

Languages-beta: MiniJava-Funcons-Index *

The P_{LAN}CompS Project

MiniJava-Funcons-Index.cbs | PLAIN | PRETTY

OUTLINE

Computations

- Normal computation
 - Flowing
 - Giving
 - Binding
 - Generating
 - Storing
 - Interacting
 - Output
- Abnormal computation
 - Failing

Values

- Value Types
- Primitive values
 - Booleans
 - Integers
 - The null value
- Composite values
 - Sequences of values
 - Tuples
 - Strings
 - Vectors
 - Sets
 - Maps
 - References and pointers
 - Classes
 - Objects
- Abstraction values
 - Generic abstractions
 - Thunks
 - Functions
 - Patterns

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

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 ]
```

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 ]
```