Class Adapter Pattern

UML Class Diagram

Python's built-in Exception class

Exception

Phone

+ max_input_voltage

+ outcome(input_voltage)
+ charge_device(input_voltage)

PowerPlug

+ output_voltage

CannotTranformVoltage

PhoneAdapter

+ transform_voltage(input_voltage)
+ charge(input_voltage)

USPowerPlug

+ output_voltage

EUPowerPlug

+ output_voltage

USPowerPlugAdapter

EUPowerPlugAdapter