

DESIGN A OUTPUT PROCESSOR FOR A GRADUATE
STUDENT RECORD SYSTEM

by

JOHN JOSEPH OTT

BGS, University of Nebraska at Omaha, 1976

A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree


MASTER OF SCIENCE

Department of Computer Science

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1982

Approved by:


Major Professor

SPEC
COLL
LO
2668
R4
1982
087
c.2

CONTENTS

	Page
LIST OF FIGURES	iii
ACKNOWLEDGEMENTS	v
CHAPTER	
I. INTRODUCTION	1
1.1 Background	1
1.2 Objective	1
1.3 Methods	2
1.4 Analysis Results	2
1.5 Report Outline	3
II. SYSTEM INPUTS	4
2.1 Collection Process and Interviews	4
2.2 Analysis of Source, Identification of Data Items, and Redundancy	7
2.3 Relationships of Documents	15
2.4 Renaming of Data Items	20
III. OUTPUT PROCESSOR	26
3.1 Design Criteria	26
3.2 Introduction to WARNIER/ORR Diagrams	27
3.3 WARNIER/ORR Diagrams	28
3.4 Implementation of INGRES	37
3.5 Availability of Output Results	37
IV. DESIGNED REPORTING SYSTEM	38
4.1 Overview	38
4.2 Functions of the Output Processor	38
4.3 Response to Inquiry (foreign students)	42
4.4 Items Missing Letter	43
4.5 C.S. Department Letter of Acceptance	47
4.6 C.S. Department Letter of Acceptance (with no support offered now)	53
4.7 C.S. Department Letter of Rejection After Committee Review	56
4.8 C.S. Department Initial Letter of Rejection (foreign student)	60
4.9 In-state Ph.D. Teaching Assistantship (with acceptance enclosure)	64
4.10 Out-of-state Ph.D. Teaching Assistantship (with acceptance enclosure)	68
4.11 In-state M.S. Teaching Assistantship (with acceptance enclosure)	72
4.12 Out-of-state M.S. Teaching Assistantship (with acceptance enclosure)	76
4.13 Graduate Student Roster	80

4.14	Student Graduation Forecast	81
4.15	Students Without a Major Professor	82
4.16	Students Not Making "Normal Progress"	83
4.17	Student Summary Sheet for a Given Student	84
V.	CONCLUSIONS	87
5.1	Summary	87
5.2	Future Work	87

APPENDIX

A.	INPUT DOCUMENTS	A-1
B.	DATA ANALYSIS SHEET	B-1
C.	OUTPUT DOCUMENTS	C-1

ILLEGIBLE DOCUMENT

**THE FOLLOWING
DOCUMENT(S) IS OF
POOR LEGIBILITY IN
THE ORIGINAL**

**THIS IS THE BEST
COPY AVAILABLE**

LIST OF FIGURES

FIGURE		Page
2.1	Application Process	5
2.2	Input Data Sources with Key	8
2.3	Data Items on the Graduate School Application	9
2.4	Data Items on the Computer Science Department Application	10
2.5	Data Items Pertaining to Letters of Recommendation	10
2.6	Data Items on the M.S. Graduate Student Information Sheet	11
2.7	Data Items on the Program of Study	12
2.8	Data Items on the Official GRE Report of Scores	12
2.9	Data Items on the Graduate School Acceptance Letter	13
2.10	Data Items on the Semester Grade Report	13
2.11	Data Items on the Graduate School's Financial Statement	14
2.12	Data Items on the Medical Statement	14
2.13	Data Items on the Official TOEFL Report of Scores	14
2.14	Multiple Source Items	15
2.15	Output Documents	16
2.16	Documents in an Admission Package	17
2.17	Data Item Correlation	21
3.1	WARNIER/ORR Diagram for the Graduate School Application ...	29
3.2	WARNIER/ORR Diagram for the Computer Science Department Application	30
3.3	WARNIER/ORR Diagram for the Letter of Recommendation	31
3.4	WARNIER/ORR Diagram for the M.S. Graduate Student Information Form	32
3.5	WARNIER/ORR Diagram for the Program of Study	33
3.6	WARNIER/ORR Diagram for the Graduate Record Exam	34
3.7	WARNIER/ORR Diagram for the Graduate School Acceptance/ Probationary Letter	34
3.8	WARNIER/ORR Diagram for the University Semester Grade Report	35
3.9	WARNIER/ORR Diagram for the Graduate School's Financial Statement	35
3.10	WARNIER/ORR Diagram for the University's International Medical Certificate	36
3.11	WARNIER/ORR Diagram for the TOEFL Scores	36
4.1	Graduate Student Record System	39
4.2	Functions of the Output Processor	40
4.3	Transaction Processor Output Menus	42
4.4	Screen 1 for Response to Inquiry	44
4.5	Screen 2 for Response to Inquiry	45
4.6	Screen 3 for Response to Inquiry	46
4.7	Input Specifications for the Response to Inquiry Letter (foreign student)	43
4.8	Screen 1 Items Missing Letter	48
4.9	Screen 2 Items Missing Letter	49
4.10	Screen 3 Items Missing Letter	50