

Unstable-Languages-beta: IMPPP-Funcons-Index

The PPlanCompS Project

Unstable-Languages-beta/IMPPP/IMPPP-Funcons-Index/IMPPP-Funcons-Index.cbs*

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 ]
```

*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 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 ]
```