MT KENYA UNIVERSITY

ONLINE TAILORING MANAGEMENT SYSTEM

DEPARTMENT OF INFORMATION TECHNOLOGY

By:

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A project submitted to the department of Information Technology in the school of pure and applied sciences in partial fulfillment of the requirements for the award of the degree of bachelor of Business Information Technology.

OCT 2013

DECLARATION

I David Mutembei hereby declare that this Project Report pertaining Online Tailoring Management System is my original work and has never been presented for a degree in any other university. Therefore, no alteration/duplication of this work whatsoever without my permission.

Name: **KIREMA DAVID MUTEMBEI**

Signature: ……. Date: …….

Approval:

This project has been submitted for examination with my approval as the supervisor.

Supervisor's name: **PETER MATHEKA**

Signature: …… Date: ……Oct /2013.

DEDICATION

I dedicate this proposal to my family for giving me the chance to be in university by pay my school fees and believing in me.

To my friends for giving me the support I needed during the proposal writing and also for helping me and anyone who is willing to adapt new changes and embrace technology.

May God bless you all.

ABSTRACT

The project is aimed to automate the tailoring sector which is manually maintained. After the automation this will mean better services and good keeping of records, data integrity, data security, quick search and also paperless environment. The project has mainly tackled management of information for the customers and in decision making.

Every user of the system will have to log into the system using username and password so that security and authentication will be ensured. Once logged in, a customer can make and order, check dress status or even give feedback. The system administrator is able to manage customer information and also update records.

This will help in realizing the vision 2030 where the government wants its people to be digitally informed and also automate all the government sectors and ministries, hence embracing Electronic Governing.

ACKNOWLEDGEMENT

I acknowledge the support of my family and my friends who have stood by me throughout my studies and particularly for their unending support.

I pay gratitude to my supervisor Mr. Peter Matheka for guidance, support, patience and understanding throughout the research period.

My sincere gratitude also goes to the entire Mt Kenya University fraternity for giving me an opportunity to pursue my career there. Also to the lecturers, management and staff of Mount Kenya University (Nairobi Campus) for their inputs especially in units that were essential in my proposal writing and development of this project for their support, patient and believing in me.

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CHAPTER ONE:INTRODUCTION

Online tailoring management system is a system aimed to assist in management of tailoring activities within the industry. It will provide online services to customers such as: measurement submission to their tailors, check whether their garments are finished and also help in proper keeping of records.This will ensure availability of right information, information safety, easy storage, access and retrieval.

The study aims at building a computerized tailoring management system that would be more effective and efficient than the existing manual system

1.1 Background information

Tailoring has been known to be dominated by unlearned people. It has been seen as a profession for the drop outs in the Kenyan systems and elsewhere. Tailors use traditional manual systems to book in their clients. The clients have to travel to location of the tailor shop to get their measurement taken. These measurements are written on papers or books.

This method pose a high threat in terms of security of their information i.e., can get lost, unauthorized people can easily access the information, data confidentiality and integrity not maintained. No proper backups and the system is tedious.

Online tailoring management system will solve all these problems and automate the tailor shops and enhance accessibility irrespective of geographical locations provided there is internet.

1.2 Problem Statement

Currently customers have to walk to the tailor shops to get their measurements taken for the tailoring of their garments. Their details are taken and kept on papers. Customers too need to move from their offices to go and check for the clothes whether there complete or not. This is time consuming and costly. Due to the manual systems in use, the whole process tends to be slow. Customers too have no prior information on cost of netting their garments.

1.3 Proposed Solution

The proposed online tailoring management system will eliminate all these manual interventions and increase the speed of the whole process. The system will allow customers to register online and successfully submit their measurements.

The system has inbuilt validation system to validate the entered data. The customer can login to the system to check on the status of the clothes for collection. The system will show the already completed garments for clients to collect. The system also provides information about the cost of each garment the customer intends to get knit. This data will be stored in the database for further reference or audit.

1.4 Proposed Project Title

Title of the project is clearly stated, i.e. Online Tailoring Management System

1.5 Project Objectives

- Automate the current manual tailoring system and maintain a searchable customer, product database, maintain data security and user rights.
- To enable customers to send their measurements to their tailors for their clothes to be made.
- To provide information about the cost, the fabric type, the urgency at which a customer wants the dress finished, the type of material to be used and quantity in terms of pairs needed.
- To compute the total cost depending on the selected fabric, type of material, quantity and duration and avails that information to the customer.
- To enable report generation: it is able to give a report of finished garments to the clients for collection and bookings made, administrator is able to view all the customers and their details, finished garments and all the bookings made.
- To create a data bank for easy access or retrieval of customer details, orders placed and the users who registered to the system.

1.6 Justification

Online Tailoring management system will break the geographical barriers and bring the whole process into a quick and easy way to access tailors. It will automate the traditional tailoring system into a modern computerized system. This will enhance data retrieval, storage and security. It is also cost effective since it will cut down on travelling cost to get your measurements taken and also going to check if your clothe has been made and is ready for collection.

The clients can access their online tailors 24/7 and at any location provided they are connected to the internet.

Due to the advancement in telecommunication e.g. undersea cabling, internet accessing speed is expected to double as the cost reduces. This will make this system more efficient to use and offer a competitive edge in the market.

1.6 Scope

The Online Tailoring Management System will permit to register and deliver measurements to the tailor for the next process to follow.

It also maintains clients' information and generating various reports about the tailor shop. The main users of the project are clients and system Administrator.

It also enables customers to check the status of their garments i.e. if ready or not for collection.

The system provides information about the cost, the fabric type the customer want his/her dress knit from, the duration a customer wants the dress finished, the type of material to be used, quantity in terms of pairs needed and most importantly, the system computes the total cost and avails that information to the customer.

However, online payment has not been achieved,but the customer is expected to pay either via mobile money transfer services like m-pesa, pesapal or cash when they come to pick their clothes.

