Cock: Inline Docs for Chicken Scheme

Peter Danenberg <pcd@roxygen.org>

August 13, 2012

Contents

1 Cock-parse

1.1 cock-parse

Module cock-parse

Description The cock-parse module is responsible for the heavy lifting: creating docexprs (see below) from documented sources code; the drivers then write docexprs as e.g. LaTeX.

Exports

- parse-files
- tex-write-docexprs

1.2 current-docexpr

Parameter #f

Description Enables communication with the parsing @-reader

```
1 (define current-docexpr (make-parameter #f))
```

1.3 docexpr

Record `docexpr`

Description Composite documentation and adherent expression

Fields `doc` Documentation for the expression
`expr` Expression surrounding the documentation

```
(define-record-and-printer docexpr doc expr)
```

1.4 parse-files

Procedure `(parse-files . files)` → `Resultant docexprs`

Description Parse files into docexprs.

Parameters `files` Cock-documented files to be parsed

```
(define (parse-files . files)
  (parameterize
    ((docexprs (make-stack)))
    (for-each
      (lambda (file)
        (with-input-from-file
          file
          (lambda ()
            (let read-next ((expression (read)))
              (if (not (eof-object? expression))
                (begin
                  (if (current-docexpr)
                    (docexpr-expr-set! (stack-peek (docexprs)) expression))
                  (current-docexpr #f)
                  (read-next (read))))))))
      files)
    (docexprs)))
```

1.5 tex-write-docexprs

Procedure `(tex-write-docexprs docexprs)` → `unspecified`

Description Write the source-derived docexprs as LaTeX.

Parameters `docexprs` The parsed docexprs

```
(define (tex-write-docexprs docexprs)
  (let* ((document (make-document (make-hash-table) (make-stack)))
         (parsed-docexprs (tex-parse-docexprs document docexprs)))
    (let ((data (document-data document)))
      (write-template
        tex-preamble
        `((author unquote (hash-table-ref/default data 'author "Anonymous"))
          (email unquote
                 (hash-table-ref/default data 'email "anonymous@example.org"))
          (title unquote (hash-table-ref/default data 'title "Documentation"))
          (subtitle
            unquote
            (hash-table-ref/default data 'subtitle "Sub-documentation")))))
    (stack-for-each parsed-docexprs (lambda (docexpr) (docexpr)))
    (display tex-footer)))
```