Installation and Usage Guide

IG-Parser Version 0.6 + Production Module - Local deployment

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Introduction

In this document, you will learn how to install and run a web application called IG-Parser-Production, developed in Go (Golang) from a GitHub repository. This tutorial is designed for Windows users with no programming experience.

This version of IG-Parser-Production includes IG-Parser v0.6 along with the Excel production module. This module allows the user to process an Excel file containing a dataset with "encoded statements" and obtain the same Excel file as output, but with the parsing for each statement. The parsing format matches the "Tabular Output" format. The development of this new feature has been carried out within the framework of the RESILIENT RULES project, funded by the European Research Council (ERC, Grant# 101044225).

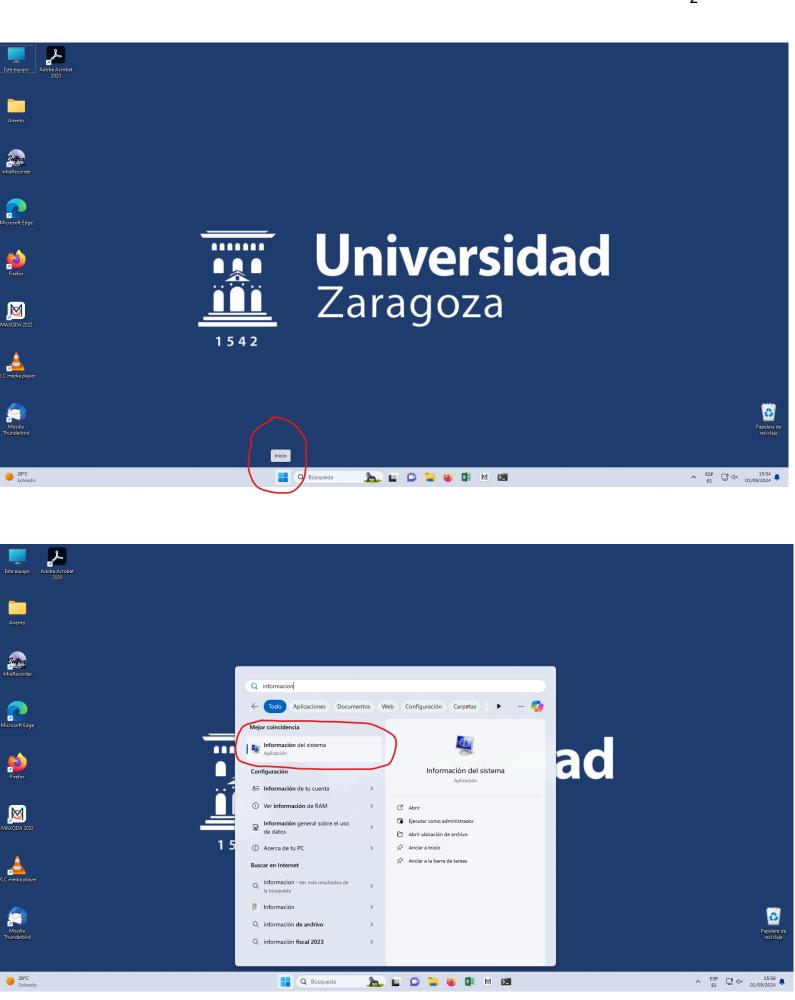
At the end of the document, possible developments that could be integrated into the official IG-Parser website will be presented.

NOTE: This document, along with the code development, is valid as of August 2, 2024.

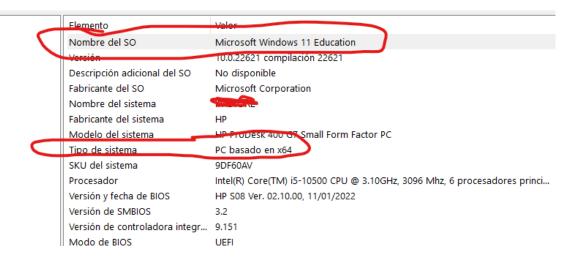
Step 1: Verify your Windows Version

To ensure you download the correct installers, we first need to verify your Windows operating system version.

- 1. Click on the **Start** button in the bottom bar of your screen.
- 2. Type "System Information" and select the application that appears.