1.7 Risks and mitigations

1.7.1 Risks

Some of the risks and threat that can affect this project are:-

- Hosting – some host may be unreliable
- Security risk – hackers and virus attack
- Time – not able to complete the project in time
- Cost of resources – not having adequate budget

1.7.2 Mitigations

- Look for reliable people/company to host your program.
- Use of security measures e.g. firewalls to protect from unauthorized people.
- I will ensure that project schedule is followed for the project to finish in time.
- Ensure that the required resources are available and within my budget.

1.8 Monitoring and evaluation

It was done by weekly meeting with my supervisor. I was able to report the progress and challenges encountered. I also worked and highly appreciated on changes recommended to improve the quality of this project to this level of standard.

CHAPTER TWO: LITERATURE REVIEW

Literature review is a text written by someone to consider the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Main goals are to situate the current study within the body of literature and to provide context for the particular reader. (Cooper, 1998)

A tailor is one that makes, repairs, and alters garments such as suits, coats, and dresses. (answers.com, 2012)

A tailor makes custom cloths wear of various styles like jackets, skirts or trousers that go with them, for men or women. An alterations specialist adjusts the fit of completed garments, usually ready-to-wear, or restyles them. Designers choose combinations of line, proportion, color, and texture for intended garments. They may have no sewing or patternmaking skills, and may only sketch or conceptualize garments. (Lancaster, 2013)

2.1 Origins of the Term Bespoketailoring

According to Poole (1846), the term bespoke arose when in the old days; a customer would choose a bolt of cloth in a tailor's shop, whereupon the tailor would mark it as being "bespoken for". It has come to mean a traditional form of tailoring in which a uniquely individualised pattern is drafted for each client, and the optimal traditional tailoring technique is used to realise the shape of the final garment. The two principle reasons for bespoke tailored clothing are as follows:

1. Difficulty attaining a good fit from ready-to-wear garments
2. Access to a wider range of styles and cloth designs

(Poole, 1846)

According to English Hardy (2003), a good tailor should be able to overcome all of the potential shortcomings, and not only create a masterpiece that fits, but should also guide his client towards a style that is better suited to his/her body. He says that a skilled tailor can make simple clothing from common cloth, but with time and practice they can learn to create garments of great beauty that provide significant protection to their wearer. (Hardy, 2013)

2.2 Developments in Tailoring Industry

In Uganda, there has been development of tailoring school where a total number of 50 students are currently enrolled. They also currently employ four staff members who are specialized in different areas of dressmaking and designing. During the last two years, 58 students have successfully graduated from this institution, some of which have chosen to team up in order to start up their own businesses. The school strongly encourage students to form teams, since it is easier for a group than for a single individual to handle the challenges of establishing an own business. (Margaret, 2011)

According to Richard (2012), he brought a rebellious streak to the heritage of suit making; he has become a pillar of the modern menswear establishment. His bold colour and innovative twists have proved irresistible to the rock n' roll elite.

Modernization of the style and approach of the traditional tailors to current designs has brought increased profits, time wastage and also reduced the number of tailors who depended on traditional technologies within the Savile Row in London (Ozwald et.al, 2013).

According to Shaw (2001), he says that the only man who behaves sensibly is his tailor shop is the one who takes his measurements anew every time he sees me, while all the rest go on with their old measurements and expect me to fit them.(Shaw, 2001).

2.3 Becoming a Twenty-First Century Tailor Shop

The growth of online retail and advances in web technologies has enabled smaller bespoke manufacturers to re brighten cottage industry practices to reach global audiences. Bespoke industries are experiencing a strong resurgence with the advent of collective digital market places such StanfordRow.com. The ruling cited the Oxford English Dictionary definition of bespoke as "made to order", and considered that despite the fact a bespoke suit was "fully hand-made and the pattern cut from scratch, with an intermediary baste stage which involved a first fitting so that adjustments could be made to a half-made suit", while a suit made-to-measure "would be cut, usually by machine, from an existing pattern, and adjusted according to the customer's measurements", "both fully bespoke and made-to-measure suits were "made to order"

in that they were made to the customer's precise measurements and specifications, unlike off-the-peg suits". (Michael at.al 2011)

2.4 Moving online

According to Custom Tailors and Designers Association-CTDA (2012) At Gaebler, we're seeing a trend in tailor shop startups toward a greater integration of technology with traditional tailoring business activities. While many older shops are hesitant to embrace technology-rich business models, younger entrepreneurs are capturing market share by leveraging technology on multiple fronts:

2.4.1 **Distance Tailoring**. Distance tailoring allows startups to expand their reach beyond the geographic limitations of the local marketplace. Customers perform their own measurements (with guidance) and place orders online. Although many tailors use this approach to take advantage of cheap labor overseas, it's possible to leverage a distance tailoring framework. (gaebler.com, 2012)

2.4.2 **Integrated Backend Solutions**. Tailor shops are like any other SMB (small and medium business) in the sense that there are multiple behind-the-scenes business tasks that must be routinely performed. With today's technology, accounting, billing, inventory, shipping and other software solutions can be integrated to create a highly functional and seamless backend system.(gaebler.com, 2012)

2.4.3 **Social Media Marketing.** Social media resources like Facebook and Twitter allow tailor shop startups to convert satisfied customers to brand advocates. By actively engaging your customers on these and other sites, you can encourage positive conversations around your products and your brand (gaebler.com, 2012).

As the technology of garment production is advancing, many small-scale suit tailors are gradually developing their capacity to garment manufacturing level while others are still struggling to be considered in the industry. (Leykun et.al, 2012)

CHAPTER THREE:METHODOLOGY

3.0 INTRODUCTION:

The term methodology means the techniques and procedures adopted by conducting a research study. It outlines how the data will be collected, and the tools for collecting data, system methodology, the proposed system input and output, users and system development tools.

3.1FACT FINDING TECHNIQUES

It shows how data will be collected from the users of the system. The data collection techniques to be used include:

3.1.1 Observation

I will use this technique to collect information about how the current system operates and its processes. This involves systematically watching and recording the behaviors and characteristics of operations and processes. It gives more detailed and context related information and can adapt to events as they occur, however, the method may be time consuming.

3.1.2 Interviews

I will conduct an oral interview whereby i will interview business owners, suppliers and buyers to get a deeper insight of how the system is going to work. I prefer this method because it gives more information from various interviewees and offers greater flexibility as the opportunity to restructure questions is there, especially in case of unstructured interview. It's preferred because it will provide a closer contact between the users and the developer hence dispelling the probability of the completed system being rejected by users.

