

Developer Documentation

Table of Contents

1. [Object Model](#)
2. [CsvHelper](#)
3. [Testing](#)
4. [Business Logic](#)
5. [Windows Forms](#)

Object Model

The object model can be found in the same directory as this file with the filename *ObjectModel.png*

CsvHelper

CsvHelper is an external NuGet package. Read the Documentation at <http://joshclose.github.io/CsvHelper/>

Testing

The unit tests can be found in the BL.Test Project.

Method Name	Description
RetrieveTest	Normal Usage
RetrieveTestStreamNull	Throw <code>ArgumentNullException</code> when <code>stream</code> is null
RetrieveTestMissingItems	Make sure that the Retrieve method returns a empty <code>IEnumerable</code> when <code>stream</code> has no items.
RetrieveTestIncompleteItems	Throw <code>ArgumentException</code> when the <code>stream</code> has incomplete items.
SaveTest	Normal Usage
SaveTestStreamNull	Throw <code>ArgumentNullException</code> when <code>stream</code> is null
UpdateTest	Normal Usage
UpdateTestItemCodeNull	Throw <code>ArgumentNullException</code> when <code>itemCode</code> is null
UpdateTestItemCodeDoesNotExist	Throw <code>ArgumentException</code> when <code>itemCode</code> is not in the <code>ItemRepository</code> items dictionary

BL

This can be found in the BL Project

Item

Item Class

Code

The Item's Code

CurrentCount

The Current Count of the amount of this Item in stock

Description

A Description of the Item

OnOrder

Whether the Item is On Order or not

ItemRepository

This class contains the methods to read and write items too a csv file

Constructor

ItemRepository Constructor

ItemMap

This class tells CsvHelper how to convert the file rows into items and vice versa

MyBooleanConverter

This class just converts Yes/No values into True/False

BL.ItemRepository.Retrieve(stream)

Retrieves a list of items from the supplied stream

Name	Description
stream	<i>System.IO.Stream</i> The stream to read to

Returns

A IEnumerable of the items in the stream

System.ArgumentNullException: Thrown when the stream is null

System.ArgumentException: Thrown when the stream has incomplete items

BL.ItemRepository.Save(stream)

Saves a list of items from the supplied stream

Name	Description
stream	<i>System.IO.Stream</i> The stream to save to

System.ArgumentNullException: Thrown when the stream is null

BL.ItemRepository.Update(itemCode, currentCount)

Updates an Item's Current Count.

Name	Description
itemCode	<i>System.String</i> The Item's code used to find the item
currentCount	<i>System.Int32</i> The Item's new CurrentCount

System.ArgumentNullException: Thrown when itemCode is null

System.ArgumentException: Thrown when itemCode is not in the itemRepository items dictionary

WF

This can be found in the WF Project

WF.ItemView.CreateColumn(name, columnType, type, readOnly)

Creates a Column

Name	Description
name	<i>System.String</i> Name of the Column
columnType	<i>WF.ColumnType</i> The column type of the column, used to set the position
type	<i>System.Type</i> The type of the column
readOnly	<i>System.Boolean</i> Is the column editable

WF.ItemView.CreateColumns

Add the Columns to the DataGridView

WF.ItemView.ItemDataGridView_CellEndEdit(System.Object,System.Windows.Forms.DataGridViewCellEventArgs)

This function is run when the user ends editing a field. It then updates the item edited.

WF.ItemView.ItemDataGridView_DataError(System.Object,System.Windows.Forms.DataGridViewDataErrorEventArgs)

Custom Errors

WF.ItemView.OpenFile

Open a Open File Dialog and then display the Contents

WF.ItemView.OpenToolStripMenuItem_Click(System.Object,System.EventArgs)

Open a file when import menu item is clicked.

WF.ItemView.PopulateRow(item)

Adds a row to the DataGridView

Name	Description
item	<i>BL.Item</i> The Item to populate the DataGridView with

WF.ItemView.PopulateRows(items)

Populates the rows of the DataGridView

Name	Description
items	<i>System.Collections.Generic.IEnumerable{BL.Item}</i> An IEnumerable of the items to populate the DataGridView with

WF.ItemView.SaveFile

Open a Save File dialog and then save the file

WF.ItemView.SaveToolStripMenuItem_Click(System.Object,System.EventArgs)

Save the file when export menu item is clicked.