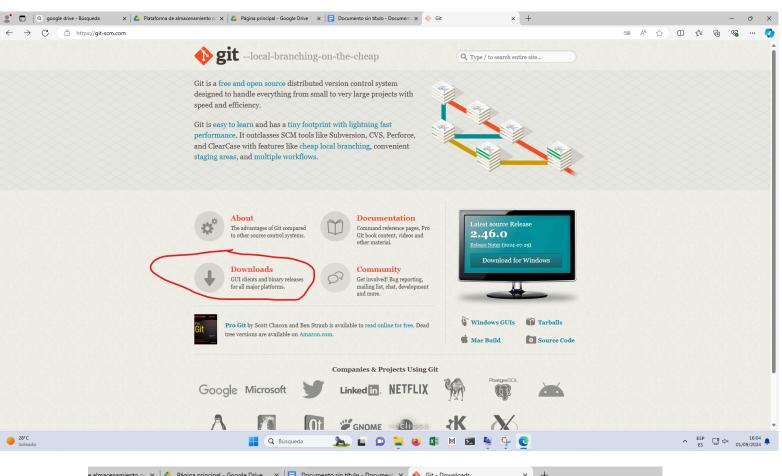
- 3. In the **System Information** window, look for the following two lines:
 - System Type: Indicates whether your system is 32-bit or 64-bit.
 - OS Name: Shows the version of Windows you are using.

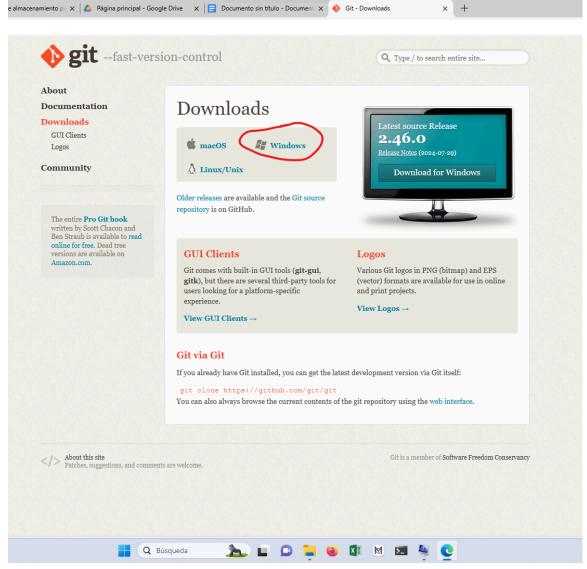


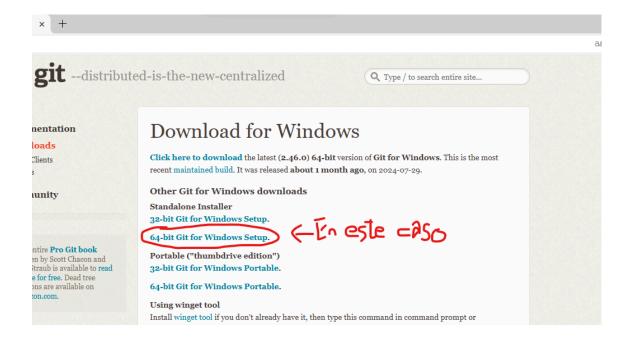
Step 2: Install Git

Git is a version control tool that allows you to download (clone) the web application's source code from GitHub.

- 1. Open your internet browser and go to https://git-scm.com
- 2. Click on the **Download** button. Make sure to select the correct version for your operating system (32-bit or 64-bit).





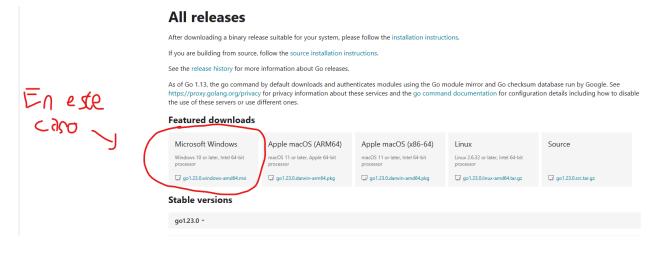


- 3. Once downloaded, double-click the file to open the installer.
- 4. Follow the installer instructions. Accept the license terms, leave the default options, and click **Next** until you see the **Install** button.
- 5. Click **Install** and wait for the installation to complete. A new window may open in your browser with the Git releases; you can close this without any problem.

Step 3: Install Go (Golang)

Go is the programming language used to develop the application. We need to install Go to run the web application.

- 1. Open your internet browser and go to https://go.dev/dl/
- 2. Select the version of Go that is compatible with your operating system.



