

# **DEVELOPMENT OF A SOFTWARE PACKAGE FOR THE CREATION OF A PRENATAL REGISTER FILE.**

Project report submitted by:

**ANTONIOU PANAYIOTIS.**

In part satisfaction of the award of  
Diploma in Computer Studies of the  
Higher Technical Institute, CYPRUS

Project Number : CS/052

Project Supervisor : Miss Liza Angelidou  
Lecturer in the Computer Studies  
Department, HTI.  
BSc, MSc in Computer Science.

External Assessor : Mr. K. Pattichis.  
BSc Electrical Engineering  
MSc Biochemical Engineering  
MSc Neurophysiology

**CHAPTER 1**  
**INITIAL INVESTIGATION PHASE**

**1.1. INTRODUCTION**

This part covers the first phase of the Systems Development Cycle. The main objective in working through this, is to gain an understanding of the system functioning and for the request for the development of the system at a level sufficient to make an evaluation and a preliminary recommendation on a course of action to be followed, identify and evaluate different possible solutions to the stated problem. The initial investigation phase is composed of two major activities which are :

- . Initial Investigation.
- . Feasibility Study.

The end product of the first phase of the System Life Cycle is a Feasibility Report. This report contains a recommendation on whether the system can potentially be developed and implemented profitably, included is a review of benefits and costs.

**1.1. ACTIVITY 1**  
**INITIAL INVESTIGATION.**

**1.1.1. INTRODUCTION**

The first activity of the system life cycle, which will provide the building stone for the activities that follows.

## Table of Contents

### CHAPTER 1

INITIAL INVESTIGATION PHASE.....	1
1.1. INTRODUCTION.....	1
1.2. ACTIVITY 1	
INITIAL INVESTIGATION.....	1
1.1.1. INTRODUCTION.....	1
1.1.2. INVESTIGATION REPORT FOR THE PRENATAL REGISTER SYSTEM..	2
1.1.2.1. INTRODUCTION.....	2
1.1.2.2. DESCRIPTION OF THE EXISTING SYSTEM.....	2
1.1.2.3. DISADVANTAGES OF THE EXISTING SYSTEM.....	2
1.1.2.4. SOLUTION.....	2
1.1.2.5. CONCLUSION.....	2
1.1.2.6. RECOMMENDATION.....	8
1.1.2.7. PRELIMINARY HARDWARE COST.....	8
1.3. ACTIVITY 2	
FEASIBILITY STUDY.....	9
1.3.1. FEASIBILITY REPORT FOR THE PRENATAL REGISTER SYSTEM... ..	9
1.3.1.1. INTRODUCTION.....	9
1.3.1.2. EXISTING SYSTEM BRIEF DESCRIPTION.....	10
1.3.1.3. TECHNICAL FEASIBILITY.....	10
1.3.1.4. HUMANS FACTORS FEASIBILITY.....	11
1.3.1.5. SCHEDULE FEASIBILITY.....	11
1.3.1.6. OPERATIONAL FEASIBILITY.....	12
1.3.1.7. FINANCIAL FEASIBILITY.....	12
1.3.1.8. BENEFITS OF THE NEW SYSTEM.....	17
1.3.1.9. COSTS OF THE NEW SYSTEM.....	18
1.3.1.10. CONCLUSION.....	19

### CHAPTER 2

ANALYSIS & GENERAL DESIGN PHASE.....	20
2.1. DESCRIPTION OF THE PHASE.....	20
2.2. ACTIVITY 3	
EXISTING SYSTEM REVIEW.....	21
2.2.1. ACTIVITY DESCRIPTION.....	21
2.2.2. REVIEW OF THE EXISTING PRENATAL REGISTER SYSTEM.....	21
2.2.2.1. ORGANIZATION.....	21
2.2.2.2. PROCEDURES WITHIN THE HOSPITAL.....	21
2.2.2.3. DATA FILES.....	22
2.2.2.4. CURRENT SYSTEM INPUTS.....	22
2.2.2.5. CURRENT SYSTEM OUTPUTS.....	22

## Table of Contents

CHAPTER 1	
INITIAL INVESTIGATION PHASE.....	1
1.1. INTRODUCTION.....	1
1.2. ACTIVITY 1	
1. INITIAL INVESTIGATION.....	1
1.1.1. INTRODUCTION.....	1
1.1.2. INVESTIGATION REPORT FOR THE PRENATAL REGISTER SYSTEM..	2
1.1.2.1. INTRODUCTION.....	2
1.1.2.2. DESCRIPTION OF THE EXISTING SYSTEM.....	2
1.1.2.3. DISADVANTAGES OF THE EXISTING SYSTEM.....	7
1.1.2.4. SOLUTION.....	7
1.1.2.5. CONCLUSION.....	7
1.1.2.6. RECOMMENDATION.....	8
1.1.2.7. PRELIMINARY HARDWARE COST.....	8
1.3. ACTIVITY 2	
FEASIBILITY STUDY.....	9
1.3.1. FEASIBILITY REPORT FOR THE PRENATAL REGISTER SYSTEM... .	9
1.3.1.1. INTRODUCTION.....	9
1.3.1.2. EXISTING SYSTEM BRIEF DESCRIPTION.....	10
1.3.1.3. TECHNICAL FEASIBILITY.....	10
1.3.1.4. HUMANS FACTORS FEASIBILITY.....	11
1.3.1.5. SCHEDULE FEASIBILITY.....	11
1.3.1.6. OPERATIONAL FEASIBILITY.....	12
1.3.1.7. FINANCIAL FEASIBILITY.....	12
1.3.1.8. BENEFITS OF THE NEW SYSTEM.....	17
1.3.1.9. COSTS OF THE NEW SYSTEM.....	18
1.3.1.10. CONCLUSION.....	19
CHAPTER 2	
ANALYSIS & GENERAL DESIGN PHASE.....	20
2.1. DESCRIPTION OF THE PHASE.....	20
2.2. ACTIVITY 3	
EXISTING SYSTEM REVIEW.....	21
2.2.1. ACTIVITY DESCRIPTION.....	21
2.2.2. REVIEW OF THE EXISTING PRENATAL REGISTER SYSTEM.....	21
2.2.2.1. ORGANIZATION.....	21
2.2.2.2. PROCEDURES WITHIN THE HOSPITAL.....	21
2.2.2.3. DATA FILES.....	22
2.2.2.4. CURRENT SYSTEM INPUTS.....	22
2.2.2.5. CURRENT SYSTEM OUTPUTS.....	22