This technique also:

- Permits clarification of questions
- Has high response rate than written questionnaires
- It is suitable for use with both literate and illiterates
- Get full range and depth of information
- Develops relationship with client
- Can be flexible with client

3.1.3 Secondary Data Collection

This is data I will collect from existing sources e.g. from the books, internet, journals and magazines that where collected by other researchers and analysis was done. It is from this data that I will then compare with the primary data and make a final decision and conclusion.

3.2 SYSTEM DEVELOPMENT METHODOLOGY (SDLC)

System development methodology is a technique that is used to show how the proposed system will developed. In this case, the methodology used will be a waterfall model.

3.2.1 Waterfall Model

It is comprised of the stages that the developer will use when developing the system. It is a sequential model hence the name waterfall. The developer has to finish with one stage before going to the next one. It comprises of the feasibility study, analysis phase, design phase, coding phase, testing phase, implementation phase and finally the maintenance phase. It is a simple model and easy to use and understand. With waterfall development based methodologies, the analysts and users proceed sequentially from one phase to the next. The deliverables from each phase are voluminous and are presented to the project sponsor for approval as the project moves from phase to phase. Once the phase is approved by the sponsor it ends and the next phase begins.

Figure

Diagram of Waterfall model

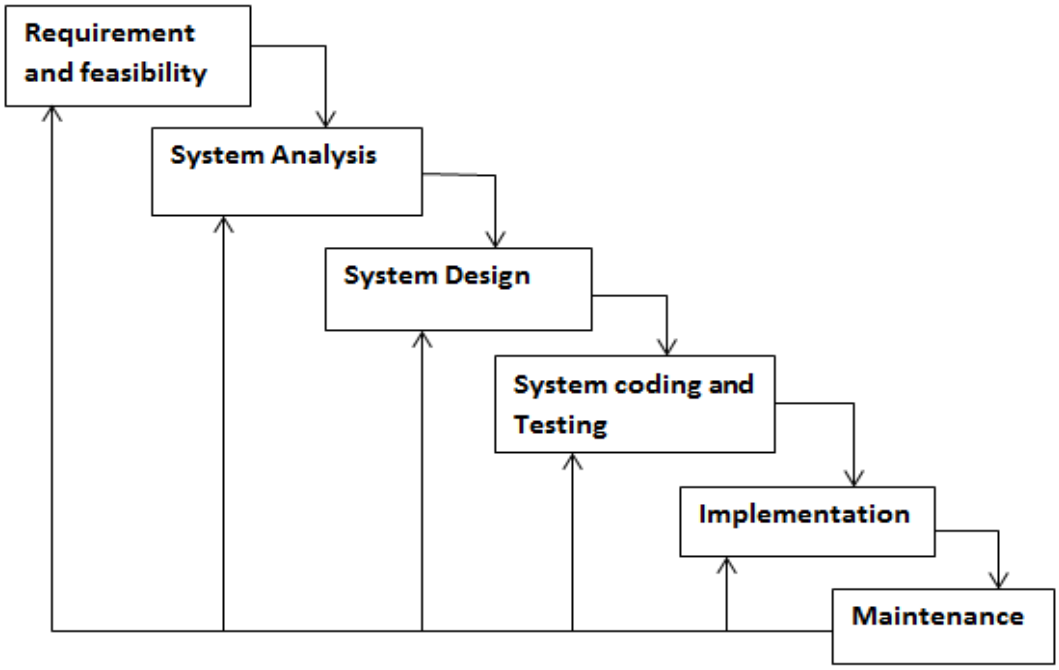

Figure 3.0: water fall diagram

3.2.1.1 Feasibility study

Here, I will carry out a study to gain an understanding of the customers' current system and problems experienced in this system through interviews, observations, participations etc. I will use the obtained data to determine the viability of the system being proposed in terms of technical, economic and social feasibilities.

3.2.1.2 Requirements analysis:

At this stage, I will gather information about what the customer needs and define the problems the system is expected to solve. I will also include customers' business context, product functions and its compatibility. I will gather requirements such as software like the programming language to use, database model and hardware needed such as laptop, printers etc.

3.2.1.3 Design.

At this stage i will make an overall design of the system architecture and physical design which includes User interface and Database design. It's at this stage that I will identify any faults before moving onto the next stage. The output of this stage is the design specification which is used in the next stage of implementation.

3.2.1.4 Coding/Implementation.

At this stage, I will begin coding as per the design specification(s). The output of this step is one or more product components built according to a pre-defined coding standard and debugged, tested and integrated to satisfy the system architecture requirements.

3.2.1.5 Testing.

In this stage, i will ensure both individual and integrated whole are methodically verified to ensure they are error free and satisfy customer requirements. I will involve both unit testing of individual code modules, system testing of the integrated product and acceptance testing conducted by or on behalf of customer. I will ensure bugs found are corrected before moving to the next stage. I will also prepare, review and publish Product documentation at this stage.

3.2.1.6 Installation.

It is done once the product has been tested and certified as fit for use. The system is prepared for use at customer site. I will do delivery via internet or physical delivery depending on user needs.

3.2.1.7 Maintenance.

This stage occurs after installation. It involves making modifications on the system to improve performance. Such changes are user initiated or as a result of bugs being discovered which were initially not known. These modifications are recorded for documentation and system update.

3.2.1.8 Benefits of waterfall model

- It improves on quality: getting requirements and design first helps to catch and correct possible errors at the design stage than at the testing stage, after all components have been integrated.
- Simple and easy to understand and use
- Easy to manage due to the rigidity of deliverables and review process
- Phases are processed and completed one at a time

3.2.1.9 Criticisms of waterfall model

- Advocates of Agile software development argue that waterfall model is a bad idea in practice – believing it's impossible for any non-trial project to finish a phase of software products life cycle perfectly before moving to the next phase and learning from them. For example, clients may not know exactly what requirements they need before reviewing a working prototype and commenting on it. They may change their requirements constantly. Designers and Programmers may have little control over this. If clients change their requirements after the design is finalized, the design must be modified to accommodate new requirements. This effectively means invalidating a good deal of working hours which means increased cost, especially if a large amount of the projects' resources has already been invested in Big design up front.
- Designers may not be aware of future implementation difficulties when writing a design for an unimplemented software product. That is, it may become clear in the implementation phase that a particular area of program functionality is extraordinarily difficult to implement. In this case, it is better to revise the design than persist in a design based on faulty predictions and that does not account for the newly discovered problems.