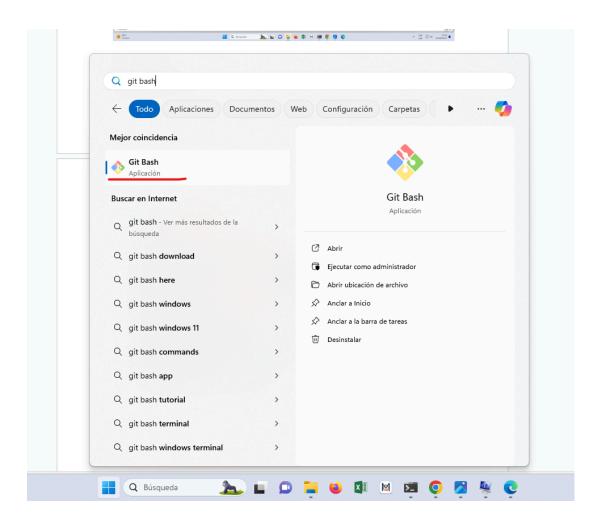
- 3. Click on the download link.
- 4. Once downloaded, double-click the file to open the installer.
- 5. Follow the instructions in the installer to install Go. Accept the license terms, leave the default options, and click **Next** until you see the **Install** button.
- 6. Click Install and wait for the installation to complete.

Step4: Clone Github Repository

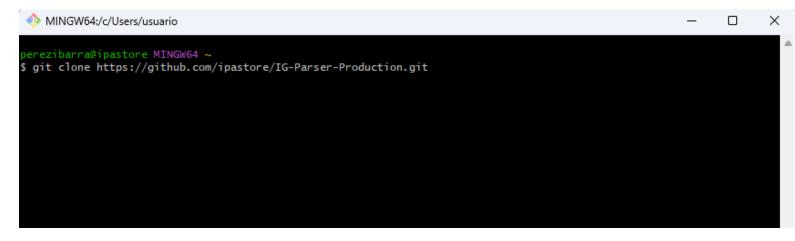
Now we will clone the GitHub repository where the web application is located.

Instructions:

1. Open **Git Bash** (an application installed with Git). You can find it in the Windows Start menu by searching for "**Git Bash**."



2. In the Git Bash window, type the following command and press Enter:



3. Wait for the cloning process to complete. This will download the application's source code to your computer.

```
MINGW64:/c/Users/usuario

perezibarra@ipastore MINGW64 ~

$ git clone https://github.com/ipastore/IG-Parser-Production.git
Cloning into 'IG-Parser-Production'...
remote: Enumerating objects: 4508, done.
remote: Counting objects: 100% (822/822), done.
remote: Compressing objects: 100% (324/324), done.
remote: Total 4508 (delta 545), reused 747 (delta 490), pack-reused 3686 (from 1)
Receiving objects: 100% (4508/4508), 7.19 MiB | 6.35 MiB/s, done.
Resolving deltas: 100% (3091/3091), done.

perezibarra@ipastore MINGW64 ~
$
```

Step 5: Run the go build Command

Once the repository is cloned, we need to compile the code to create the executable file for the web application.

- 1. Open **Git Bash** again or continue in the same window.
- 2. Navigate to the folder where the repository was cloned. Type or copy and paste the following command and press Enter:

```
MINGW64:/c/Users/usuario

— — — X

perezibarra@ipastore MINGW64 ~

$ git clone https://github.com/ipastore/IG-Parser-Production.git
Cloning into 'IG-Parser-Production'...
remote: Enumerating objects: 4508, done.
remote: Counting objects: 100% (822/822), done.
remote: Compressing objects: 100% (324/324), done.
remote: Total 4508 (delta 545), reused 747 (delta 490), pack-reused 3686 (from 1)
Receiving objects: 100% (4508/4508), 7.19 MiB | 6.35 MiB/s, done.
Resolving deltas: 100% (3091/3091), done.

perezibarra@ipastore MINGW64 ~

$ cd IG-Parser-Production
```

3. Type or copy and paste the following command and press Enter to compile the application:

go build -o ig-parser-production.exe ./web

```
MINGW64:/c/Users/usuario/IG-Parser-Production

perezibarra@ipastore MINGW64 ~

$ git clone https://github.com/ipastore/IG-Parser-Production.git
Cloning into 'IG-Parser-Production'...
remote: Enumerating objects: 4508, done.
remote: Counting objects: 100% (822/822), done.
remote: Compressing objects: 100% (324/324), done.
remote: Total 4508 (delta 545), reused 747 (delta 490), pack-reused 3686 (from 1)
Receiving objects: 100% (4508/4508), 7.19 MiB | 6.35 MiB/s, done.
Resolving deltas: 100% (3091/3091), done.

perezibarra@ipastore MINGW64 ~

$ cd IG-Parser-Production

perezibarra@ipastore MINGW64 ~/IG-Parser-Production (main)
$ go build -o ig-parser-production.exe ./web|
```

