

Why Preserve?

- architecture and its evolution
- data structures and algorithms
- approaches to problems
- attention to communicating with people
- performance and other tradeoffs
- use of and evolution of programming languages
- coding styles, idioms, and their evolution
- influences from other disciplines and genres
- literature of source code
- critical literature

Principles

▨ Principle of Unbiased Collection

▨ Principle of Thorough Collection

▨ Principle of Safekeeping

▨ Principle of Respect for Ownership

▨ Principle of Fair Use

▨ Principle of Transparency

▨ Principle of Service

IF CANNOT TO ALLOW
TRAILING SPACE

0. (CF, SERVICE).
1. RETURNS CHARACTER N TT.
N-1 IS FOR PEEKING (END TTY)

END CHARG

NO SPACE

IN -1 FOR PEEKING AT 'EOF'

RETURN CHAR, BUT DON'T FLUSH

CALL TO READ

FROM SUBROUTINE TO CALL POINT NOW.
PUSH 1. RETURN FOR LEAVE, READ
RETURN FOR LEAVING FLAG INDICATING READ RECDITION
LEAVE OF 195 010
END 010.1
END 0. INCALL

READ (MOVE A, D) READ (ENABLE TTY END-SCAN
MOVE A, SERVICE

```
NOVEL 1 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 2 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 3 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 4 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 5 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
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```
NOVEL 6 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
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```
NOVEL 7 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 8 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 9 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 10 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 11 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 12 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 13 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 14 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 15 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 16 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

```
NOVEL 17 (1)
PAGES 1-1000
DATE 1980
TEXT 1000
LINK 1000
```

Unbiased Collection

- type of software
- programming language
- approach or philosophy behind the work
- identity or nature of the developer or development group
- level of success or failure of the software
- country or region of origin
- purpose the software serves
- architecture, design approach, or development methodology
- time period in which the software was developed
- media in which the artifact is captured

Precise Recording and Authentication

- location and time of collection
- name or names of the developers
- the circumstances of its creation
- the chain of possession from creation to collection

```

NAME: A. SOLLA
JEP T. SCHEBING
DAS A. TYINAN
DAS HIL THERR
P A. MERM
MVEI A. (A)
PUMI T. BEADRA
MIPS T. MERM
CAY T. I
JEP T. SCHEBING
LESS ENCI/ENEA CHAS

```

```

READLIST: NOVEN A. COMA
MVEI T. MVEI
PUMI T. BEADRA
JEP T. SCHEBING

```

```

MVEI: ILOM T. ILOM
MVEI A.
MVEI A. AT
MVEI A.

```

```

MERM: MERM A. MERM
JEP T. SCHEBING
PUMI T. BEADRA
PUMI T. BEADRA
MERM: MERM A. MERM
JEP T. SCHEBING
CAY T. I
LESS ENCI
PUMI T. BEADRA
MVEI T. MVEI

```

```

MERM: MVEI A. MVEI
MERM MERM
MVEI T. MVEI

```

```

MERM: MERM T. MERM
PUMI
PUMI A.

```

```

LENG OF IRE QIR

```

```

JEP QIR. I
READLIST: JONES A. SOLLA
MVEI A. SOLLA
MVEI C. SOLLA
JEP T. SCHEBING
    A. SOLLA
    B. TYINAN
    C. TYINAN
    E. MERM
MVEI A. MERM
PUMI T. BEADRA
MIPS T. MERM
CAY T. I
JEP T. SCHEBING
LESS ENCI

```

```

!!! READLIST ENCI AND
!!! SAVED A,B,C,ARIA

```

```

SOLLA: JEP SOLLA
SOLLA: PUMI A. A
MERM A. MERM
    JEP SOLLA
CAY A. I
LESS ENCI
MVEI ARI. (A)
NOVEN ARI. SOLLA
MVEI: MVEI A. (A)
MVEI: JEP T. COMA
JEP MVEI

```

