



Racontr

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Agenda

- Racontr Overview
- Motivation, Goals & Intended Audience
- Language Features
- Functions
- Demonstration
- Future Work



Racontr Overview

- Allows users to design and implement their own creative text adventure games
- Dynamic language where users can develop any kind of story with customizable people, places, and things
- Programmer decides their own storylines.

Motivation, Goals & Intended Audience

- Inspired by past projects: GAWK (2014), GRIMM (2004), ZIL
- Goals
 - Customize characters, scenes, and items
 - Syntax easier than existing object-oriented languages
- Intended Audience
 - People who may not be familiar with coding but want to make text-adventure games





Language Features

- Program starts with class declarations followed by body statements
 - Program with only class declarations will compile
 - Program with only body statements will compile
- Comments follow C Language syntax

```
/* text */
```



Language Features cont.

- Conditional Statements

```
if condition {  
    /* type declarations */  
} else {  
    /* type declarations */  
}
```

- Inbuilt classes include: Scene, Character

```
class identifier {  
    /* type declarations */  
}
```

- While Loops

```
while condition {  
    /* body statements */  
}
```



Functions

```
2 | #instance type-->return type
3 | def fib(n : i32) -> i32 {
4 | |   if n == 1 || n == 0 {
5 | | |   return 1
6 | | | }
7 | |   return fib(n - 1) + fib(n - 2)
8 | | }
9 |
10 | var fib_result : i32 = fib(10)
11 | print_int(fib_result)
```



Demonstration



Future Work

- Users can utilize predefined storylines
- Mission, Achievements, Ending as additional inbuilt classes
- Machine learning/natural language processing in creating storylines
 - Use NLP and dictionary to parse user input
- Visualize storylines with Unity/UNREAL