California State University Fullerton
CPSC 462

Object Oriented Software Design
Implementation Model
for the

High Velocity Sales Technology
System

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Revision History:

Version	Date	Summary of Changes	Author
1.0	Nov 9, 2020	• Initial Release	Alexander Frederick
1.1	December 7, 2020	• Added createPayment, PaymentHandler functionality	Alexander Frederick

Table of Contents

1   Software Design to Source Code Cross-Reference

1.1   Static View Design to Source Code Implementation Cross-Reference

Class Name	Source code file name	Line number(s)
Customer Information	CustomerInfo.cpp	All
Inventory Handler	Inventory.cpp	All
Logger Handler	SimpleLogger.hpp	All
Persistence Handler	SimpleDB.cpp	All
Purchase Handler	Purchase.cpp	All
Session Handler	Session.cpp	All
createPayment	createPayment.cpp	All

1.2   GRASP Pattern Design to Source Code Implementation Cross-Reference

Pattern	Source code file name(s)	Line number(s)
Low Coupling / High Cohesion Pattern	Session.cpp	18 - 30
	CustomerInfo.cpp	12 - 24
Creator Pattern	Session.cpp	18 – 30
	CustomerInfo.cpp	12 - 24
Information Expert Pattern	Session.cpp	66 - 97
	Inventory.cpp	25 - 30
Controller Pattern	Session.cpp	32 - 65
	Inventory.cpp	25 - 30
	Purchase.cpp	10 - 35
Polymorphism Pattern	PaymentHandler.cpp	All
	VisaPayment.cpp	All
	GenericPayment.cpp	All
Protected Variations Pattern	PaymentHandler.cpp	All
	VisaPayment.cpp	All
	GenericPayment.cpp	All

1.3   Logical View Interfaces to Source Code Implementation Cross-Reference

Interface Class Name	Source code file name	Line number(s)
User Interface Handler	UserInterfaceHandler.cpp	All
System Driver UI	SystemDriverUI.cpp	All
Inventory Handler	InventoryHandler.cpp	All
Inventory	Inventory.cpp	All
Customer Info Handler	CustomerInfoHandler.cpp	All
Customer Info	CustomerInfo.cpp	All
Session Handler	SessionHandler.cpp	All
Session	Session.cpp	All
Purchase Handler	PurchaseHandler.cpp	All
Purchase	Purchase.cpp	All
Logger Handler	LoggerHandler.cpp	All
Simple Logger	SimpleLogger.hpp	All

Interface Class Name	Source code file name	Line number(s)
Persistence Handler	PersistenceHandler.cpp	All
Simple DB	SimpleDB.cpp	All
PaymentHandler	PaymentHandler.hpp	All

2   System Build Instructions

2.1   Windows Build Instructions

In the current iteration we are launching the application using a Visual Studio Solution. We intend to further evaluate the ability to build the application from a single command line compilation.

2.2   Linux Build Instructions

Open a console window within the code directory. Run the command: "g++ -o Project main.cpp". Followed by the command: "./Project"

2.3   Macintosh Build Instructions

Open a console window within the code directory. Run the command: "g++ -o Project main.cpp". Followed by the command: "./Project"

3   Source Code

The source code is located within the SourceCode.rar compressed file.