```

MVEI: MERM - NOT ACC

```

```

MVEI: MERM MERM
MVEI T. MVEI
JEP MVEI

```

```

MVEI: MERM T. MERM
CAY T. I
JEP MVEI

```

```

PUMI T. I
MERM A. MERM
MVEI T. MVEI

```

```

MVEI: MVEI T. (A)
JEP T. SCHEBING
MVEI A. MERM
PUMI T. COMA
MERM A. MERM

```

ELSE RETURN CHAS, NOT DON'T FLAG

```

PUMI T. BEADRA
MVEI T. MVEI
JEP T. SCHEBING
MVEI T. MVEI
JEP T. SCHEBING
MVEI T. MVEI
JEP T. SCHEBING
MVEI T. MVEI

```

```

IF UNSET TO ALLOW
MAILING SPACE
M. (CF. SERVICE)
N. RETURN CHARACTER N TT.
M-I IS FOR PERKING (AND TTY)

```

```

NEW CHAS

```

```

M-SPACE

```

```

M -I FOR PERKING AT 'MVEI'

```

```

RETURN CHAS, NOT DON'T FLAG

```

```

*****

```

```

CALL TO READ
FROM MVEI/TYINAN TO CALL SOLLA NOW.
MVEI T. BEADRA/T. MVEI, READ
FROM MERM/BEADRA FLAG INDICATING READ REVISION
LENG OF IRE QIR
IRE QIR. I
IRE A. MERM
MERM
MERM: MVEI A. COMA/ENEA TTY ENCI/ENEA
MERM A. MERM

```

Safekeeping



once collected, an artifact should be subject to the best effort for long-term preservation

```
NOVEM A. (A)
JEP T. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
```

```
NOVEM A. (A)
(LIKE NOVEM A. (A), IT ALSO CHG)
(FORCE NOVEM A. (A) TO DO HIS WILL)
(AS READ FROM READLIST GETS ITS FILE)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
```

```
END OF FILE
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
```

```
NOVEM A. (A)
POMM T. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
```

```
NOVEM A. (A)
POMM T. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
```

```
NOVEM A. (A)
POMM T. (A)
```

```
NOVEM A. (A)
POMM T. (A)
```

```
NOVEM A. (A)
```

```
NOVEM A. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
```

```
NOVEM A. (A)
POMM T. (A)
NOVEM A. (A)
DAS S. (A)
DAS M. (A)
DAS S. (A)
```

Respect for Ownership

- must be able to gather proprietary, copyrighted, trade secret, or patented software
- provisions should be made to keep secret and otherwise protect the contents of the artifact to the satisfaction of its owner until it can be released for study and observation

```
NOVEL A. (A)
POMI T. HEADS
WIFE T. HEADS
CIN T. I
LAST NAME
LESS ENCL/EXTRA CHRG
```

```
READ: NOVEL A. CORN
NOVEL T. HEADS
POMI T. HEADS
LAST NAME
```

```
NOVEL: NOVEL A. CORN
WIFE A.
NOVEL A. (A)
NOVEL A.
```

```
NOVEL: WIFE A. HEADS
LAST NAME
POMI T. HEADS
WIFE T. HEADS
CIN T. I
LAST NAME
POMI T. HEADS
LAST NAME
```

```
NOVEL: NOVEL A. (A)
WIFE A. HEADS
LAST NAME
```

```
NOVEL: WIFE A. HEADS
CIN T. I
NOVEL A.
```

END OF THE JOB

```
END JOB
READLIST: JONES A. SOLIS
NOVEL A. SOLIS
NOVEL C. SOLIS
JOB T. SOLIS
A. SOLIS
B. TYMAN
C. TYMAN
D. TYMAN
E. TYMAN
```

```
NOVEL A. SOLIS
POMI T. HEADS
WIFE T. HEADS
CIN T. I
LAST NAME
LAST NAME
```

```
READLIST: JONES A. SOLIS
READLIST: JONES A. SOLIS
```

```
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
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```
NOVEL: WIFE A. HEADS
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NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
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NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
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```
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
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NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
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```
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
```

ELSE RETURN CHRG, NOT DON'T FLUSH

```
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
```

```
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
```

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NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
NOVEL: WIFE A. HEADS
```