3.3 CONCLUSION

The online Tailoring system will ease the work of clients by allowing them to send their measurement online thus cutting on transport expenses and time. It will ease communication between the tailor and the client and also to access each other.

It provides information about the cost, the fabric type the customer want his/her dress knit from, the urgency at which a customer wants the dress finished, the type of material to be used, quantity in terms of pairs needed and most importantly, the system computes the total cost and avails that information to the customer.

Therefore, this system will be more beneficial to implement.

3.4 SYSTEM ANALYSIS

3.4.1 Existing System

The existing system was found to be completely manual, i.e. customers' information is captured in books, there also required to walk to the tailor shop to get their measurements taken. Customers also go to the tailor shops to check on the progress of their garments.

3.4.2 Problems of Existing System

Considering the above section, there are many problems associated with the existing manual system, they include the following:

- Duplication in records of the customers.
- There is a problem of storage of the taken measurements i.e. can easily get lost.
- Information retrieval from these sources is not easy

3.4.3 Requirements Analysis

3.4.3.1 User Requirements

It is very important to get users of the system fully involved such that the problem of change management does not arise. The system is expected to be:

- Easy to learn and use
- Improve on the efficiency of information storage and retrieval
- Produce results faster i.e. measurements submission or checking clothe status, therefore reducing on time wasted during to and fro travelling.
- Provides attractive interfaces with easy navigation throughout the system
- Faster, flexible and convenient.
- A system that stores data and produces reports timely and accurately

3.4.3.2 Functional Requirements

Functional requirements capture the intended behavior of the system. This behavior may be expressed as services, tasks or functions the system is required to perform. Therefore the proposed system is able to:

- Capture customer information, store it and make it available at the time of need.
- Present the users with a real-time display on the garments status.
- Generate reports accurately and timely
- Search and display customer information details
- Computes the total cost of a garment depending on the selected fabric, type of material, quantity and duration and avails that information to the customer.

3.4.3.3 Non-functional Requirements (NFR)

Non-functional requirements are requirements which specify criteria that can be used to judge the operation of a system, rather than specific behaviours. This is contrasted with functional requirements that specify specific behaviour or functions. Systems must exhibit software quality attributes, such as accuracy, performance, cost, security and modifiability plus usability, i.e. easy to use for the intended users. NFRs help to achieve the functional requirement of a system. Thus the proposed system does the following:

- The system has high performance and reliability level. The mean time between failures, mean time to repair, and accuracy are very high.
- The system has user-friendly interfaces. This ensures the ease with which the system can be learned or used. The system can allow users to install and operate it with little or no training.
- Handles growing amounts of work in a graceful manner as can be readily enlarged i.e. the ease, with which the system can be modified to handle a large increase in users, workload or transactions.
- The system prevents unauthorized access to the system with user authentication via login-on system.

3.4.3.4 System Requirements

3.4.3.4.1 Hardware requirements

ITEMS	QUATITY	PRICE(Kshs)
Computer Processor: core2dual 3GB RAM 500 HDD	1	50 000
External back up (disks) – @ 500 GB	2	16 000
Research and internet costs		2 000
Printing and photocopying		3 000
Stationary		3 000
Transport		4 000
Labour costs		5 000
TOTAL		**83 000**

Table 3.0: Hardware Requirements

3.4.3.4.2 Software Component System Requirement:

- Browsers: Microsoft Internet Explorer, Firefox
- Server: Xampp
- Operating System: Windows XP, 7, 8 and Linux.
- Back end: MySQL.
- Front end: PHP Script and scripting is done using JavaScript.

3.4.4: Use Case Diagram

A use case diagram shows the interaction between the system and its environment.

The components of a use case diagram are:

- ✓ Actors: Represent external entities of the system i.e. People who interact with the system that is being modeled. For example, customers and system administrator will be the actors of the proposed system.
- ✓ Use Cases: Use cases are functional parts of the system. Examples are recording and submitting measurements.
- ✓ Associations: Associations are shown between actors and use cases, by drawing a solid line between them. This only represents that and actor uses the use case.

