extend the behavior of the parent class, not narrow it down.

- In simpler terms, derived classes should be substitutable for their base classes without altering the behavior of the system. This principle ensures that inheritance is used properly.

Dr. Mohammed Abu-Hadhoud
DBA,MBA, PMOC, PgMP□, PMP□, PMI-RMP□, CM, ITILF, MCPD, MCSD
28+ years of experience


ProgrammingAdvices.com
Thank You
Mohammmed Abu-Hadhoud
26+ Years of Experience
MBA, PMOC, PgMP®, PMP®, PMI-RMP®, CM, ITILF, MCPD, MCSD
PROGRAMMING ADVICES
LEARN THE RIGHT WAY