CALL TO READ

Transparency

All aspects of collection should be open to public scrutiny

the identities of the members of the collection group

the principles and practices of collection

the procedures to exercise fair use

descriptions of all collected items

```
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
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NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
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NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
```

Service



collection of artifacts should not enrich any party—neither the collectors, the owners, nor anyone claiming fair use

```
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
```

```
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
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NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
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NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
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NOVEL A. (A)
PAGE1 P. HEADRA
NOVEL A. (A)
PAGE1 P. HEADRA
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NOVEL A. (A)
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NOVEL A. (A)
PAGE1 P. HEADRA
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```
NOVEL A. (A)
PAGE1 P. HEADRA
```

Selection Process

people based

diversity of selectors

nomination + second

prioritization

no vetoes, only timing and expenditure

all selectors vote order when needed

```

MEMBER A 1001
JEP T 000010
DAS A TYINAM
DAS HIL THROK
E A HEDW
NOVEL A 10
POMM T BEADNA
NOVE T HEDW
CASH T 1
JEST THING
LEAD ENH1EXTRA CHAR
    
```

```

READO:NOVEL A,CORW
NOVEL T 001
POMM P0A HEDW
JEST HEDW
    
```

```

NOVEL:NOVEL A,CORW
NOVEL A
NOVEL A 01
NOVEL A
    
```

```

MEMBER:NOVEL A,THROK
JEST MEMAM
POMM P0A T
POMM P0A TY
MEMBER:NOVEL A,HEW
JEST MEMAM
CASH A 1
LEAD ENH1
POMM T HEDW
JEST HEDW
    
```

```

MEMBER:NOVEL A,01
NOVEL HEDW
JEST HEDW
    
```

```

MEMBER:NOVEL THROK
POMM
POMM A
    
```

```

LEAD OF 100 010
    
```

```

JEP 010 1
READLIST:JONES A,SOL1
NOVEL A HEDW
NOVEL C HEDW
JEP T 000010
E A HEDW
E A TYINAM
E T HEDW
1 1 T HEDW
1 1 A HEDW
NOVEL A HEDW
POMM T BEADNA
NOVE T HEDW
CASH T 1
JEST THING
LEAD ENH1
    
```

```

11 READLIST ENH AND
11 DAVES A,B,C,AR1A
    
```

```

NOVEL:JEST HEDW
NOVEL:POMM P A
NOVEL A HEDW
JEST HEDW
CASH A 1
LEAD ENH1
MEM AM1 (A)
NOVEL AM1 HEDW
NOVEL:HEDW A (A)
NOVEL:JEP T,COMV
JEST HEDW
    
```

```

NOVEL:MEMAM NOT ADD
    
```

```

NOVEL:MEMAM HEDW
NOVEL TY 001
JEST HEDW
    
```

```

NOVEL:NOVEL TY,HEDW
CASH TY 1
JEST HEDW
    
```

```

POMM T 0
NOVEL A HEDW
JEST HEDW
    
```

```

NOVEL:NOVEL TY (A)
JEP T 000010
NOVEL A HEDW
POMM T COMV
NOVEL A HEDW
    
```

```

MEMBER TO FIND THE MEMO
(LIKE REVISIONS, IT SHOWS CHANGES)
(FORCE TYINAM TO DO HIS WILL)
(AS READ FROM READLIST GETS ITS FILL)
    
```

```

;ELSE RETURN CHAR, NOT DON'T FLUSH
    
```

```

MEMBER P0A HEDW
NOVEL P0A HEDW
JEST HEDW
NOVEL:NOVEL TY (1000)
NOVEL TY COMV
NOVEL TY 0
JEST HEDW
    
```

```

LEAD OF 100 010
    
```

```

IF OUGHT TO ALLOW
MAILING SPACE
    
```

```

0. (CF. SERVICE)
1. RETURN CHARACTER N TY
N-1 IS FOR PEEKING (AND TY)
    
```

```

END CHAR
    
```

```

NO-SPACE
    
```

```

IN -1 FOR PEEKING AT 'NOF'
    
```

```

RETURN CHAR, NOT DON'T FLUSH
    
```

```

*****
    
```

```

CALL TO READ
FROM MEMAM TO CALL HEDW NOW
POMM T BEADNA/T0A HEDW
FROM HEDW HEDW HEDW HEDW HEDW HEDW
LEAD OF 100 010
JEP 010 1
JEP HEDW
MEMBER:NOVEL A,CORW/ENABLE TYE HEDW HEDW
NOVEL A HEDW
    
```