4. Wait for the dependencies to download and the .exe file has now been created.

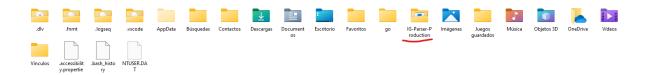
```
go: downloading github.com/xuri/excelize/v2 v2.8.0
go: downloading golang.org/x/text v0.12.0
go: downloading github.com/xuri/nfp v0.0-20230819163627-dc951e3ffe1a
go: downloading github.com/xuri/efp v0.0-20230802181842-ad255f2331ca
go: downloading github.com/richardlehane/mscfb v1.0.4
go: downloading golang.org/x/crypto v0.12.0
go: downloading github.com/mohae/deepcopy v0.0-20170929034955-c48cc78d4826
go: downloading golang.org/x/net v0.14.0
go: downloading github.com/richardlehane/msoleps v1.0.3
```

Step 6: Run the Application

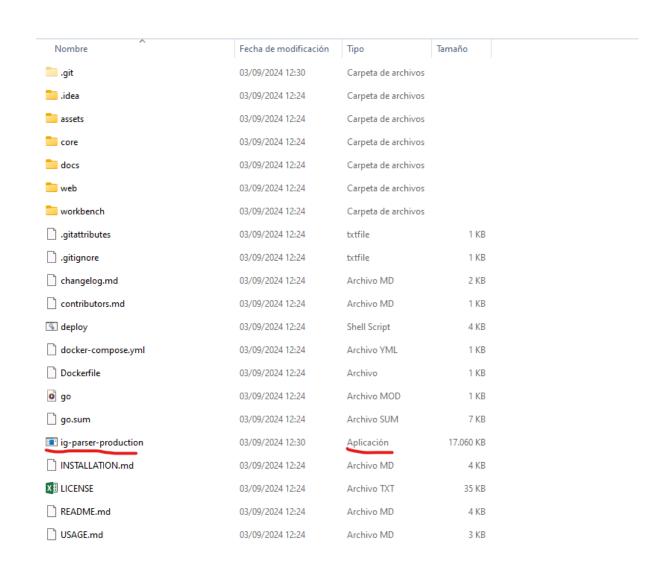
After compiling the application, we can run it.

Instructions:

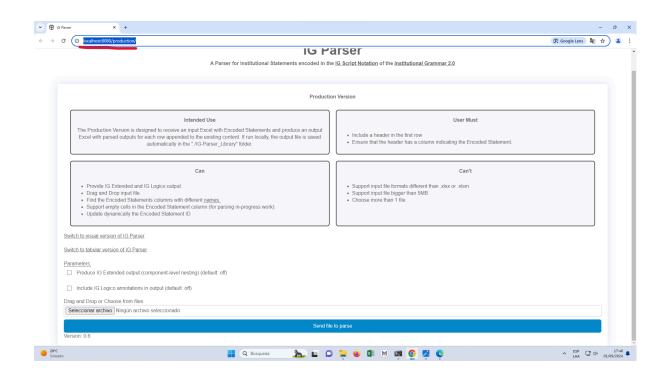
1. Navigate to the **IG-Parser-Production** folder. This can be found inside your user folder (This PC → Local Disk (C:) → Users → [your username]).



2. Find the ig-parser.exe file and double-click it.



3. The application will automatically start in a new window of your default browser at the URL: http://localhost:8080/production/.



A new terminal window will also open, which you don't need to use or understand. The terminal contains the engine, and the browser window is the user interface.

