

Abstract Syntax Tree

Linus Szillat

June 6, 2022

In this manual we cover the functionality of BSL-Tools.

Contents

1	BSL Tree Tests	4
1.1	Constant Definition	4
1.2	Struct Definition	4
1.3	Function Definition	4
1.4	Conditional Expression	4
1.5	Function Call Expression	4
1.6	Name Expression	4
1.7	List Expression	4
1.8	Value Expressions	5
1.9	Consecutive Program	5

Here are some tests for the Show Feature of the Abstract Syntax Tree.

1 BSL Tree Tests

1.1 Constant Definition

```
(define one 2) (define two 3) (+ one two)
```

1.2 Struct Definition

```
(define-struct pool (people fish water)) (make-pool (2 1 a lot))
```

1.3 Function Definition

```
(define (swim-with-the-fish pool) (string-append Cool pool with a number of (number->string (pool-fish pool))))
```

1.4 Conditional Expression

```
(cond ((< 1 0) Chocolate is the best!) ((< 0 0) But Ice Cream is way better!) ((> 1000 200) Still Pizza's the best!)) (else #f))
```

1.5 Function Call Expression

```
(swim-with-the-fish (make-pool 2 20 a little less than much, but still much))
```

1.6 Name Expression

```
just-a-normal-not-intriguing-name
```

1.7 List Expression

```
(list 1 2 3 4 5)
```

1.8 Value Expressions

Boolean:

#t

Number:

42

String:

"Hallo Welt"

Empty-List:

empty

1.9 Consecutive Program