Preservation

- let's not bias our preservation choices
- let's get moving before it's too late
- let's view this as creating a commons

```
NOVEL A.1001
JEP T. SPEERING
DAS S. TYINAN
DAS NIL THROG
S A. HENNI
NOVEL A.101
POMM T. BEADDA
MIFE T. HENNI
CAY T. 1
JEP THROG
LEA SMIKSTRA CHAS
```

```
BEADDA:NOVEL A.1000
NOVEL T.101
POMM T. BEADDA
JEP SINTEN
```

```
NOVEL:LOW A.1000
NOVEL A.
NOVEL A.11
NOVEL A.
```

```
HENNI:NOVEL A.1000
JEP HENNI
POM T.101
POM T.101
HENNI:NOVEL A.1000
JEP HENNI
CAY S. 1
LEA SMIK
POM T. HENNI
JEP HENNI
```

```
HENNI:NOVEL A.101
LEA SMIK
JEP HENNI
```

```
HENNI:NOVEL THROG
POM
POM S.
```

LEND OF THE QIG

```
IFN QIG.1
READLIST:JONES A. SOLIS
NOVEL A. SOLTY
NOVEL C. SOLTY
JEP T. SPEERING
S A. SOLANG
S S. TYINAN
S C. UNTYINAN
S SMI. STADMAN
S SMI. UNTYINAN
NOVEL A. HENNI
POMM T. BEADDA
MIFE T. SOLANG
CAY T. 1
JEP THROG
LEA SMIK
```

```
!!! READLIST END AND
!!! SAVED A,B,C,ARIA
```

```
SOLAN:JEP SOLTY
SOLTY:POM S.A
SOLAN A. SOLANG
JEP SOLTY
CAY S.-1
LEA SMIK
MIFE SMI.(A)
NOVEL SMI. SOLANG
SOLTY:MIK A.(A)
SOLTY:JEP T. CMVI
JEP POMM
```

```
SOLTY:MIKBIT NOT ADD
```

```
SOLTY:MIKLOO STANG
NOVEL TT.101
JEP POMM
```

```
SOLTY:MIK T. SOLANG
CAY TT.-1
JEP HENNI
```

```
POM T.1
MIFE S. SOLANG
JEP SOLTY
```

```
SOLTY:NOVEL TT.(A)
JEP T. HENNI
MIFE S. SOLANG
POM T. COMB
NOVEL A. SOLANG
```

```
NOVEL:10100 THE MIM
(LIKE REPTONITE, IT GLOW. GLOW GREEN)
(FORCE TYINAN TO DO HIS WILL.
(20 READ FROM READLIST GETS ITS FILE)
```

```
ELSE RETURN CHAS, NOT DON'T FLOW
```

```
NOVEL T.1000000
MIF T.101
JEP SINTEN
```

```
NOVEL:LOW TT.-1(100)
MIFE TT. COMB
CAY TT. 10
JEP HENNI
```

LEND OF THE QIG

```
IF UNSET TO ALLOW
DAILING SPACE
```

```
0. (CF. SERVICE)
1. RETURN CHARACTER N TT.
N-1 IS FOR PERKING (END TTY)
```

END CHAS

END SPACE

IF -1 FOR PERKING AT 'END'

RETURN CHAS, NOT DON'T FLOW

CALL TO READ

```
NOVEL IDENTIFY TO CALL HENNI NOW.
POMM T. BEADDA/TOM LAYD, READ
RETURN FOR LAYD'S FLAG INDICATING READ RECDITION
LEND OF THE QIG
END QIG.1
END S. HENNI
LEA SMIK
NOVEL:NOVEL A.1000/ENABLE TTY END-SCAN
MIFE A. HENNI
```

