

Languages-beta: MiniJava-Funcons-Index

The P_{LAN}CompS Project

Languages-beta/MiniJava/MiniJava-Funcons-Index/MiniJava-Funcons-Index.cbs*

Computations

Normal computation

Flowing

```
[ Funcon sequential
  Alias seq
  Funcon if-true-else
  Alias if-else
  Funcon while-true
  Alias while ]
```

Giving

```
[ Funcon initialise-giving
  Funcon give
  Funcon given
  Funcon interleave-repeat ]
```

*Suggestions for improvement: plancomps@gmail.com.
Issues: <https://github.com/plancomps/CBS-beta/issues>.

Binding

- [*Type* environments
- Alias* envs
- Datatype* identifiers
- Alias* ids
- Funcon* initialise-binding
- Funcon* bound-value
- Alias* bound
- Funcon* scope
- Funcon* collateral
- Funcon* recursive]

Generating

- [*Funcon* fresh-atom]

Storing

- [*Funcon* initialise-storing
- Datatype* variables
- Alias* vars
- Funcon* allocate-initialised-variable
- Alias* alloc-init
- Funcon* assign
- Funcon* assigned]

Interacting

Output

- [*Funcon* print]

Abnormal computation

Failing

- [*Funcon* finalise-failing
- Funcon* checked]

Values

Value Types

```
[ Type value-types  
  Alias types ]
```

Primitive values

Booleans

```
[ Datatype booleans  
  Alias bools  
  Funcon true  
  Funcon false  
  Funcon not ]
```

Integers

```
[ Type integers  
  Alias ints  
  Funcon integer-add  
    Alias int-add  
  Funcon integer-subtract  
    Alias int-sub  
  Funcon integer-multiply  
    Alias int-mul  
  Funcon integer-is-less  
    Alias is-less  
  Funcon decimal-natural  
    Alias decimal ]
```

The null value

```
[ Datatype null-type  
  Funcon null-value  
  Alias null ]
```

Composite values

Sequences of values

```
[ Funcon length  
  Funcon index  
  Funcon first ]
```

Tuples

```
[ Datatype tuples  
  Funcon tuple-elements ]
```

Strings

```
[ Funcon to-string ]
```

Vectors

```
[ Datatype vectors  
  Funcon vector  
  Funcon vector-elements ]
```

Sets

```
[ Type sets  
  Funcon set-unite ]
```

Maps

```
[ Funcon map  
  Funcon map-lookup  
  Alias lookup ]
```

References and pointers

```
[ Datatype references  
  Funcon reference  
  Type pointers  
  Funcon dereference ]
```

Classes

```
[ Funcon class  
  Funcon class-instantiator  
  Funcon class-name-single-inheritance-feature-map ]
```

Objects

```
[ Datatype objects  
  Funcon object  
  Funcon object-class-name  
  Funcon object-single-inheritance-feature-map ]
```

Abstraction values

Generic abstractions

```
[ Funcon abstraction  
  Funcon closure ]
```

Thunks

```
[ Funcon thunk  
  Funcon force ]
```

Functions

```
[ Datatype functions  
  Funcon function  
  Funcon apply ]
```

Patterns

```
[ Datatype patterns  
  Funcon pattern  
  Funcon match ]
```