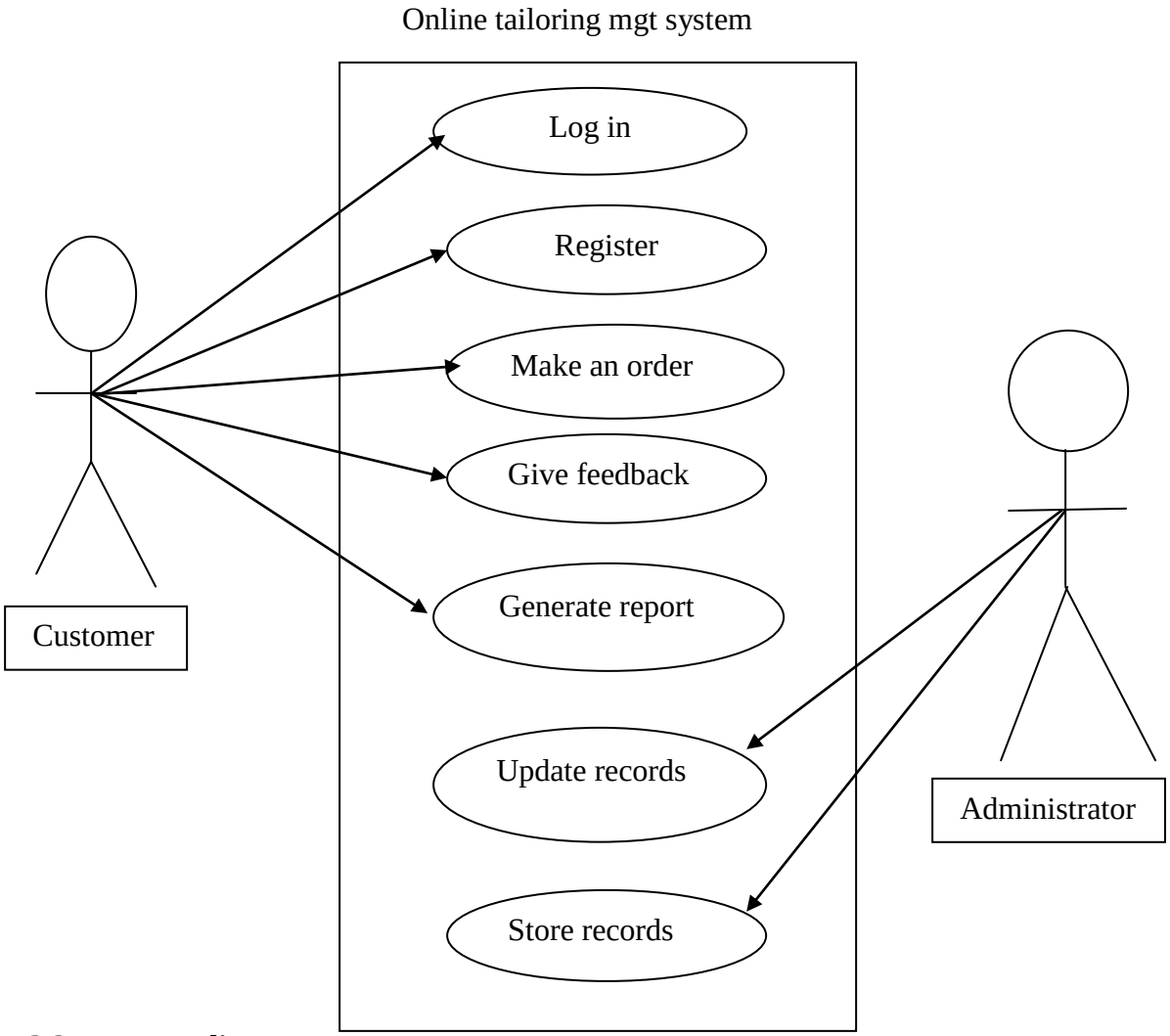

Figure 3.2: use case diagram

3.5: Data Flow Diagram

Data flow diagrams (DFDs) were used to illustrate the flow of information in a system. They are hardware independent and do not reflect decision points. They demonstrate the information and how it flows between specific processes in a system. They provide one kind of documentation for reports. These diagrams help to show how data moves and changes through the system in a graphical top-down fashion. They also help to give graphical representation of the system's components, processes and the interfaces between them.

When it came to conveying how data flows through systems (and how that data was transformed in the process), DFDs were the method of choice over technical descriptions for three principal reasons:

- DFDs are easier to understand by technical and non-technical audiences.
- They provide a high-level system overview, complete with boundaries and connections to other systems.
- They provide a detailed representation of the system components.

The diagram below shows the flow of data through the proposed system. It depicts the flow of information and the transformation that is applied as data moves from input to output.

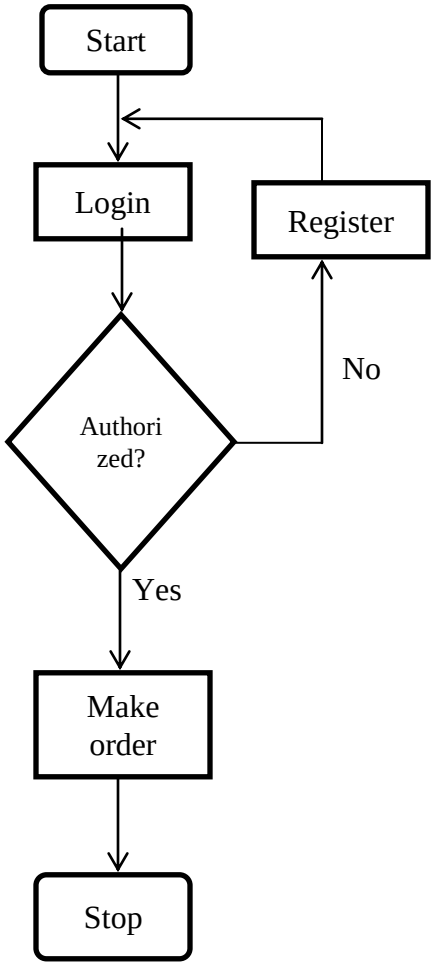

Figure 3.3: Diagram to show information flow in the proposed system

3.6: SYSTEM DESIGN

3.6.0: Introduction

This involves transforming the software requirements into an architecture that describes its top-level structure and identifies the software components and developing a detailed design for each software components. For each requirement, a set of one or more design elements will be produced.

A model is a representation of reality and can be built for existing systems as a way to better understand those systems or proposed systems as a way to document business requirements or technical design.

3.6.1 Data Modeling

This is a technique for organizing and documenting a system's data.

3.6.1.1 Conceptual design

Conceptual design is the very first phase of design, in which drawings or solid models are the dominant tools and products. The conceptual design phase provides a description of the proposed system in terms of set of integrated ideas and concepts about what it should do, behave and look like, that will be understandable by the users in the manner intended.

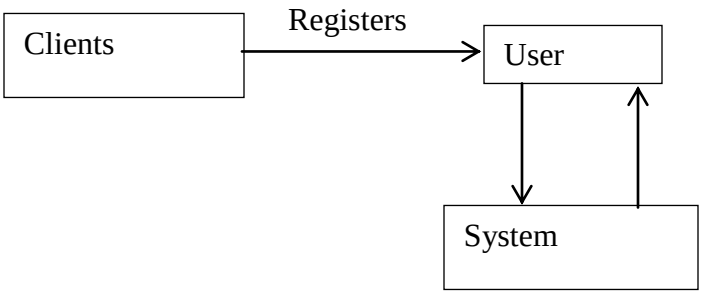

Figure 3.4: Diagram of a conceptual design of the system

3.6.1.2 Data dictionary

This contains all data definitions for cross-referencing and for managing and controlling access to the information repository / database. It provides a very thorough interface description (comparable to Interface Control Documents) that is independent of the model itself. Changes made to a model may be applied to the data dictionary to determine if the changes have affected the model's interface to other systems.