<u>NOTE:</u> Please note that if you close this window, you will close the engine and you will not be able to use the

browser view. If you want to reopen it, go back to point 2 (double click on ig-parser.exe)

```
E CUMSerNuswarioNG-Parenky X + V - - - - X

2024/09/01 17:08:18 Setting IG Extended output: false
TRANSACTION ID: eXulkbBd

2024/09/01 17:08:18 Setting annotations: false
2024/09/01 17:08:25 Logging enabled
2024/09/01 17:08:26 Created folder ./Logs
2024/09/01 17:08:26 Setting IG Extended output: false
TRANSACTION ID: VAJSULBX

2024/09/01 17:08:26 Setting IG Extended output: false
TRANSACTION ID: VAJSULBX

2024/09/01 17:08:26 Setting annotations: false
2024/09/01 17:12:07 Logging enabled
2024/09/01 17:12:07 Created folder ./Logs
2024/09/01 17:12:07 Logging enabled
2024/09/01 17:12:07 Log file: ./Logs/20240901-171207-Lln8kUfI.log
2024/09/01 17:12:07 Activated static output.
TRANSACTION ID: Lln8kUfI
Input values:
RAW STATEMENT: Once policy comes into force, relevant regulators must monitor and enforce compliance.
ANNOTATED STATEMENT: Cac{Once E(policy) F(comes into force)} A,p(relevant) A(regulators) D(must) I(monitor [AND] enforce
) Bdir(compliance)

2024/09/01 17:12:12 Logging enabled
2024/09/01 17:12:12 Logfile: ./Logs/20240901-171212-qzVFDRY7.log
2024/09/01 17:12:12 Log file: ./Logs/compliance

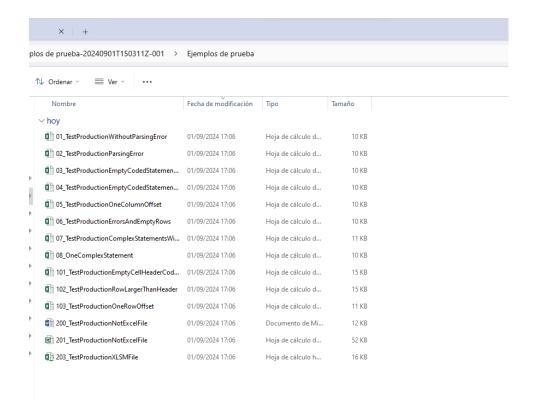
RAW STATEMENT: Once policy comes into force, relevant regulators must monitor and enforce compliance.

RAW STATEMENT: Cac{Once E(policy) F(comes into force)} A,p(relevant) A(regulators) D(must) I(monitor [AND] enforce
) Bdir(compliance)
```

Step 7: Check for Proper Functioning

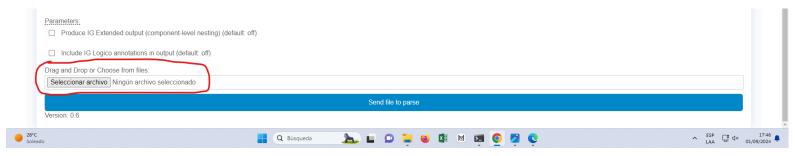
The application is now ready to use. We will now choose one of the example files available on the Drive to test its proper functioning.

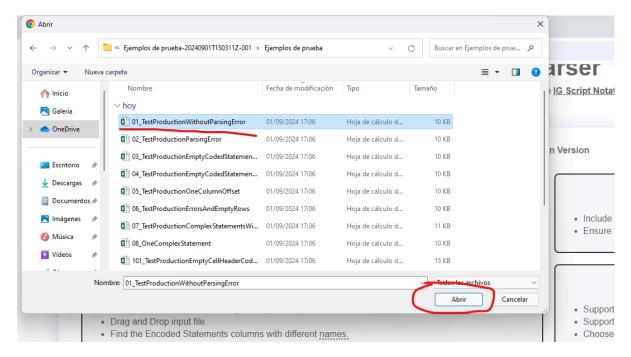
- Go to the IG-Parser-Production folder on your computer (This PC → Local Disk (C:) → Users → [your username] → IG-Parser-Production) and find the folder named "excel-examples-for-production."
- 2. A new folder will open containing files with different characteristics. The file names are self-explanatory. For example,
 - "102_TestProductionRowLargerThanHeader.xlsx" contains an Excel file with a row longer than the header, which returns an error in the program.



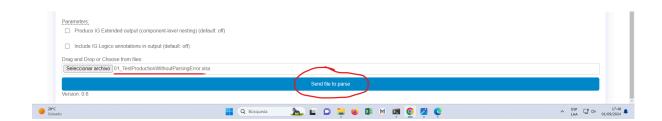
- 3. Use an easy example to start: "01_TestProductionWithoutParsingError.xlsx."

