A COMPUTERIZED GENERAL LEDGER

ACCOUNTING SYSTEM

By

MEI-HUA ISABEL KAO

B.A. in Business Administration
National Taiwan University
Taipei, Taiwan
1971

Submitted to the faculty of the College
of Science and Technology
Corpus Christi State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
in Computer Science
May, 1981
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II. FILES</td>
<td>5</td>
</tr>
<tr>
<td>III. LIST OF GENERAL LEDGER ACCOUNTING SYSTEM PROGRAMS</td>
<td>12</td>
</tr>
<tr>
<td>APPENDIX A. SETTING UP THE CHART OF ACCOUNTS</td>
<td>i</td>
</tr>
<tr>
<td>APPENDIX B. LAYOUT OF INCOMING CARDS</td>
<td>ix</td>
</tr>
</tbody>
</table>
INTRODUCTION

The General Ledger is a record of the balance of each of the accounts of a business and of the transaction to the accounts. The "Chart of Accounts" is arranged to provide a means of classifying the transactions into meaningful categories for reporting and analysis. It is a fundamental accounting principle that the General Ledger must always be in balance; that is, the total of all accounts with debit balances must equal the total of all accounts with credit balances.

The Computerized General Ledger Accounting System is part of the automated accounting system that can provide rapid accurate classification and manipulation of today's large volume of transactions. It is responsible for entering transactions to the computer, editing transactions, posting them to the General Ledger file and generating financial reports.

In this project, the General Ledger Accounting System is divided into seven sections:

1) Set up a Chart of Accounts and Program #1 uses it as input to create a ACCT-master file. The steps for setting up a Chart of Accounts are provided in Appendix 1.
2) Editing: Program #2 enters and edits Direct Postings from cards, then builds a sequential disk file. An error listing is produced for all errors detected. It also lists the Direct Posting disk file.

3) Files Maintenance: Program #3 reads in the correction cards does files' maintenance for Direct Posting disk file. It also prints out log file and corrected Direct Posting file.

4) Sorting: Program #4 sorts the Direct Posting file by Account Number.

5) Merging: Program #5 merges Direct Posting file, Account Payable Posting file, Account Receivable Posting file, and Payroll Posting file into Merged Posting file. Account Payable Posting file, Account Receivable Posting file, and Payroll Posting file are provided from other data systems and assumed to be sorted by Account Number and to be corrected before they were merged.

6) Updating: Program #6 updates the Acct-Master file with the Merged Posting file and use REPORT WRITER to write a Posting Update Report.


The General Ledger System Structure & Relationship Chart for this project is shown in Figure 1.
Fig. 1. G/L STRUCTURE & RELATIONSHIP CHART

GENERAL LEDGER SYSTEM

DIRECT ENTRY & EDIT
- GET CARD FILE
- GET ACCT MASTER
- ERROR LISTING
- WRITE DIRECT POSTING

FILES' MAINTENANCE
- GET CORRECTION CARDS
- GET ACCT MASTER
- PROCESS DIRECT POSTING

SORT & MERGE
- MERGED FILE
- PROCESS MASTER
- WRITE UPDATE REPORT

POSTING UPDATE
- TRIAL BALANCE

REPORTS
- BALANCE SHEET
- INCOME STATE

DIRECT POSTING
- PROCESS A/P POSTING
- A/P* POSTING

A/R POSTING
- PROCESS PAYROLL POSTING
- PAYROLL* POSTING

ERROR LISTING

* A/P, A/R & Payroll Posting Files are provided from other data systems.
This General Ledger System uses Modular programs written in COBOL. All programs, files and the brief descriptions are provided. Also provided are sample reports.
FILES

The following are descriptions of the files used in General Ledger Accounting System. The files described are listed below in the order in which they appear.

FILE #1 - ACCT-MASTER
FILE #2 - DIRECT-POSTING
FILE #3 - AP-POSTING
FILE #4 - AR-POSTING
FILE #5 - PAYROLL-POSTING
FILE #6 - MERGED-FILE
File #1
File Name: ACCT-MASTER
Concise Description:

Contains a record for regular account and each financial report heading, title and total line.

Organization: Index Sequential by Account Number.

<table>
<thead>
<tr>
<th>DATA NAME</th>
<th>DESCRIPTION</th>
<th>SIZE</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAS-FLAG</td>
<td>ISAM Delete Flag</td>
<td>PIC X</td>
<td>0 = Regular</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Title</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = Heading</td>
</tr>
<tr>
<td>MAS-NO</td>
<td>Account Number</td>
<td>PIC X(5)</td>
<td></td>
</tr>
<tr>
<td>MAS-NAME</td>
<td>Account Name</td>
<td>PIC X(30)</td>
<td></td>
</tr>
<tr>
<td>MAS-TYPE</td>
<td>Account Type</td>
<td>PIC X</td>
<td>1 = Income Stmt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Balance Sheet</td>
</tr>
<tr>
<td>MAS-REP-TYPE</td>
<td>Report Type</td>
<td>PIC X</td>
<td>1 = Debit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Credit</td>
</tr>
<tr>
<td>MAS-NOM-BAL</td>
<td>Normal Balance</td>
<td>PIC X</td>
<td>1-9</td>
</tr>
<tr>
<td>MAS-TOT-LEVEL</td>
<td>Total Level</td>
<td>PIC X</td>
<td>0 = no, 1 = yes</td>
</tr>
<tr>
<td>MAS-SPECIAL-REP</td>
<td>Include on Special Report</td>
<td>PIC X</td>
<td></td>
</tr>
<tr>
<td>MAS-TOT-MON</td>
<td>This Month Total</td>
<td>S9(8)v99</td>
<td></td>
</tr>
<tr>
<td>MAS-TOT-YEAR</td>
<td>This Year Total</td>
<td>S9(8)v99</td>
<td></td>
</tr>
<tr>
<td>MAS-TOT-QAR</td>
<td>This Quarter Total</td>
<td>S9(8)v99</td>
<td></td>
</tr>
<tr>
<td>MAS-1PRE-QAR</td>
<td>First Previous Quarter Total</td>
<td>S9(8)v99</td>
<td></td>
</tr>
<tr>
<td>MAS-2PRE-QAR</td>
<td>2nd Previous Quarter Total</td>
<td>S9(8)v99</td>
<td></td>
</tr>
<tr>
<td>MAS-3PRE-QAR</td>
<td>3rd Previous Quarter Total</td>
<td>S9(8)v99</td>
<td></td>
</tr>
<tr>
<td>MAS-PRE-YEAR</td>
<td>Previous Year Total</td>
<td>S9(8)v99</td>
<td></td>
</tr>
</tbody>
</table>