# Technical Specifications Final Fantasy XII Completion Sheet Script

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# 1. History

| Version | Date       | Subject  |
|---------|------------|--|
| 1.0     | 14/08/2024 | Initial version of the document  |
| 1.1     | 26/08/2024 | Adjustments for improvement of "Sell Up To" cell value and small fixes |

# 2. Information

# 2.1 UpdateBazaarSheet Flow

- BazaarSheetCoordinator::updateBazaarSheet
  - BazaarSheetSheetReader::getBazaarNames()
    - SheetReaderBase::getSingleColumnRangeValues()
  - BazaarSheetHandler::getBazaarOutput()
    - HandlerBase::getOutput()
    - BazaarSheetHandler::getOutputFor()
    - BazaarSheetDatabaseReader::getBazaarLoot()
    - BazaarSheetFactory::createBazaarOutput()
  - BazaarSheetWriter::writeBazaarInformation()
    - SheetWriteBase::clearRange()
    - SheetWriterBase::writeInformation()
    - BazaarOutput->getUpdateRow()
      - LootNeededValueConverter::convertToLootString()

# 2.2 UpdateLootSheet Flow

- LootSheetCoordinator::updateLootSheet
  - LootSheetSheetReader::getLootNames()
    - SheetReaderBase::getSingleColumnRangeValues()
  - LootSheetHandler::getLootOutput()
    - HandlerBase::getOutput()
    - LootSheetHandler::getOutputFor()
    - LootSheetFactory::createLootOutput()
      - LootSheetDatabaseReader::getBazaarLoot()
      - LootOutput::addBazaarLoot()
  - LootSheetWriter::writeBazaarInformation()
    - SheetWriteBase::clearRange()
    - SheetWriterBase::writeInformation()
    - LootOutput->getUpdateRow()
      - SellUpToValueConverter::convertToSellUpToString()
      - NeededToTurnInValueConverter::convertToNeededToTurnInString()

# 3. Class description

#### 3.1 Introduction

This chapter writes out all classes present in the FF12 Completion Script, including its intended goal, class it extends, classes using it, properties, functions and classes it uses. For the classes it uses, every class that is created via a factory class is noted with an \*.

#### 3.2 Base classes

#### 3.2.1 DatabaseReaderBase

Goal

Base class for the database reader classes

Used by

BazaarSheetDatabaseReader LootSheetDatabaseReader

**Functions** 

protected function runGetBazaarLoot(array \$select, string \$bazaarName): array

Uses

Framework\Databases\MySqlWrapper \*
Framework\Databases\Join \*
Framework\Databases\MySqlSelectQuery \*

#### 3.2.2 FactoryBase

Goal

Base class for the factory classes

Used by

BazaarSheetFactory LootSheetFactory

**Functions** 

protected function createBazaarLoot(string \$lootName, int \$amount, int \$lootSheetRow, int \$bazaarSheetRow): BazaarLoot

Uses

BazaarLoot

#### 3.2.3 HandlerBase

Goal

Base class for the handler classes

Used by

BazaarHandler

LootHandler

**Functions** 

protected function getOutput(array \$list): array abstract protected function getOutputFor(string \$elementName): OutputBase

# 3.2.4 OutputBase

Goal

Base class for the output data classes

Used by

BazaarOutput LootOutput

**Functions** 

abstract public function getUpdateRow(): array

#### 3.2.5 SheetReaderBase

Goal

Base class for all sheet reader classes

Used by

BazaarSheetSheetReader LootSheetSheetReader

**Functions** 

protected function getSingleColumnRangeValues(string \$range): array

Uses

Framework\Google\SheetsWrapper \* SheetResultConverter

#### 3.2.6 SheetWriterBase

Goal

Base class for all sheet writer classes

Used by

BazaarSheetSheetWriter LootSheetSheetWriter

**Functions** 

protected function writeInformation(string \$sheetRange, array \$output)

