

Developer Documentation

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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.