Data dictionaries do not contain any actual data from the database, only book keeping information for managing it. Without a data dictionary, however, a database management system cannot access data from the database. Below are the illustrations:

users

Field	Type	Null	Default	Comments
USERID	varchar(30)	No		
USERNAME	varchar(30)	No		
PASSWORD	varchar(30)	No		

Indexes:

Keyname	Type	Unique	Packed	Field	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	PASSWORD	2	A		

Table 3.1: Description of user login

customers

Field	Type	Null	Default	Comments
IDNO	int(10)	No		
USERID	varchar(20)	No		
FULLNAME	varchar(30)	No		
SEX	varchar(30)	No		
COUNTY	varchar(30)	No		
PHONENO	int(20)	No		
EMAIL	varchar(50)	No		

Indexes:

Keyname	Type	Unique	Packed	Field	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	IDNO	2	A		

Table 3.2: Description of customers' information

topdress

Field	Type	Null	Default
DRESSCODE	int(100)	No	
DRESSTYPE	varchar(100)	No	
FABRIC	varchar(100)	No	
MATTYPE	varchar(100)	No	
QTY	varchar(100)	No	
CPP	varchar(100)	No	
TAMOUNT	varchar(100)	No	
DURATION	varchar(100)	No	
CUSTID	int(30)	No	
FLENGTH	int(3)	No	
SHOULDERS	int(3)	No	
CHEST	int(3)	No	
SLEEVE	varchar(8)	No	
NWAIST	int(3)	No	
WAIST	int(3)	No	
NECK	int(3)	No	
COMMENT	varchar(1000)	No	

Indexes:

Keyname	Type	Unique	Packed	Field	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	DRESSCODE	2	A		

Table 3.3: Description of top dresses measurements

btmdress

Field	Type	Null	Default
DRESSCODE	int(100)	No	
DRESSTYPE	varchar(100)	No	
FABRIC	varchar(100)	No	
MATTYPE	varchar(100)	No	
QTY	varchar(100)	No	
CPP	varchar(100)	No	
TAMOUNT	varchar(100)	No	
DURATION	varchar(100)	No	
CUSTID	varchar(20)	No	
TLENGTH	int(3)	No	
TWAIST	int(3)	No	
KNEELENGTH	int(3)	No	
HIP	int(3)	No	
THIGH	int(3)	No	
BOTTOM	int(3)	No	
COMMENT	varchar(1000)	No	

Indexes:

Keyname	Type	Unique	Packed	Field	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	DRESSCODE	3	A		

Table 3.4: Description of bottom dresses measurements

feedback

Field	Type	Null	Default	Comments
SURNAME	varchar(30)	No		
OTHER_NAMES	varchar(30)	No		
EMAIL	varchar(30)	No		
COMPANY	varchar(30)	No		
TELEPHONE	varchar(30)	No		
COMMENT	varchar(1000)	No		

Table 3.5: Description design of the feedback table

finished

Field	Type	Null	Default	Comments
cusid	int(20)	No		
cusname	varchar(100)	No		
fdress	varchar(50)	No		

Indexes:

Keyname	Type	Unique	Packed	Field	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	cusid	2	A		

Table 3.6: Description design of the finished garments table

admin

Field	Type	Null	Default	Comments
username	varchar(30)	No		
password	varchar(20)	No		

Table 3.7: Description design of the administration information

CHAPTER FOUR: IMPLEMENTATION (CODING AND TESTING)

4.0. Introduction

It is the processes of putting the proposed system in operation. Some of the Activities undertaken by the analyst are Training personnel who will use the system. There is also provision of user manual and help page for efficient use of the system.

Next is to install Computer Equipment and internet to help them connect with their clients in the globe. This will facilitate the full functionality of this proposed system. Equipment should be acquired from recognized vendor. These include central processing unit (CPU), Ethernet cables, routers, output and input devices e.g. keyboard, mouse, monitor and all secondary storage devices. The hardware and software vendors have major responsibility for installing these equipment. The analyst then determines the functional changes. E.g. may analyze the job function changes caused by the computerized system.

4.1. Coding

Coding is the construction of the actual system using specific language. For this proposed system, I have used php to actualize the system. It is a scripting language, more secure and web based.

4.2 Application and Database Connection

The constructed system is connected to the Mysql Database through a data environment. The tables should be created and normalized. The data should also be validated. A connection should also be set and established in the design of the respective forms.

4.3. Testing

Testing is the process of verifying and validating the system for the conformance with specification and meeting the customer's requirements. The objectives of testing are to ensure that the system programs is error free, guarantee the system end users can interact with the system well and ensure that the components of the system interface are working well.

4.3.1. Functional Testing

The purpose of functional testing is to ensure that the program performs all the functions that were originally specified, that all the input is correctly accepted. It relates to the whole system and does not require a technical understanding of the system. All the functions of the system as originally specified are systematically tested to ensure that nothing has been accidentally omitted or misinterpreted. A positive attempt is made to anticipate errors than an inexperienced user might make, and tests made to check the effect of such errors and ensure that they do not result in incorrect actions or bad data being stored in the database.

4.3.2. System Testing

This is where the system is checked whether it has met the user requirements and performs as per expectations. The following are the tests to be used. On completion of the whole system, each of it is tested to ensure no errors have been introduced. The system is tested with a realistic amount of test data; although the researcher is not expected to spend days typing in hundreds of records, the system should be tested with about 50 records in each of the main tables.

4.3.2.1. Recovery Testing:

Recovery testing can be carried out to determine what happens, for example if there is a power failure in the middle of data entry. Is the whole database corrupted?

4.3.2.2. Acceptance Testing

The user is invited to test the system to ensure that it fulfills the stated objectives. If possible the researcher should observe this testing and not stop the user from mistakes. The system should cope with unexpected user behaviour.