Uses

Framework\Google\SheetsFactory \*

#### 3.2 Converters

#### 3.2.1 DatabaseResultConverter

Goal

Convert database results to a format that is handled more clearly

Used by

DatabaseReader

**Functions** 

public static function convertSingleColumnValue(array \$databaseResult, string \$columnName): array public static function convertBazaarLootResult(array \$databaseResult): array private static function getBazaarSheetRowValue(array \$record): string

Uses

BazaarLoot \*

#### 3.2.2 LootNeededValueConverter

Goal

Convert information for the bazaar items to values for the sheet

Used by

BazaarOutput

#### **Functions**

public static function convertToLootString(array \$bazaarLoot): string private static function convertToLootStringSingle(array \$bazaarLoot): string private static function convertToLootStringDouble(array \$bazaarLoot): string private static function convertToLootStringTriple(array \$bazaarLoot): string

#### 3.2.3 NeededToTurnInValueConverter

Goal

Convert information for a loot item to values for the "Needed to turn in" cells

Used by

LootOutput

#### **Functions**

public static function convertToNeededToTurnInString(array \$bazaarLoot): string private static function convertToNeededToTurnInStringSingle(array \$bazaarLoot): string private static function convertToNeededToTurnInStringDouble(array \$bazaarLoot): string private static function convertToNeededToTurnInStringTriple(array \$bazaarLoot): string

#### 3.2.4 SellUpToValueConverter

Goal

Convert information for a loot item to values for the "Sell Up To" cells

Used by

LootOutput

#### **Functions**

public static function convertToSellUpToString(int \$lootRow, int \$sellUpTo): string public static function convertToSellUpToString(array \$bazaarLoot): string private static function convertToSellUpToStringSingle(array \$bazaarLoot): string private static function convertToSellUpToStringDouble(array \$bazaarLoot): string private static function convertToSellUpToStringTriple(array \$bazaarLoot): string private static function convertToSellUpToStringQuadruple(array \$bazaarLoot): string private static function convertToSellUpToStringQuintuple(array \$bazaarLoot): string

#### 3.2.5 SheetResultConverter

Goal

Convert sheet results to a format that is handled more clearly

Used by

CompletionSheetReader

**Functions** 

public static function convertSingleColumnValue(array \$sheetResult): array

# 3.3 Coordinators

#### 3.3.1 BazaarSheetCoordinator

Goal

Call class functions that perform parts of the updateBazaarSheet script

Used by

update Bazaar Sheet

**Functions** 

public function updateBazaarSheet()

Uses

BazaarSheetSheetReader \*

BazaarSheetHandler \*

BazaarSheetSheetWriter \*

#### 3.3.2 LootSheetCoordinator

#### Goal

Call class functions that perform parts of the updateLootSheet script

Used by

updateLootSheet

**Functions** 

public function updateLootSheet()

Uses

LootSheetSheetReader \*
LootSheetHandler \*
LootSheetSheetWriter\*

#### 3.4 Data

#### 3.4.1 BazaarLoot

#### Goal

Hold values for a piece of loot needed to unlock a Bazaar item

#### Used by

BazaarOutput LootOutput

#### **Properties**

string \$lootName int \$amount int \$lootSheetRow int \$bazaarSheetRow

#### **Functions**

public \_\_construct(string \$lootName, int \$amount, int \$lootSheetRow, int \$bazaarSheetRow)
public function lootName(): string
public function amount(): int
public function lootSheetRow(): int
public function bazaarSheetRow(): int

# 3.4.2 BazaarOutput

Goal

Hold values for a piece of loot needed to unlock a Bazaar item

Used by

BazaarSheetSheetWriter

Extends

OutputBase

Properties

array \$bazaarLoot

**Functions** 

public function getUpdateRow(): array

Uses

LootNeededValueConverter

# 3.4.3 LootOutput

#### Goal

Hold values for a piece of loot and other loot items used to unlock the same bazaar items

