

CSV File Provision Helper Library

Name - Damidu Rathnayaka Company - Zone24*7 PVT LTD

Overview

This Csv Library is a .NET library designed to consist of csv file Reading ,Writing , Validating headers and objects , simple Logger, Creating dynamic list with CSV files . These features would help in provisioning of a csv library.

- Reading and Writing CsvHelper supports both reading and writing CSV files.It can read CSV data from various sources, such as files, streams, and strings. Similarly, it can write CSV data to these destinations.
- Header Validation -Ensure that the CSV file has a valid header row that accurately represents the columns in the data.
- Column Presence and Order Validate that all expected columns are present in the CSV file.

- Data Range Validation Validate numeric values to ensure they fall within acceptable ranges.
- Simple CSV import Logger is also there to track the process of the import of the csv files.

Goals

- 1. To achieve multi csv helper functionalities from a one library.
- 2. To enable reusability of various csv file manipulation related functionality (example Validate a Header of a csv File) .

Specifications

This Document will show how to install the nuget package (private) and use various functionalities of this Library. It will show with code examples of the usages so that users can easily implement their work.

Steps to Setup the Nuget Package

I. First Add a New Nuget Package Source

Add Name field as - "Demo Feed"

Add Source filed as -

"https://pkgs.dev.azure.com/drathnayaka446/CSVLibrary/_packaging/DemoFeed/nuget/v3/index.json"

II. After That You may require to add credentials

Since this is a private Nuget package for that reason users need to request login from the developer by an email . (drawbase446@gmail.com). It will be published to public network soon. After selecting Demo feed , Then Search for HelperLibrary and install this library.

Features of the Library are Below

Write Custom Header and Raw Data to CSV file through Objects

This code manually writes custom headers and raw data to the CSV file. This helps developers to manually control the writing process to include custom headers. This will help generate headers and rows based on the object properties.

Example - https://codesnippets.cloud/snippet/CsvLibrary-Codes/through-Objects

Insert CSV file data to a list

This functionality helps to read the CSV file into a list of objects of type T. The InsertCsvDatais used to configure the CSV writing process.

Example - https://codesnippets.cloud/snippet/CsvLibrary-Codes/list-

Read CSV file without customDelimiter

This functionality helps to read the CSV file default separator (,).

Example -

https://codesnippets.cloud/snippet/CsvLibrary-Codes/without-customDelimiter

Read CSV file with a customDelimiter

This functionality helps to read the CSV file.

Example - https://codesnippets.cloud/snippet/CsvLibrary-Codes/a-customDelimiter

CSV object validator

When the Csv is converted to a dataList variable contains int the CSV file data as a list of objects, and you can perform validation operations on the list as needed.

Example - https://codesnippets.cloud/snippet/CsvLibrary-Codes/validator-

CSV File validator with user-defined class and its properties

When the Csv file is processed this will help to validate the class validations to be compared and checked with the CSV file data. Check if it's meeting the necessary requirements.

Example - https://codesnippets.cloud/snippet/CsvLibrary-Codes/properties-

CSV File Header Validator

When the Csv file is processed this will help to validate the headers of the csv file are correct or not.

Example - https://codesnippets.cloud/snippet/CsvLibrary-Codes/Header-validator

Simple CSV Status Logger

When the Csv file is processed this will help to output status of the CSV file processing such are imported / Processed/ Finished or if there is an error in the file.

Example - https://codesnippets.cloud/snippet/CsvLibrary-Codes/Status-Logger