4.3.2.3. User Acceptance testing

This is testing of the system by the user department after the system has passed the systems test

4.3.3. Unit testing

After the parts of the system are completed they are first tested. All the new hardware, procedural manuals and all system interfaces must be tested to ensure that they meet the required standards.

4.4. Test Data

The purpose of test data is to verify and make sure that the system is operating well and according to the standards set. It involves checking the new system if it is working correctly. It is tested in modules to establish if there is any problem in any module. This is whereby each module is tested on its own. While testing entries should be inputted as they are so as to be acceptable in the database else errors will occur. As an example, if customer's Id should be in numbers so the field should not accept text.

4.5. File Conversion

The analyst changes the existing files into a form where it can be used by the new system. The procedure is as follows; the analyst first record the file data then Transcribe the documents to suitable media and Verifies data to ensure it is error free

4.6. Control

Control measures to be put in place for the system is; Password where the user is required to enter his/her password to log in. It is only to authorize users.

The antivirus software should be used to clean up the viruses harmful to the application. Physical security such as keeping the system in a safe room- Ensure that there are firm windows and Doors and guarding the place.

4.7 Physical Design:

Home Interface Testing

Figure 4.0: Shows the home user interface.

Ordering User Interface Testing

Figure 4.1: Shows the bottom dress ordering user interface.

Admin interface testing

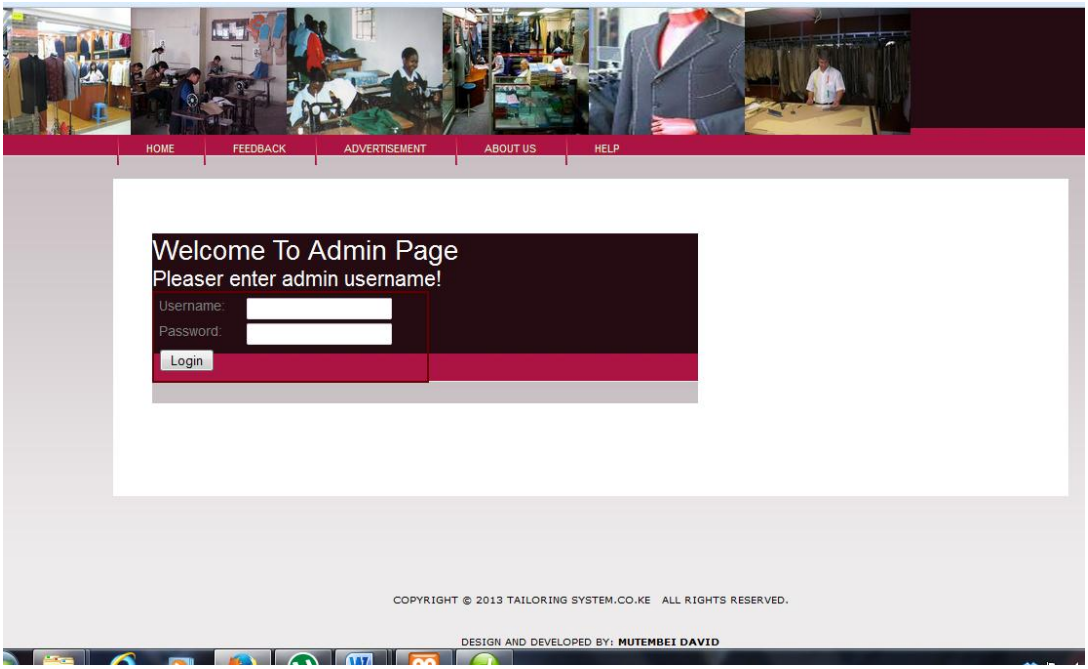

Figure 4.2: Shows the admin login interface.

The admin interface above, validates and ensures the authorized administrator logs in. after login, the administrator can view orders made, update finished clothes or remove a user from database.

Admin update interface testing

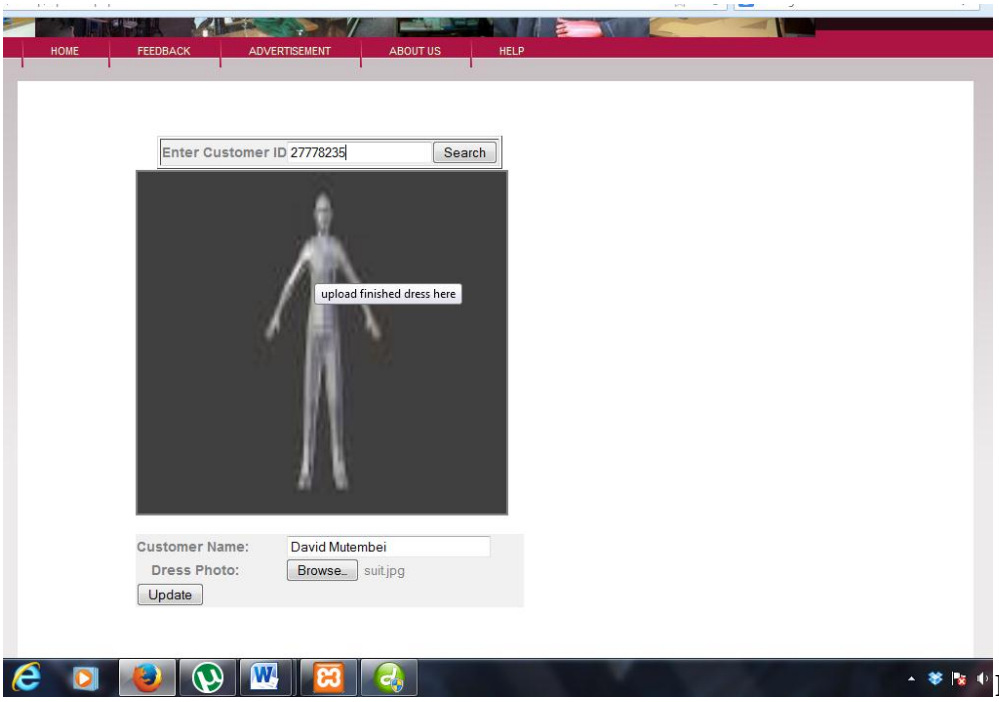

Figure 4.3: Shows the admin update interface.