Used by

CompletionSheetWriter

Extends

OutputBase

**Properties** 

string \$lootName
array \$bazaarLoot

#### **Functions**

public function addBazaarLoot(): array
public function getUpdateRow(): array

Uses

SellUpToValueConverter NeededToTurnInValueConverter

#### 3.5 Factories

#### 3.5.1 BazaarSheetFactory

Goal

Create objects used by the BazaarSheet script

Used by

updateBazaarSheet BazaarSheetCoordinator BazaarSheetHandler

Extends

FactoryBase

#### **Functions**

public static function createBazaarSheetCoordinator(): BazaarSheetCoordinator
public static function createBazaarSheetSheetReader(): BazaarSheetSheetReader
public static function createBazaarSheetHandler(): BazaarSheetHandler
public static function createBazaarSheetDatabaseReader(): BazaarSheetDatabaseReader
public static function createBazaarOutput(array \$bazaarLoot): BazaarOutput
public static function createBazaarSheetSheetWriter(): BazaarSheetSheetWriter

#### Uses

BazaarSheetCoordinator BazaarSheetDatabaseReader

BazaarSheetSheetReader BazaarOutput

BazaarSheetHandler BazaarSheetSheetWriter

#### 3.5.2 LootSheetFactory

#### Goal

Create objects used by the LootSheetSheet script

#### Used by

updateLootSheet
DatabaseResultConverter
LootSheetCoordinator
LootSheetFactory
LootSheetHandler

#### Extends

FactoryBase

#### **Functions**

public static function createLootSheetCoordinator(): LootSheetCoordinator public static function createLootSheetSheetReader(): LootSheetSheetReader public static function createLootSheetHandler(): LootSheetHandler public static function createLootSheetDatabaseReader(): LootSheetDatabaseReader public static function createLootOutput(string \$lootName): LootOutput public static function createLootSheetWriter(): LootSheetWriter

#### Uses

LootSheetCoordinator LootSheetDatabaseReader LootSheetSheetReader LootOutput

LootSheetHandler LootSheetWriter

#### 3.6 Handlers

#### 3.6.1 BazaarSheetHandler

Goal

Create an array of filled BazaarOutput object

Used by

BazaarSheetCoordinator

Extends

HandlerBase

**Functions** 

public function getBazaarOutput(array \$bazaarList): array protected function getOutputFor(string \$bazaarName): BazaarOutput

Uses

DatabaseSheetReader \*
BazaarOutput \*

#### 3.6.2 LootSheetHandler

Goal

Create an array of filled LootOutput object

Used by

LootSheetCoordinator

Extends

HandlerBase

**Functions** 

public function getLootOutput(array \$lootList): array
protected function getOutputFor(string \$lootName): LootOutput

Uses

LootSheetDatabaseReader \* LootOutput \*

# 3.7 Readers

#### 3.7.1 BazaarSheetDatabaseReader

Goal

Get information from the database for the BazaarSheet script

Used by

BazaarSheetHandler

Extends

DatabaseReaderBase

**Functions** 

public function getBazaarLoot(string \$bazaarName): array

#### 3.7.2 BazaarSheetSheetReader

Goal

Get information from the completion sheet for the BazaarSheet script

Used by

BazaarSheetCoordinator

Extends

SheetReaderBase

**Functions** 

public function getBazaarNames(): array

#### 3.7.3 LootSheetDatabaseReader

Goal

Get information from the database for the LootSheet script

Used by

LootSheetHandler

Extends

DatabaseReaderBase

**Functions** 

public function getBazaarNames(string \$lootName): array public function getBazaarLoot(string \$bazaarName): array

#### 3.7.4 LootSheetSheetReader

Goal

Get information from the completion sheet for the LootSheet script

Used by

LootSheetCoordinator

Extends

SheetReaderBase

**Functions** 

public function getLootNames(): array

# 3.8 Writers

#### 3.8.1 BazaarSheetWriter

Goal

Write information to the Bazaar sheet

Used by

BazaarSheetCoordinator

Extends

SheetWriterBase

**Functions** 

public function writeBazaarInformation(array \$bazaarOutput)

# 3.8.2 LootSheetWriter

Goal

Write information to the Loot sheet

Used by

LootSheetCoordinator

Extends

SheetWriterBase

**Functions** 

public function writeLootInformation(array \$lootOutput)