APPENDIX A

Position Description

Curator/Archivist of a Software Archive

Introduction:

The curator/archivist is responsible for developing and carrying out the program of the software archives. The incumbent will represent the institution with potential donors and the professional community as well as to researchers. The incumbent will establish and maintain policies and procedures, within the framework of the administrative practices of the rest of the organization, which are consonant with the needs of a software collection, and which achieve its aims in a professional and accountable fashion.

Duties and Responsibilities:

1. Sets program objectives and allocates resources:
   * Drafts plans and budgets with appropriate advice from colleagues inside and outside the organization, for submission to management.
   * Assures that resources are assigned to carry out approved projects.
2. Builds Collections:
   * Articulates annual collection development objectives within the scope of the collecting policy.
   * Assists targets of collecting objectives to deposit records, soliciting their donations of materials to the software archive as appropriate.
3. Manages Collections:
   * Accessions, describes and provides access to holdings.
   * Publishes descriptions of archives and assists in selecting materials for exhibits.
4. Develops Professional Awareness of Software Archive Issues:
   * Gives talks and publishes in the professional literatrure.
   * Participates in standards committees for software cataloging.
   * Participates in efforts to forge inter-institutional exchanges of software archives holding information.
5. Interprets the History and Sociology of Software:
   * Assists in developing exhibits and public programs using the materials of the software archive.

Supervisory Controls, Guidelines and Contacts

The incumbent will operate as a member of the senior professional staff of the repository, with general supervision and periodic review, but largely following the adopted plans and broad professional guidelines. The specific guidelines for operating a software archive contained in this report serve as the only direct source of advice, and are subject to substantial evolution and professional consensus. The incumbent will be expected to play a role in the further development of professionally accepted guidelines for software archives and exercise good judgement in the interim.

The incumbent will need to contact a wide range of individfuals and organizations on behalf of the repository. These contacts would include, but not be limited to, vendors, potential donors, researchers, colleagues and staff. International contacts would not be unusual and inter-institutional agreements would be a frequent topic of discussion with contacts.

Qualifications:

In addition to an advanced degree in archives or library administration and/or computer science or equivalent academic qualifications and the specific prior experience implied above, the incumbent must possess:

* Broad knowlege of the history of software and the nature of computing languages, adequate in depth to understand software and its significance, but not necessarily to program.
* Demonstrated ability to develop new programs from general guidelines.
* Experience in establishing and administering archival control systems.

APPENDIX B

Latticework for a Software Thesaurus

This framework for a language to describe software from a variety of different perspectives is being proposed as a vocabulary for use by a software archive, but rather as a preliminary model for building such a vocabulary. Terms in this example were found in current literature regarding software, that is they all have warrant, but numerous terms which could also be included were not. Lacking the facilities to maintain a comprehensive vocabulary for software, the author felt that it would be better to place before his readers a structure which was clearly incomplete, rather than risk misunderstanding by presenting a more complete vocabulary which was then taken as definitive. The point of this framework is that it can be built upon; new major facets may be added (A-Z), including any referenced in the section XX of the report, and new terms within categories will need to be added, including those for lists (such as languages, or operating systems) which are clearly incomplete.

A. Academic Disciplines
- *Cognitive Science
- *Computer Science
- *Information Science
- *Robotics
- *Software Engineering
  - **Development Methodologies
    - **Software Architectures

B. Software Business
- *Software Advertising
- *Software Authoring
- *Software Marketting
  - **Software Licensing
    - ***Shrinkwrap Licensing
    - ***Site Licensing
    - ***Run Time Licensing
  - **Software Sales
- *Software Purchasing
  - **Requests-For-Proposal
  - **Software Competitions

*Software Trade
**Software Trade Balances
**Software Trade Policy

C-K available to be added

L. Software Literature
*Technical Literature
**Primary Literature
***Software Books
****Text Books
****Technical Books
***Software Conference Proceedings
***Periodicals
***Software Technical Reports
**Secondary Literature
***Software Directories
****Printed Software Directories
****Online Software Directories
***Software Review
**Tertiary Literature
***Software A&I Services
*Lay Literature
*Software Humor

M-N available to be added

P. Software Political Context
*Software by legal context
**Software Legislation
**Software Regulation
**Software Registration
***Software Copyright
***Software Patenting
***Software Trademarks
*Software Industry by political context
**Software Lobbying
**Software Liability

Q-R available to be added

S. Software (itself)
*Software by application (or function)
**Data Management Tools
***Database Management Systems
****DBMS by Type
*****Hierarchical DBMS
*****Networked DBMS
*****Relational DBMS
***Data Dictionary and Data Models
**Data Processing Software
***System Management Software
***System Acceptance Tools
****Benchmarking
****Data Comparitors
****Reliability Testing
***Configuration Management
***Software Development
****Debugging Software
****Design Software
****Documentation Software
****Prototyping Tools
**Entertainment Software
***Games
***Hobbyist/Leisure Software
***Interactive, Multi-media Software
**Integration Software
***Software conversion tools
***Peripheral Drivers
**Monitoring & Instrumentation Control Software
***Environmental Monitoring Software
****Energy Management Systems
****Security Monitoring Systems
***Machine Control Software
**Office Automation Software
***Integrated Office Systems
***Word Processing Software
***Scheduling & Calendaring Software
***Voice Mail Software
**Graphics Software
***Business Graphics Software
***CAD/CAM Software
***Animation & Simulation Software
***Graphic Image Manipulation

*Software by collectivities or components
**Software Code Collectivities
***Libraries
***Routines
***Modules
***Sub-routines
**Software code functions
***Addressing Schemes
***Interfaces/Calls
**Software Code Types
***Algorithms
***Formulae
***Protocols
*Software by computing role
**Operating systems
***Operating systems by name
****360
****VMS
****Unix
***Operating subsystems by function
****Communications Management
*****Time Sharing Systems
*****LAN Operating Systems
****Memory Management
****DASD Management
****Input/Output System Control
**Compiliers by Language
*Software by context of origin
**Industrial Software
**Military Software
**Office Software
**Personal Software
*Software by Dependency
**OS Dependency (by name)
**Language Dependency (by name)
***Ada
***ALGOL
***Assembler
***Basic
***C
***COBOL
**Hardware dependency, by component
***Mainframe Software

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                ****IBM Processors
                    *****Model 1401
                ****Control Data Processors
            ***Mini-computer Software
            ***Micro-computer Software
                ****Multi-user Microcomputer systems
                ****Single user microcomputer systems
            ***Data Communications Equipment Software
                ****Local DCE Software
                ****Remote DCE Software
            **Standard Dependency, by type
            ***Communication Standard Dependency
                ****TCP/IP Dependent
                ****SNA Dependent
    *Software by Developmental Stage
        **Released Software
        **Pre-release test software
          ***Alpha Test phase
          ***Beta Test phase
        **Vaporware
    *Software by Format
        **Source Code
        **Object Code
        **Microcode
        **Firmware
    *Software by Information Management Strategy
        **Artificial Intelligence Software
          ***Expert Systems
          ***Robotics
          ***Lingistic Analysis Systems
        **Information Retrieval Software
          ***Full-Text Retrieval Software
          ***ISAM Retrieval Software

T. Software Training & Teaching
    *Software Training & Teaching Programs
        **Degree Granting Programs
    *Software Training & Teaching Materials
        **Software tutorials
        **Software courseware

U-Z available to be added
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