Languages-beta: SL-Funcons-Index

The PLanCompS Project

`Languages-beta/SL/SL-Funcons-Index/SL-Funcons-Index.cbs`[*]

Computations

Normal computation

Flowing

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

Giving

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

[*] 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  closed
     Funcon  scope
     Funcon  collateral  ]
```

Generating

```
[ Funcon  fresh-atom  ]
```

Storing

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

Interacting

Input

```
[ Funcon  read  ]
```

Output

```
[ Funcon  print  ]
```

Abnormal computation

Terminating abruptly

```
[ Funcon finalise-abrupting ]
```

Failing

```
[ Funcon fail
  Funcon else
  Funcon checked ]
```

Returning

```
[ Funcon return
  Funcon handle-return ]
```

Breaking

```
[ Funcon break
  Funcon handle-break ]
```

Continuing

```
[ Funcon continue
  Funcon handle-continue ]
```

Values

Value Types

```
 [ Type values
  Alias vals
   Type cast-to-type
  Alias cast
Funcon is-equal
  Alias is-eq ]
```

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-divide
   Alias int-div
  Funcon integer-negate
   Alias int-neg
  Funcon integer-is-less
   Alias is-less
  Funcon integer-is-less-or-equal
   Alias is-less-or-equal
  Funcon integer-is-greater
   Alias is-greater
  Funcon integer-is-greater-or-equal
   Alias is-greater-or-equal
  Funcon decimal-natural
   Alias decimal  ]
```

The null value

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

Composite values

Lists

```
[ Datatype lists
    Funcon list-nil
      Alias nil
    Funcon list-cons
      Alias cons
    Funcon list-head
      Alias head
    Funcon list-tail
      Alias tail ]
```

Strings

```
 [ Type strings
Funcon string-append
Funcon to-string ]
```

Maps

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

Objects

```
[ Datatype objects
    Funcon object
    Funcon object-feature-map ]
```

Abstraction values

Generic abstractions

```
[ Funcon closure ]
```

Functions

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