Unstable-Languages-beta: LD-Funcons-Index

The PLanCompS Project

 ${\tt Unstable-Languages-beta/LD/LD-Funcons-Index.cbs}^*$

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 ]
```

Giving

```
[ Funcon give Funcon given ]
```

^{*}Suggestions for improvement: plancomps@gmail.com. Issues: https://github.com/plancomps/CBS-beta/issues.

Binding

```
[ Funcon initialise-binding
Funcon bind-value
Alias bind
Funcon bound-value
Alias bound
Funcon scope ]
```

Generating

```
[ Type atoms Funcon fresh-atom ]
```

Storing

```
[ Funcon initialise-storing

Datatype variables

Alias vars

Funcon allocate-initialised-variable

Alias alloc-init

Funcon assign

Funcon assigned ]
```

Abnormal computation

Terminating abruptly

```
[ Funcon handle-abrupt ]
```

Failing

```
[ Funcon finalise-failing
Funcon fail
Funcon checked ]
```

Values

Value Types

```
[ Type values
  Alias vals

Funcon is-value
  Alias is-val
  Type ground-values
  Alias ground-vals ]
```

Primitive values

Booleans

```
[ Datatype booleans
    Alias bools
    Funcon true
    Funcon false ]
```

Integers

```
[ Type integers
    Alias ints
    Type natural-numbers
    Alias nats

Funcon integer-add
    Alias int-add

Funcon integer-multiply
    Alias int-mul

Funcon integer-divide
    Alias int-div

Funcon integer-is-less-or-equal
    Alias is-less-or-equal

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 ]
```

Lists

```
[ Datatype lists ]
```

\mathbf{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

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