DEVELOPMENT OF SOFTWARE FOR HOME BANKING AND FINANCE

by

S.M.Feizal Jownally

Project report

Submitted to

the Department of General Studies

of the Higher Technical Institute

Nicosia Cyprus

in partial fulfillment of the requirements

for the diploma in

GENERAL STUDIES

Project Supervisor : Mr Panikos Masouras (HTI Lecturer) BSc

External Assessor : Mr Yiannos Aletraris (Popular Bank) BSc(Hons) MSc MBCS MIEEE

June 1990

PROJECT NO
1200
1130

HIGHER TECHNICAL INSTITUTE

Diploma Project In Computer Studies

1989 - 1990

HOME BANKING AND FINANCE SYSTEM

By

S.M.Feizal Jownally

SUMMARY

The idea of this project was derived from the need for a computerized system that would record all the financial transactions of a home and produce reports that would be of value to the user while budgeting or filling an income tax form. The basic objectives of the project was to produce a system that would satisfy the expressed need and also be simple enough to be operated by people who are unfamiliar with computers.

The first phase of the project was the INVESTIGATION phase, during which the various financial aspects of a typical Cypriot family was studied and the feasibility of the project decided upon.

The second phase was the ANALYSIS AND GENERAL DESIGN phase. During that period the project specifications were extracted in line with the specified needs of the user and a preliminary outline of the computerized system was designed.

The third phase was the DETAILED DESIGN AND IMPLEMENTATION phase, during which the new system was designed in its detailed aspects, implemented and fully tested to meet user performance criteria.

The final phase was the INSTALLATION phase, where the actual software system was installed on existing equipment and all files were appropriately initialized.

TABLE OF CC

CONTENTS

INVESTIGATION PHASE

ŝ

1.	INITIAL INVESTIGATION			
	1.1	Objectives	1	
	1.2	Major Desired Outputs	2	
	1.3	Key Inputs To The System	3	
	1.4 Existing Systems And Procedures			
		1.4.1 Incomes	4	
		1.4.2 General Expenses	4	
		1.4.3 Loans	5	
		1.4.4 Insurances	5	
		1.4.5 Income Tax	6	
		1.4.6 Bank Accounts	7	
	1.5	Operational Problems	8	
	1.6	Preliminary Estimate Of Costs And		
		Projected Benefits	9	
	1.7	Development Time And Cost Estimates	10	
2.	FEAS	SIBILITY STUDY	11	
	2.1	Existing System	11	
	2.2	Anticipated Changes And Expected Benefits	11	
	2.3	Financial Feasibility	12	
	2.4	Schedule Feasibility	13	
	2.5	Operational Feasibility	16	
	2.6	Technical Feasibility	16	

	ANA	LYSIS	S AND GENERAL DESIGN PHASE	
	3.	EXIS	STING SYSTEM REVIEW	10
		3.1	Organization	10
		3.2	Policies And Procedures	10
		3.3	Current System Outputs	19
		3.4	Current System Inputs	21
		3.5	Current Processing	21
		3.6	Data Files	22
				22
	4.	NEW	SYSTEM REQUIREMENTS	24
		4.1	Overview Narrative	24
		4.2	System Function	24
		4.3	Processing	25
		4.4	Outputs For Users	31
		4.5	Inputs To The System	31
		4.6	User Interface With The System	32
-		4.7	User-Specified Physical Requirements	32
	5.	NEW	SYSTEM DESIGN	34
		5.1	Processing	34
		5.2	Data Files	34
		5.3	Security And Control	34
			5.3.1 Access Control	34
			5.3.2 Source Document Control	35
			5.3.3 Data Entry Control	35
			5.3.4 File COntrol	35
	6.	IMPL	LEMENTATION AND INSTALLATION PLANNING	36
		6.1	Preliminary Detailed Design And	
			Implementation Plan	36
		6.2	Preliminary System Test Plan	37
		6.3	User Training Outline	37
		6.4	Preliminary Installation Plan	38

•825

DETAILED DESIGN AND IMPLEMENTATION PHASE

7.	TECHNICAL DESIGN		
	7.1	Program Inventory	39
	7.2	Program Specifications	40
	7.3	Specifications For Backup And	
		Recovery Procedures	67
	7.4	Specifications For On-Line Help Facility	67
	7.5	Policy Considerations	67
8.	TEST	SPECIFICATIONS AND PLANNING	69
	8.1	Program Test Specifications	69
	8.2	System And Subsystem Test Specifications	73
9.	PROGI	RAMMING AND TESTING	75
10.	USER	TRAINING	76
11.	SYSTI	EM TEST	77
3.0.0.1			
APPE	SNDLX	A CURRENT SYSTEM MODELS	
ירוא			
APPI	NDIX	B INPUT DOCUMENTS	
זרות		C NEW CUCEEN NODE C	
APPE	NDTX	C NEW SYSTEM MODELS	
שרת ג	VTOTV		
AFFE	NDIX	D COTPOTS	
λοστ	NDTV	E INDUMO	
AFFE	TADTY	L INPUTS	

APPENDIX F DATA DICTIONARY