

Unstable-Languages-beta: IMPPP-Funcons-Index *

The PLaNCompS Project

IMPPP-Funcons-Index.cbs | PLAIN | PRETTY

OUTLINE

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

Computations

Normal computation

Flowing

[*Funcon* left-to-right
 Alias l-to-r
Funcon sequential
 Alias seq
Funcon effect
Funcon if-true-else
 Alias if-else
Funcon while-true
 Alias while
Funcon atomic]

Giving

[*Entity* given-value
Funcon give
Funcon given
Funcon no-given
Funcon left-to-right-filter]

Binding

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

Generating

[*Type* atoms
Funcon fresh-atom]

Storing

[*Entity* store
Funcon initialise-storing
Funcon allocate-variable
 Alias alloc
Funcon allocate-initialised-variable
 Alias alloc-init
Funcon assign
Funcon assigned
Funcon un-assign]

Interacting

Input

[*Funcon* read]

Output

[*Funcon* print]

Abnormal computation

Terminating abruptly

[*Entity* abrupted
Funcon handle-abrupt]

Failing

[*Funcon* finalise-failing
Funcon fail
Funcon else
Funcon checked
Funcon check-true]

Values

Value Types

[*Type* values
 Alias vals
Funcon is-value
 Alias is-val
Funcon when-true
 Alias when
 Type ground-values
 Alias ground-vals
Funcon is-equal
 Alias is-eq]

Primitive values

Booleans

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

Integers

```
[ Type integers
  Alias ints
  Type positive-integers
  Alias pos-ints
  Type natural-numbers
  Alias nats
  Funcon natural-successor
  Alias nat-succ
  Funcon natural-predecessor
  Alias nat-pred
  Funcon integer-add
  Alias int-add
  Funcon integer-divide
  Alias int-div
  Funcon integer-negate
  Alias int-neg
  Funcon integer-is-less-or-equal
  Alias is-less-or-equal
  Funcon integer-is-greater
  Alias is-greater
  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
  Funcon second ]
```

Tuples

[*Datatype* tuples
 Funcon tuple-elements]

Lists

[*Datatype* lists
 Funcon list-elements
 Funcon list-cons
 Alias cons
 Funcon list-head
 Alias head
 Funcon list-tail
 Alias tail
 Funcon list-append]

Strings

[*Type* strings
 Funcon string-append]

Sets

[*Type* sets
 Funcon is-in-set
 Funcon is-subset
 Funcon set-unite
 Funcon set-intersect
 Funcon set-difference
 Funcon some-element]

Maps

[*Type* maps
 Funcon map
 Funcon map-lookup
 Alias lookup
 Funcon map-domain
 Alias dom
 Funcon map-override
 Funcon map-unite
 Funcon map-delete]

Abstraction values

Generic abstractions

[*Type* abstractions
 Funcon abstraction
 Funcon closure]

Thunks

```
[ Datatype thunks  
  Funcon thunk ]
```

Functions

```
[ Funcon apply  
  Funcon supply ]
```