

XENON COMPILER

USER MANUAL



X e n o n

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XENON COMPILER

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Objective

The user will know how to use the Xenon Compiler.

Introduction

The following written represents a manual for the use of the Xenon Compiler. We show the installation requirements, the steps to follow for the installation, and the commands required to run and test the Xenon Compiler.

USER MANUAL

Installation Requirements

- Install git
- Install elixir

Installation

The Xenon compiler is located in the GitHub repository. Follow these steps:

- Open the Git Bash terminal
- Type the following command:

git clone <https://github.com/hiphoox/c202-javeritos>

It will be displayed on the screen as follows:

```
fraja@Javier-Tavera MINGW64 ~  
$ git clone https://github.com/hiphoox/c202-javeritos  
Cloning into 'c202-javeritos'...  
remote: Enumerating objects: 63, done.  
remote: Counting objects: 100% (63/63), done.  
remote: Compressing objects: 100% (56/56), done.  
remote: Total 63 (delta 8), reused 6 (delta 0), pack-reused 0  
Unpacking objects: 100% (63/63), 304.77 KiB | 79.00 KiB/s, done.
```

Check with the command "ls" if the repository was cloned

ls

```
c202-javeritos/
```

Then type the following command to open that folder:

cd c202-javeritos

```
fraja@Javier-Tavera MINGW64 ~  
$ cd c202-javeritos  
fraja@Javier-Tavera MINGW64 ~/c202-javeritos (master)
```

The following folders can be observed:

- [CompiladorXenón](#) : Compiler code.
- [DocumentaciónXenón](#) : Compiler documentation.

Type in the command: **ls**

```
fraja@Javier-Tavera MINGW64 ~/c202-javeritos (master)  
$ ls  
CompiladorXenón/  DocumentaciónXenón/
```

Enter the correct folder using the following command:

cd CompiladorXenón

```
fraja@Javier-Tavera MINGW64 ~/c202-javeritos (master)  
$ cd CompiladorXenón
```

This is to get into the Xenon code folder

Type the following command to generate an executable:

mix escript.build

```
fraja@Javier-Tavera MINGW64 ~/c202-javeritos/CompiladorXenón (master)  
$ mix escript.build  
Compiling 4 files (.ex)
```

*** Note: In case the elixir version fails, we will access the file mix.exs inside the same folder and we'll change the next line to our version elixir.

Execution

To run the compiler, write the following command:

./CompiladorXenón [input parameters]

Input parameters	
-t [filename.c]	Show token list.
-a [filename.c]	Show AST.
-s [filename.c]	Show assembly.
-c [filename.c]	Compile program (check the same folder for [filename].exe).
-o [filename.c]	[[newFilename].exe] Compile the program with a new name."

Tests

To run the scheduled Xenon Compiler tests, type the following command:

Mix test

```
fraja@Javier-Tavera MINGW64 ~/c202-javeritos/CompiladorXenón (master)
$ mix test
Compiling 4 files (.ex)
```

This verifies that the Xenon compiler has no errors.