 This file does not contain any errors and will produce a successfully processed file.
- 4. You can select the file using the "Select file" button or drag and drop the file directly to the "No file chosen" area (this last function does not work in Microsoft Edge; it has only been tested in Google Chrome).





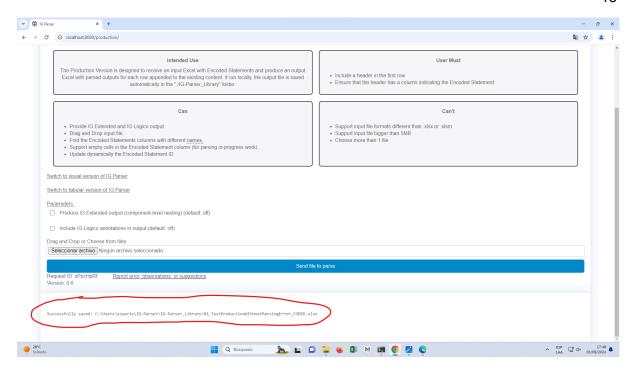
5. If the file name appears in gray, it means you have selected it correctly. Click "Send file to parse."



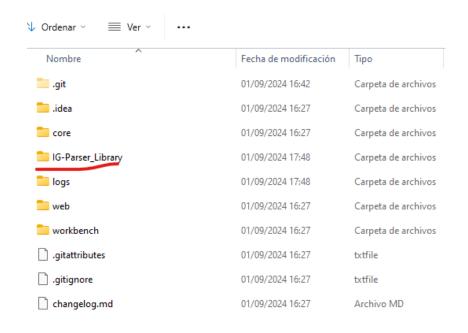
6. If there is any error, a red message will appear. Otherwise, a message will appear:

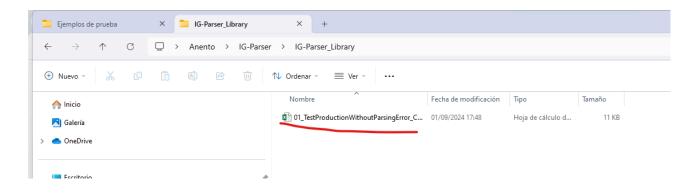
"Succesfully saved in "_____"

(This is the location of the processed file).



7. By default, the program saves processed files in a folder called "IG-Parser_Library" inside the "IG-Parser" folder. The output file name is the original name followed by "_CODED." For example, "01_TestProductionWithoutParsingError_CODED."





8. Conclusion

Congratulations, you have successfully installed and run IG-Parser-Production (IG-Parser v0.6). You can continue testing the example files to see potential errors and the application's capabilities. You can also try the "IG-Extended" and "IG-Logico" options and note the differences in encoding.

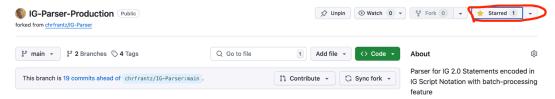
On the other hand, the Tabular and Visual Output functions are functional and can be used to code each statement.

Future Functionalities:

- Automatic Statement ID Generation Chosen by User: Choose Excel columns to generate a Statement ID automatically (e.g., select "Document Name," "Code," "Principle," and "End" to produce an ID: "199 CHO 5 5").
- **Symbol Display in Headers:** Option to display full names or symbols in headers (e.g., "Direct Object" or "Bdir").
- Enhanced Sheet Coding: Expand the code to encode all Sheets containing an Encoded Statement column, potentially through the UI with user-provided information.
- En esta versión aparecen los nombres completos de los elementos del IG, como por ejemplo: "Direct Object". Se puede incluir una opción para que aparezcan los símbolos en el header (Bdir en este caso).
- Ampliación del código para codificar todas las Sheets que contengan una columna Encoded Statement. Esto también podría hacerse a través de la UI con información proporcionada por el usuario.

9. Update or Uninstall

If you want to stay updated on new modifications, you can click on the "Star" button on the <u>GitHub repository</u>. You will receive emails with updates on the source code.



If you are interested in updating the code on your local machine, you can first uninstall and then reinstall.

Instructions:

Simply delete the "IG-Parser-Production" folder (This PC → Local Disk (C:) → Users → [your_username] → IG-Parser-Production).

2. Then reapply Step 4 and Step 5 (Clone Repository and Run Go Build Command).

NOTE 1: Please note that if you delete the "IG-Parser-Production" folder, you will also delete the files already processed in "IG-Parser_Library."

NOTE 2: If you only want to uninstall, simply follow Instruction 1 (Delete folder).