Computing Coursework

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Chapter 1

Analysis

1.1 Introduction

1.1.1 Client Identification

my client is Susannah Mason, she is 50 years old and has very little usage of computers, except when having to order new stock for the pharmacy. currently the pharmacy uses computerised methods to submit orders to the warehouse.

Suesannah is a pharmacutical manager at spire healthcare in impington

by creating this program it would speed up the process making leeping track of and ordering of new equipment and stock alot easier for her

1.1.2 Define the current system

the current system uses mostly computer based order submission and price checks but the orders have to be put through the computer manually

1.1.3 Describe the problems

the orders for the stock take too long to submit and all stock has to be conted by hand

1.1.4 Section appendix

1.2 Investigation

1.2.1 The current system

the current system at the pharmacy is a data base that holds the information of over 36000 items(change when get home) the data base holds the price the mass the desription and how much is in the pharmacy at that point in time

Data sources and destinations

Algorithms

i will be using quite a few algorithums for this assignment

IF item = lowest minimum amount THEN order more item

ELSE check next item

END IF

this other algorithm will be used to calculate the exact price of all of the order

if order submitted = True THEN calculate order

ELSE restart program

END IF

using the information in the list Items the exact price is calulated

IF item in Items add price item

ELSE add price 0

END IF

Data flow diagram

Input Forms, Output Forms, Report Formats

1.2.2 The proposed system

the proposed system will be used to order, check stock and be informed as soon as anything leaves the pharmacy the data base will be updated of the removal, as well as if the product falls below a certain point it will be program to replace

the stock by ordering new stock form the wearhouse automatically but the order will go through a master contol point before being sent off

Data sources and destinations

Data flow diagram

Data dictionary

Volumetrics

1.3 Objectives

1.3.1 General Objectives

- to make a stable system that checks, updates, restocks and sends payment for the ordered items
- to give the system to auto restock items when they fall below a certain number of items
- to graph which items are being bought or used faster and updates the resocking system acordingly

1.3.2 Specific Objectives

- to design a program that will make sorting through the items at the pharmacy as well as store the price and item location in the pharmacy as well as the amount.
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1.3.3 Core Objectives

1.3.4 Other Objectives

1.4 ER Diagrams and Descriptions

1.4.1 ER Diagram

1.4.2 Entity Descriptions

- Client(clientID, PharmacyNum,)
- Pharmacist(PharamacistID,*PharmacyNum*, surname, firstname, PhoneNumber, address,email)
- Pharmacy(PharmacyNum)
- Warehouse(WareHouseNum,)
- Order(OrderNum, *WareHouseNum*, OrderDate,)

1.5 Object Analysis

1.5.1 Object Listing

- Client
- Pharmacist
- Pharmacy
- Warehouse
- Order

1.5.2 Relationship diagrams

1.5.3 Class definitions

1.6 Other Abstractions and Graphs

1.7 Constraints

1.7.1 Hardware

1.7.2 Software

1.7.3 Time

1.7.4 User Knowledge

1.7.5 Access restrictions

1.8 Limitations

1.8.1 Areas which will not be included in computerisation

1.8.2 Areas considered for future computerisation

1.9 Solutions

1.9.1 Alternative solutions

1.9.2 Justification of chosen solution

Chapter 2

Design

2.1 Overall System Design

2.1.1 Short description of the main parts of the system

2.1.2 System flowcharts showing an overview of the complete system

2.2 User Interface Designs

2.3 Program Structure

2.3.1 Top-down design structure charts

2.3.2 Algorithms in pseudo-code for each data transformation process

2.3.3 Object Diagrams

2.3.4 Class Definitions

2.4 Prototyping

2.5 Definition of Data Requirements

2.5.1 Identification of all data input items

2.5.2 Identification of all data output items

2.5.3 Explanation of how data output items are generated

2.5.4 Data Dictionary

2.5.5 Identification of appropriate storage media

2.9.1 Outline Plan

Test Series	Purpose of Test Series	Testing Strategy	Strategy Rationale
Example	Example	Example	Example

2.9.2 Detailed Plan

Test Series	Purpose of Test	Test Description	Test Data	Test Data Type (Normal/ Erroneous/ Boundary)	Expected Result	Actual Result	Evidence
Example	Example	Example	Example	Example	Example	Example	Example

Chapter 3

Testing

3.1 Test Plan

3.1.1 Original Outline Plan

Test Series	Purpose of Test Series	Testing Strategy	Strategy Rationale
Example	Example	Example	Example

3.1.2 Changes to Outline Plan

Test Series	Purpose of Test Series	Testing Strategy	Strategy Rationale
Example	Example	Example	Example

3.1.3 Original Detailed Plan

Test Series	Purpose of Test	Test Description	Test Data	Test Data Type (Normal/ Erroneous/ Boundary)	Expected Result	Actual Result	Evidence
Example	Example	Example	Example	Example	Example	Example	Example

3.1.4 Changes to Detailed Plan

Test Series	**Purpose of Test**	**Test Description**	**Test Data**	**Test Data Type (Normal/ Erroneous/ Boundary)**	**Expected Result**	**Actual Result**	**Evidence**
Example	Example	Example	Example	Example	Example	Example	Example

3.2 Test Data

3.2.1 Original Test Data

3.2.2 Changes to Test Data

3.3 Annotated Samples

3.3.1 Actual Results

3.3.2 Evidence

3.4 Evaluation

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3.4.4 Weaknesses of Testing

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3.4.6 Robustness of Application

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Installing PyQt

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6.2.1 Objective Evaluation

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