Rotate Programming Language Documentation

Airbus5717

June 18, 2021

About

- Low learning curve.

- [.vr] file extension.

- syntax close to C-like languages and Rust

- static typing and scripting language

  `WARNING: SYNTAX MAY CHANGE AT ANY MOMENT`

Overview

Display output

```
import std.io;

fn main() {
    println("Hello World!");
}
```

Comments

```
// single line comment
/* multiline
   comment */
/+ multiline
   comment
   +/
/// documentation comment
```

```
/*
    // nested multiline comments are not allowed
*/
/+
    /*
        Allowed
    */
+/
```

Variables

```
// immutable string
let NAME: str = "a string";
// mutable string
let mut name: str = "mutable string";

// immutable ascii char
let char1: char = 'a';
// immutable int
let x: int = 1;


let num: float = 12.0;
```

Arrays

```
let array[3]: int = [1, 2, 3];
```

Functions

use arrow for return type. don't use arrow for void functions.

```
fn example() -> str {
    return "example string";
}
```

Imports

import folder.file;

```
import std.io;
```

Strings

```
let name = "Hello";
let name2 = #"{name}, World!"#;
```

Operators and Logic

same as C and Rust with little modifications

If statements

```
if x == 1 {
    // code
} else if x == 2 {
    // code
} else {
    // code
}
```

Match statements

```
match x {
    | 1 : // do ;
    | 2 : // do ;
    | 3 : // do ;
    | _ : // default;
}
```

Loops

for and while loops as well as a foreach loop

```
foreach (i, 0..2) {
    println(#"{i}"#);
}
```

Considering Later

Structures

similar to C but without typedef and with functions