EventLog

«Java Class»
EventLog

writer: PrintWriter

+EventLog()
+writeToLog(String): void
+timeStamp(): void

EventLogInterface

«Java Interface»
EventLogInterface

+writeToLog(String): void
+timeStamp(): void

IndicatorLightListenerDevice

«Java Class»
IndicatorLightListenerDevice

-logic: VendingLogicInterface
+lightActivated: boolean
+lightDeactivated: boolean

+IndicatorLightListenerDevice(VendingLogicInterface)
+enabled(AbstractHardware<AbstractHardwareListener>): void
+disabled(AbstractHardware<AbstractHardwareListener>): void
+activated(IndicatorLight): void
+deactivated(IndicatorLight): void

CoinSlotListenerDevice

«Java Class»
CoinSlotListenerDevice

-logic: VendingLogicInterface
+insertedCoinValue: int
+rejectedCoinValue: int

+CoinSlotListenerDevice(VendingLogicInterface)
+enabled(AbstractHardware<AbstractHardwareListener>): void
+disabled(AbstractHardware<AbstractHardwareListener>): void
+validCoinInserted(CoinSlot,Coin): void
+coinRejected(CoinSlot,Coin): void

VendingLogic

«Java Class»
VendingLogic

-vm: VendingMachine
-credit: int
-El: EventLogInterface
-circuitEnabled: Boolean[]

+VendingLogic(VendingMachine)
+getEventLog(): EventLogInterface
+getCurrencyValue(): int
-registerListeners(): void
+welcomeMessageTimer(): void
+welcomeMessage(): void
+vendOutOfOrder(): void
+displayCredit():void
+displayPrice(int):void
+invalidCoinInserted(): void
+validCoinInserted(Coin): void
+dispensingMessage(): void
+returnChange(): void
+isExactChangePossible(): boolean
+determineButtonAction(PushButton): void
+selectionButtonAction(int): void
+findHardwareIndex(AbstractHardware<AbstractHardwareListener>): int
+disableHardware(AbstractHardware<AbstractHardwareListener>): void
+enableHardware(AbstractHardware<AbstractHardwareListener>): void

VendingLogicInterface

«Java Interface»
VendingLogicInterface

+getEventLog(): EventLogInterface
+getCurrencyValue(): int
+welcomeMessageTimer(): void
+welcomeMessage(): void
+vendOutOfOrder(): void
+displayCredit():void
+displayPrice(int):void
+invalidCoinInserted(): void
+validCoinInserted(Coin): void
+dispensingMessage(): void
+returnChange(): void
+isExactChangePossible(): boolean
+determineButtonAction(PushButton): void
+selectionButtonAction(int): void
+findHardwareIndex(AbstractHardware<AbstractHardwareListener>): int
+disableHardware(AbstractHardware<AbstractHardwareListener>): void
+enableHardware(AbstractHardware<AbstractHardwareListener>): void

CoinRackListenerDevice

«Java Class»
CoinRackListenerDevice

-logic: VendingLogicInterface
+coinValue: int
+coinCount: int
+racksFull: boolean
+racksEmpty: boolean

+CoinRackListenerDevice(VendingLogicInterface)
+enabled(AbstractHardware<AbstractHardwareListener>): void
+disabled(AbstractHardware<AbstractHardwareListener>): void
+coinsFull(CoinRack): void
+coinsEmpty(CoinRack): void
+coinAdded(CoinRack,Coin): void
+coinRemoved(CoinRack,Coin): void
+coinsLoaded(CoinRack,Coin[]): void
+coinsUnloaded(CoinRack,Coin[]): void

CoinReturnListenerDevice

«Java Class»
CoinReturnListenerDevice

-logic: VendingLogicInterface
+deliveredCoinValue: int
+deliveredCoinCount: int
+returnsFull: boolean

+CoinReturnListenerDevice(VendingLogicInterface)
+enabled(AbstractHardware<AbstractHardwareListener>): void
+disabled(AbstractHardware<AbstractHardwareListener>): void
+returnIsFull(CoinReturn): void
+coinsDelivered(CoinReturn,Coin[]): void

PopCanRackListenerDevice

«Java Class»
PopCanRackListenerDevice

-logic: VendingLogicInterface

+PopCanRackListenerDevice(VendingLogicInterface)
+enabled(AbstractHardware<AbstractHardwareListener>): void
+disabled(AbstractHardware<AbstractHardwareListener>): void
+popCansFull(PopCanRack): void
+popCansEmpty(PopCanRack): void
+popCanAdded(PopCanRack,PopCan): void
+popCanRemoved(PopCanRack,PopCan): void
+popCansLoaded(PopCanRack,PopCan[]): void
+popCansUnloaded(PopCanRack,PopCan[]): void

CoinReceptacleListenerDevice

«Java Class»
CoinReceptacleListenerDevice

-logic: VendingLogicInterface
+coinValue: int
+coinCount: int
+receptaclesFull: boolean

+CoinReceptacleListenerDevice(VendingLogicInterface)
+enabled(AbstractHardware<AbstractHardwareListener>): void
+disabled(AbstractHardware<AbstractHardwareListener>): void
+coinsFull(CoinReceptacle): void
+coinAdded(CoinReceptacle,Coin): void
+coinRemoved(CoinReceptacle,Coin): void
+coinsLoaded(CoinReceptacle,Coin[]): void
+coinsUnloaded(CoinReceptacle,Coin[]): void

PushButtonListenerDevice

«Java Class»
PushButtonListenerDevice

-logic: VendingLogicInterface

+PushButtonListenerDevice(VendingLogicInterface)
+enabled(AbstractHardware<AbstractHardwareListener>): void
+disabled(AbstractHardware<AbstractHardwareListener>): void
+pressed(PushButton): void

«Java Class»
EventLog

«Java Interface»
EventLogInterface

«Java Class»
IndicatorLightListener
(vending.hardware package)

«Java Class»
CoinSlotListener
(vending.hardware package)

«Java Class»
VendingLogic
-vm: VendingMachine

«Java Class»
IndicatorLightListenerDevice
-logic: VendingLogicInterface

«Java Class»
CoinSlotListenerDevice
-logic: VendingLogicInterface

«Java Class»
VendingMachine
(vending.hardware package)

«Java Interface»
VendingLogicInterface

«Java Class»
CoinRackListenerDevice
-logic: VendingLogicInterface

«Java abstract Class»
TimerTask

«Java Class»
MyTimer
-vm: VendingMachine

«Java Class»
PopCanRackListenerDevice
-logic: VendingLogicInterface

«Java Class»
CoinRackListener
(vending.hardware package)

«Java Class»
PopCanRackListener
(vending.hardware package)

«Java Class»
CoinReturnListenerDevice
-logic: VendingLogicInterface

«Java Class»
CoinReceptacleListenerDevice
-logic: VendingLogicInterface

«Java Class»
CoinReturnListener
(vending.hardware package)

«Java Class»
PushButtonListenerDevice
-logic: VendingLogicInterface

«Java Class»
PushButtonListener
(vending.hardware package)

«Java Class»
CoinReceptacleListener
(vending.hardware package)

addCoin(valid coin)
/amount+=coin

no
credit(amount==0)/
display "Hi there!"
(5s on & 10s off)

vendPop()/amount
becomes 0

has
credit(amount>0)/
display "Credit:"
:amount

addCoin(valid coin)
/amount+=coin

addCoin(invalid coin)
/return coin

addCoin(invalid
coin)/return coin