From: **Bernard L. PEUTO** [redacted]
Subject: Summary of the Action Item responses: 10 software preservation candidates for testing our processes
Date: December 16, 2003 at 8:14 PM
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SCC friends

You will find below a summary created By Mike Blasgen and Mary Cicalese of the responses to the "10 software preservation candidates for testing our processes" action item.

As you should know by now there is a significant distinction between the programs that ought to be preserved and those that we will use for this initial "experimentation". I got the impression that most of the responses where focused on some kind of a list of the top 10 most important software items to preserve. At the same time the energy displayed by all these responses is great and I am glad that we gave it a forum. I also noted that some good names came up that did not exist Grady's list and we got a list of software matched with volunteers that seem to have energy to invest in them. I am starting to see that this passion may be one of the most important factor for the test selection. We are clearly learning from this dialogue and after all the experimentation will need manpower and we are finding who is interested.

Some suggestions were made that talked to the coverage of the experimental test:

Candidates should be from a different era, or of different preservation complexity, or of different preservation completeness.

Other factors mentioned were:

1) Their overall importance to the history of computing.

2) Their functional category

3) Their age

4) The availability of knowledgeable volunteers and original designers

5) Commercial programs vs. academic programs

6) Finite and small program vs. large and multi versions programs etc..

Bernard

*** From Mike and Mary

I have below summarized (brutally in many cases) points made via email since folks began to react to the suggestion that we develop a list of ten pieces of software that we should start collecting seriously.

As background, the first work on the software collection and software preservation done under the auspices of the CHM is the work of

preservation done under the auspices of the CHM is the work of

**** Grady Booch and the oracles of computer science produce a list of 152 pieces of "classic software"

http://www.computerhistory.org/cgi-bin/wishlist.cgi

After a meeting in October to review the suggested classic software items, Bernard Peuto then encourages us to identify the top 10 software items. A mess of email ensued.. Summaries of folks' suggestions are below:

**** Burt Grad:

1. CICS/OS or CICS/DOS
2. VM/CMS
3. IDMS or ADABAS
4. Mark IV
5. MS/DOS
6. One of the early Linear Programming programs (to get a scientific program)
7. Oracle
8. One of the DEC operating systems
9. Wang's Word Processing program (the progenitor in that application)

We are most interested in the commercially valuable programs that have shaped the business use of computers.

**** Dick Sites

Original Alto software
Mosaic browser
The first operating system (control program). I'm thinking something from IBM circa 1950's. Maybe Boeing for the IBM 704 or 709. Maybe the 650. Maybe this belongs to Wheeler's loader circa 1951.

Star Wars on PDP-1. Pong on Atari.

CPM. Windows 1.0

BBN IMP software (routing, self-updating, robust, 24x7 reliable...)

Fortran I

**** Bernard Peuto

FORTRAN

A word processor TBD

OS/360

Multics

Netscape/ Mosaic

VisiCalc

A software 1,000 TBD

A software 10,000 TBD

Indexing our own software collections

Other possible candidates

> DOS or CPM;
> CAL TSS;
> PowerPoint;

**** Grady Booch

I have 6 boxes of punched cards constituting the source code for multics
sitting in my laboratory...

**** Dennis Allison

Operating Systems:
~~~~~~~~~~~~~~~~~~~
Unix V6.

CP/M (and later MP/M and the Gem gui tools)

Compilers & Interpreters:
~~~~~~~~~~~~~~~~~~~~~~~~~~
PL/I H. (PL/S, IBM's internal
machine-oriented lanague would be another.)

Algol. The compiler done by Peter Naur

Prolog (the first implementation in Fortran)

LISP (in all its wonderous variations)

Altair 4K Basic

PL/M (originally a cross compiler, then a native compiler)

Entertainment Software:
~~~~~~~~~~~~~~~~~~~~~~
Wumpus (Greg Yob).
.
Adventure,
NYIT's control point animation software.

Mathematical Software:
~~~~~~~~~~~~~~~~~~~~~
LINPAC
Fast Fourier Transform programs

Symbolic Manipulation:
~~~~~~~~~~~~~~~~~~~~~
The original SNOBOL system (macro based).
MACSYMA

Personal Productivity Software:
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Visicalc (and successors up to Framework, Symphony, and Excel)
Sidewinder (Borland)

File Compression Tools:
~~~~~~~~~~~~~~~~~~~~~
compress
zip
pkzip
bzip2
ice

Editors:
~~~~~~~
MIT X2's visual editor (I don't remember its name)
BRAVO, the Alto text editor
Emacs

**** Eric Hahn

Communications:
Berkeley TCP/IP
BBN (Arpanet) IMP (<- I have source)

Operating Systems:
K&R "blue book" Unix
Multics

MS-DOS (pre-microsoft?)

Languages:
Smalltalk and/or MACLisp 0
K&R "blue book" C
(I know fortran is on everyone else's list..)

Office Automation:
Xerox Star/Alto/Dorado WIMP suite (not sure)
Visicalc

Games:
MIT Spacewar
Adventure/Zork

Scientific/Engineering:
early mainframe CAD?
what ran on the 6600s?
Spice?
Blast/Hammer (Human Genome)?

**** Len Shustek

My approach was to pick one from each of the 8 major
categories on Grady's list. I'm leaving two spots empty on my list of 10
to be filled with representatives of the "next 1000" and "next 10,000"
groups;

Language: Fortran I (if we can find it, otherwise Fortran II).
Game: Adventure
OS: Multics
Text Editor: EMacs
Application: VisiCalc
AI: MYCIN
Scientific: LINPACK (I think we probably need more candidates here)
Web/Networking: BBN TCP/IP, or BBN IMP software

**** Dave House

If you want CPM, go for its predecessor ISIS

**** Gordon Bell

OS/8 predates both ISIS and CPM. LINC, FOCAL.

**** John Toole

Focus on top 10 is OK, but remember we will need lots more in the future.

Mike & Mary