Structure:

# **Class**

## Method

Explanation of Method functionality

# Capstone Project: Warehouse Inventory Management System

# **DB**

## DB

Parameters: None

Constructor which connects to the database holding the data.

## Setup

Parameters: String, String, String

Assigns values to field variables that represent the SQL login information

Return: None

## Connect

Parameters: None

Connects to SQL database

Return: None

Exceptions: SQL Exception

## getFullInventory

Parameters: None

Query the database to acquire information about every item saved in the database. This method then returns a list of these items.

Returns LinkedHashMap

## addToDB

Parameters: Item

Add new items to the database.

Returns: Boolean

Exceptions: SQL Exception

## removeFromDB

Parameters: Item

remove items from the database. (This function may be unneccessary)

Returns: Boolean

## createShipment

Parameters: HashMap, HashMap

Add incoming/outgoing shipments to the database

Returns: Boolean

Exceptions: SQL Exception

## getHistory

Parameters: Integer

Query the database for order history of the item whose ID was passed in as a parameter

Returns: LinkedHashMap

## updateRecords

Parameters: Item, String

Update the location column in the item table as well as create an entry in the location table

Returns: Boolean

# **Driver**

## Main

Runs the program

# **InventoryPanel**

Parent Class: JPanel

## InventoryPanel

Parameters: LinkedHashMap, UI

Constructor. Builds all components of this frame except for the table

## getSelected

Parameters: UI

Find which item in the table was selected and passes the information along to the showDetails method of the UI object in the parameter

Returns Boolean

## buildTable

Parameters: None

Builds the table that is displayed in this panel. Handles all actions related to the table and the objects displayed within it.

Returns None

## addRow

Parameters: Object []

Add a new row to the table using the information in the array passed as the parameter

# **Item**

## Item

Parameters: Integer, String, Long, String, Integer

Constructor. Creates the Item from ID, Name, UPC, and location values.

## getInfo

Parameters: None

Returns all info about the Item relevant to inventory.

## toString

Parameters: None

Returns String representation of item object

# **UI**

Parent Class: JFrame

## UI

Parameters: None

Constructor. This class extends JFrame. The constructor sets Frame specific components such as title and size.

## Connect

Parameters: None

Calls the connect() method from DB object. Then calls setup method

Returns: None

Exceptions: SQL Exception

## Close

Parameters: None

Closes the program

Returns: None

## Setup

Parameters: None

Creates an inventory panel object and adds it to the display. Creates connection to database using DB object.

Returns: None

## Refresh

Parameters: None

Resets the display by removing all components of the panel and recreating them with updated data.

Returns: None

## newIncoming

Parameters: None

Creates a popup window for information regarding a new incoming shipment. Updates DB with necessary information by using the DB class.

Returns: None

## newOutgoing

Parameters: None

Creates a popup window for information regarding a new outgoing shipment. Updates DB with necessary information by using the DB class.

Returns: None

## changeItemLocation

Parameters: Item, DetailFrame

Creates a new location object

Returns: None

## addNewItem

Parameters:

Opens popup to enter new item information

Returns: None

## showDetails

Parameters: Integer

Creates a new DetailFrame object using the item associated with the Integer value passed in as a parameter.

Returns: None

# **DetailFrame**

Parent Class: JFrame

## DetailFrame

Parameters: Item, UI, DB

Constructor. Builds the detail frame with all necessary components. Data is pulled directly from DB object.

# **Location**

Parent Class: JFrame

## Location

Parameters: Item, DB, UI, DetailFrame

Constructor. Builds the frame to change the stored location of an item in inventory.

# **Order**

## Order

Parameters: Integer, Integer, Integer, Integer, Date

Constructor. Builds Order object

## getInfo

Parameters: None

Returns: Object []

# **Shipment**

Parent Class: JFrame

## Shipment

Parameters: DB, LinkedHashMap, UI, Boolean

Constructor. Builds the frame for the Shipment module.

Returns: None

## buildTable

Parameters: None

Creates table that displays information about this shipment

Returns: None

## addToOrder

Parameters: None

Updates table with new Orders as they are created

Returns: None