Pulsewave Software
EasiScript Documentation

Version 1.0

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Introduction

EasiScript is a beginner-friendly, general purpose , simplified programming language inspired by Python, C, and C++. It aims to make coding more accessible by offering multiple, easy-to-understand commands for performing the same operations. This allows developers to use the syntax they are most comfortable with, increasing flexibility and ease of use.

Table of Contents

- File Handling
- Error Handling
- Importing Modules

6. License, usage etc

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1. Basic Syntax

1.1 Printing to Console

EasiScript provides multiple commands to print output to the console. You can choose any of the following:

easiscript

Copy code

print "Hello, World!";

display "Hello, World!";

say "Hello, World!";

show "Hello, World!";

All of these commands will produce the same output: Hello, World!.

1.2 Variables and Data Types

Variables in EasiScript do not require explicit type declaration. You can assign values directly:

Example:

set x = 10;

set name = "EasiScript";

EasiScript supports common data types such as integers, strings, and booleans.

1.3 Arithmetic Operations:

EasiScript simplifies arithmetic operations with flexible commands:

```
sum add 5 + 3;
subtract 10 - 4;
times 2 * 6;
divide 8 / 2;

-- or --

print 5 + 3;
print 10 - 4;
print 2 * 6;
print 8 / 2;
```

Both sets of commands achieve the same result.

1.4 Comments

Comments in EasiScript are initiated with the # symbol:

```
# This is a single-line comment
#Whatever written with hashtag as prefix, will be ignored.
```

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2. Control Flow

2.1 Conditional Statements

EasiScript supports conditional statements to control the flow of the program

Example:

```
if x > 10:
    print "x is greater than 10";
else:
    print "x is 10 or less";
```

2.2 Loops

EasiScript includes loop structures like while loops:

Example:

```
set i = 0;
while i < 5:
    print i;
    set i = i + 1;
endwhile;
```

---

3. Functions

3.1 Defining Functions

You can define functions in EasiScript to reuse code:

Example:

```
function greet(name):
    print "Hello, " + name;
endfunction;
```

3.2 Function Calls

Call functions using the function name followed by parentheses:

Example:

```
greet("World");
```

---

4. Data Structures

4.1 Lists

EasiScript allows you to work with lists:

Example:

```
create list = [1, 2, 3, 4];

print list[0];
```

4.2 Dictionaries

Dictionaries store key-value pairs:

Example:

```
create dict = {"name": "EasiScript", "version": 1.0};

print dict["name"];
```

---

5. Advanced Topics

5.1 File Handling

EasiScript supports basic file operations:

Example:

```
file = open("example.txt", "r");

content = read file;

print content;

close file;
```

5.2 Error Handling

Handle errors using try and except:

Example:

```
try:
    divide 10 / 0;
except:
    print "An error occurred!";
```

5.3 Importing Modules

Import additional modules to extend functionality:

Example:

```
import "math";
print math.sqrt(16);
```

6. License and others:

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Usage:

You can start using EasiScript by writing .es files. Here's an example hello_world.es script:

display “hello , world!”

To run this script, use the following command:

python easiscript_parser.py hello_world.es (example)

Contributing:

We welcome contributions to EasiScript! If you'd like to contribute, please fork the repository and use a feature branch. Pull requests are warmly welcome.

Reporting Issues

If you encounter any issues or have suggestions for improvements, please open an issue on the GitHub repository.

License:

This project is published under **Pulsewave Software** and is licensed under the MIT License - see the LICENSE file for details.

References

- Python
- MIT License

Installation:

1. **Download EasiScript**:
    - GitHub
    - Mediafire
2. **Download Python**:
    - Python website
3. **Download an IDE (optional)**:
    - A terminal is required to run EasiScript. You can use IDEs like Visual Studio Code or Command Prompt in Windows.

Conclusion

EasiScript is designed to be an accessible and versatile language that allows users to choose their preferred syntax style. As EasiScript evolves, more features and commands will be added, making it an even more powerful tool for developers.