**CHAPTER FOUR**

**SYSTEM IMPLEMENTATION AND DISCUSSION**

**4.1 INTRODUCTION**

This chapter tries to show how the programs and systems are being implemented, why the source program was selected and also why the system is being developed and implemented.

**4.2 SOFTWARE DEVELOPMENT TOOLS AND JUSTIFICATION**

The new system will be developed in one of the high-level programming languages which is Python programming language but we will be making use of one of its numerous framework which is Django framework, while the frontend technology we will use are HTML, CSS and JavaScript. These languages are chosen because of their flexibility and ability to generate a well-defined user graphical interface; SQLite will be employed for the database query.

**4.3 SYSTEM REQUIREMENTS**

This website may not run effectively if the minimum system specification is not met therefore, there is need to install a proper system hardware and software required for the website to meet up the objective as stated.

**4.3.1 Software Requirements**

Front End : Html5

Css3

Modern JavaScript

Bootstrap (Css framework)

Backend : Python

Framework : Django version 4

Operation System : Windows 8 and above

**4.3.2 Hardware Requirements**

These are computer hardware for building the software.

Processor : Intel Core Duo 2.0 GHz or more

RAM : 4 GB or More

Harddisk : 580GB or more

Monitor : 15” CRT, or LCD monitor

Keyboard : Normal or Multimedia

Mouse : Compatible mouse

**4.3.3 People Requirements**

The people required to use this software are those who have a basic understanding of computer. The people involved are the students, staff and system designer.

**4.4 SYSTEM TESTING**

This stage involves the testing of data processing procedures, production of test copies of the reports generated and other outputs, which are meant to be viewed again by users of the newly proposed system for possible errors. It involves the testing and debugging of all computer programs by the researcher. Methods such as walk through should be used to test the system incorporated with the program but following a system level like

1. Login testing
2. Program testing
3. System testing
4. Acceptance testing

**Login Testing** is used especially where the system requires an access authentication like login modules to be tested

**Program Testing** is used in the effect of each program module to test so as to determine whether they are working as desired.

**System Testing** involves testing the complete system hardware and software supplemental manuals.

**Acceptance Testing** is the final stage process before the system is said to be accepted for operational use. It involves testing the system with data from the organization instead of the stimulated data developed especially for the purpose of testing. It ensures the functionality of the program as anticipated.

**4.5 IMPLEMENTATION DETAILS**

**4.5.1 Coding**

The coding was done using html and javascript. This is because html and javacript is one of the programming languages that can be used in writing application that can be run on windows operating system platform.

The codes will be Appendix II ­­­­– Source Codes

**4.5.2 End User Training and Manual**

There is need to properly train the staff and students on the system operation procedures. This would go a long way to help realize the very essence of developing the new system thereby stepping up performance. Errors would also be minimized. Staff, administrators, and supervisors could be trained via use of any of the following tools.

1. On-the – job training.
2. Seminars/courses.
3. Booklets.

A properly trained staff would be able to help management achieve the objectives of adopting a new system because he or she would be able to put the system to its appropriate use.

**User Manual**

To access the system, follow this step:

1. Copy the folder to the site folder
2. Open a web browser
3. Type the address of the system in the address bar of the web browser.
4. Press enter or click go button.
5. Wait to load
6. Access program
7. End program

**4.5.3 File Conversion**

This involves the convention of manual data to electronic data, which are stored in the disk. And the data can be used as desired by the user(s).

**4.5.4 Changeover Procedure**

To ensure the workability of the system after the implementation, an appropriate mode of change over to the new system has to be adopted. The mode of change over adopted here is parallel change over, that is the concurrent running of the old and new system for some time in order to compare the outputs of both systems and then carry out amendment where necessary.

**4.5.5 Commissioning**

This involves the process of full implementation of this project. In other words, it is called deployment of the developer/software for usage

**4.5.6 Maintenance Details**

On the system maintenance aspect, all the network system components should be maintained and managed as the operation contains. Maintenance of the system is to enable the continuous performance of the system as expected and it includes:

1. Hardware maintenance: This involves all the activities carried out on the computer and network hardware in order to anticipate the outset of incipient or to correct the hardware. This is door by hardware technologies, engineers or information technology professors.
2. Software maintenance: These include all the activities carried out in updating and modifying the programs in order to suit the future challenges in software development.
3. Adaptive maintenance: This involves changes and modification in the programs to suit the operating environment.
4. Corrective maintenance: These involves the process of detecting bugs in the programs and other faults and the subsequent removal functioning and operation.

**4.6 RESULTS**

1. Accurate Financial Flow: the proposed system has been able to store all transaction and also provide an accurate financial report for the management during decision making.
2. Computerized System: The proposed system has implemented the computerized system which can perform a better managing process of financial information for the laundry. The data of the laundry service and the customer has been kept in a save manner without the problem of losing the data.
3. System and User Privileges: System and user privileges has been implemented in the proposed system to setting up the user level for each system user. This function is to provide the limitation of system accessing.
4. Increase time performance: The system has ensured that the service performs in Laundry are in better condition and on time and it making the business processes to be more effective and faster

**4.7 DISCUSSION**

After the customer details are entered into the system by the sale representatives or account. The information is saved along with the types of cloths brought for washings. Every details are recorded including the supply of items and at the end of the week or month the totals expenses and income are generated and calculate. The unique feature of this software is that details once entered or saved cannot be manipulated or deleted for selfish reasons. It also provides a feature of editing, thereby increasing the efficiency and Reliability of the organization.