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-- file SymTabDefs.Mesa
-- last modified by Satterthwaite, August 16, 1977 11:22 AM

DIRECTORY
  StringDefs: FROM "stringdefs",
  SymDefs: FROM "symdefs";

SymTabDefs: DEFINITIONS =
  BEGIN
    OPEN SymDefs;

-- implemented by SymbolTable

-- hash manipulation

  FindString: PROCEDURE [StringDefs.SubString] RETURNS [found: BOOLEAN, hti: HTIndex];
  hashforse: PROCEDURE [ISEIndex] RETURNS [HTIndex];
  hashvalue: PROCEDURE [StringDefs.SubString] RETURNS [HVIndex];
  SubStringForHash: PROCEDURE [StringDefs.SubString, HTIndex];

-- context management

  firstctxse: PROCEDURE [CTXIndex] RETURNS [ISEIndex];
  nextse: PROCEDURE [ISEIndex] RETURNS [ISEIndex];

  searchcontext: PROCEDURE [hti: HTIndex, ctx: CTXIndex] RETURNS [found: BOOLEAN, sei: ISEIndex];

-- type manipulation

  undertype: PROCEDURE [SEIndex] RETURNS [CSEIndex];
  typeclass: PROCEDURE [SEIndex] RETURNS [TypeClass];
  xfermode: PROCEDURE [SEIndex] RETURNS [TransferMode];
  wordsfortype, cardinality: PROCEDURE [SEIndex] RETURNS [CARDINAL];

-- implemented by SymTab (extensions for building tables)

  symtabinit, symtaberase: PROCEDURE;

-- hash manipulation

  EnterString: PROCEDURE [StringDefs.SubString] RETURNS [HTIndex];
  hashblock: PROCEDURE RETURNS [base: POINTER, length: CARDINAL];

-- context management

  nextlevel: PROCEDURE [ContextLevel] RETURNS [ContextLevel];
  makenewctx: PROCEDURE [ContextLevel] RETURNS [CTXIndex];
  resetctxlist: PROCEDURE [CTXIndex];
  ctxentries: PROCEDURE [CTXIndex] RETURNS [CARDINAL];
  firstvisiblese: PROCEDURE [CTXIndex] RETURNS [ISEIndex];
  visiblectxentries: PROCEDURE [CTXIndex] RETURNS [CARDINAL];
  contextvariant: PROCEDURE [CTXIndex] RETURNS [ISEIndex];

  StaticNestError: SIGNAL;

  fnfield: PROCEDURE [ISEIndex] RETURNS [offset: bitaddress, size: CARDINAL];

  makectxse: PROCEDURE [hti: HTIndex, ctx: CTXIndex] RETURNS [ISEIndex];
  makenonctxse: PROCEDURE [CARDINAL] RETURNS [CSEIndex];

  makeSEChain: PROCEDURE [CTXIndex, CARDINAL, BOOLEAN] RETURNS [ISEIndex];
  fillctxse: PROCEDURE [ISEIndex, HTIndex, BOOLEAN];
  NameClash: SIGNAL [hti: HTIndex];
  setselink: PROCEDURE [sei, next: ISEIndex];

-- type manipulation

  typeroot: PROCEDURE [SEIndex] RETURNS [CSEIndex];
  typelink: PROCEDURE [SEIndex] RETURNS [SEIndex];
  recordlink, recordroot: PROCEDURE [recordCSEIndex] RETURNS [recordCSEIndex];

-- attribute testing

  ConstainId: PROCEDURE [ISEIndex] RETURNS [BOOLEAN];
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END...