Enables admin to update the status details of the garment in the finished table so as to enable the customer search and retrieve his/her clothe. The customer searches from the home page.

Interface to view finished dress

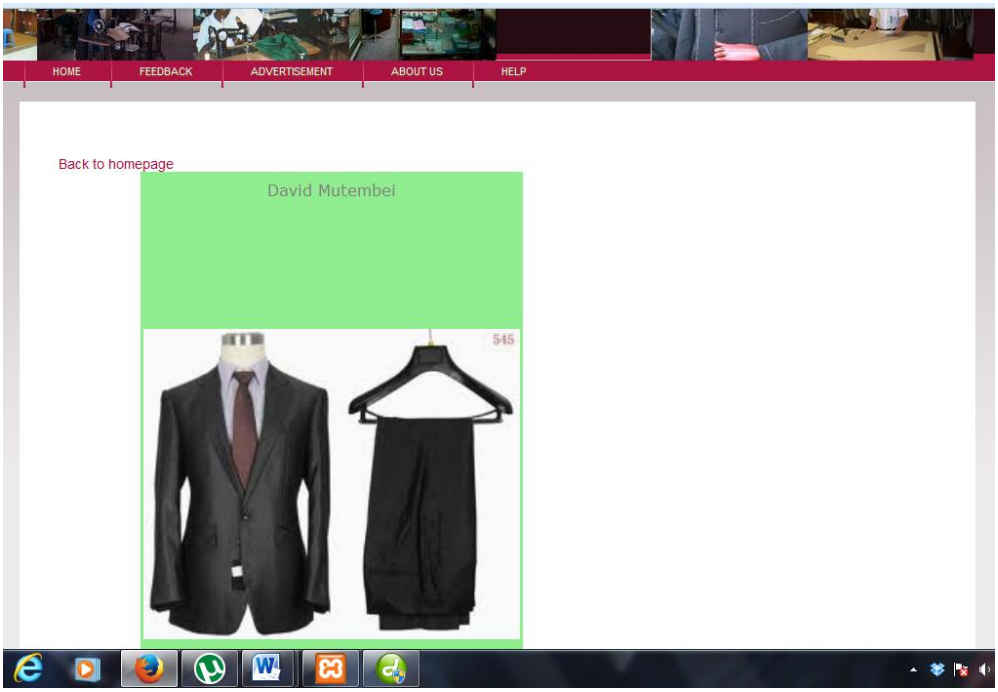

Figure 4.4: Shows interface for customer to view his/her dress.

This interface enables the customer to view his/her dress by searching from the home page using the customer id. If the clothe is finished, the customer sees it and can go to collect else he/she is asked to kindly check again.

CHAPTER FIVE: SUMMARY, LIMITATION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter describes the objectives of the system stipulated in earlier chapter, limitation of the system, conclusion and recommendation of the system.

5.1 Summary

As discussed in the previous chapters the main problem addressed was dealing with online tailoring management. It is the above situation that drove us to techniques of developing this Online Tailoring Management System to enable users handle details of their clothes efficiently and effectively. The project has implemented Most of the objectives stipulated in earlier chapters. The online tailoring management system offers a number of benefits to the user and can capture data, store, and view, add and delete the records entered.
It also provides information to the customer about the fabrics to be used, quantity in terms of pairs, urgency and computes the total cost of knitting the garment.

5.2 Limitations

Problems Encountered during System Design: Limited time to finish up the work, limited numbers of computers with the internet in the faculty hence it becomes difficult to download PHP codes from the internet and inadequate financial support to facilitate the project.
It's as a result of time factor also that limited the development and incorporation of online payment capabilities, however, the system displays relevant information about the cost of knitting a specific garment ordered depending on the fabric chosen, material used, quantity required and the urgency at which it's required.

5.3 Conclusions

The core reason for the establishment of a tailoring management system is to enable the customers and administrators in a convenient, fair and timely manner of interaction. Therefore the IT used by whoever uses the system should support the core objective of the system if it is to remain relevant. A lot still needs to be done in the IT department in order to make available

technology effective. This may involve training of the staffs on how to enter right and relevant data into the system and the management to keep updating the hardware and software requirements of the system. IT and computer systems need to be kept being upgraded as more and more IT facilities software are introduced in today's IT market.

The researcher acknowledges the fact that this system does not handle all staffs the tailor shops have like the asset section and staff members in the tailor shop. The researcher therefore suggests that for further research into building a system that captures all fields as pertains the tailor shop.

5.4 Recommendations

Training of all the members of the staff in the tailor shops to get accustomed to the system will be a priority. This being a new system, some members of the staffs' management will get threatened that the computerized tailoring management system will replace their jobs. I would recommend that management of the tailor shops educates the staff on how this system will operate and how it will supplement their efforts i.e. customers will only visit them during clothes collection. For the efficiency of the system, users of the need to be thoroughly educated about the operations of the system especially on how to register, give their details, make orders and on how to check on their dress status. They should also know how to login using username and password which should be kept confidential.

Access to the server room should be physically guarded against unauthorized person; the server room should be dust free and fully protected with an air conditioner of 1100BTU to prevent the server from over-heating. Backup media like External hard disks, CDs, Diskettes and Flush disks can be used for backups and storage of data.

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The Bespeaker's Guide to Tailored Clothing for Women-01 January 2010

Vintage-style clothing website ModCloth Inc. "It used to be about search -- that was Amazon

Tom Giles at tgiles5@bloomberg.net - http://www.bloomberg.com/news/2012-08-08/e-tailor-startups-challenge-amazon-in-200-billion-market.html

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APPENDICES

APPENDIX A: Cost And Material Estimates

ITEMS	QUATITY	PRICE(Kshs)
Computer Processor: core2dual 3GB RAM 500 HDD	1	50 000
External back up (disks) – @ 500 GB	2	16 000
Research and internet costs		2 000
Printing and photocopying		3 000
Stationary		3 000
Transport		4 000
Labour costs		5 000
TOTAL		**83 000**

APPENDIX B: ACTIVITY SCHEDULE

Week	Tasks/ Activities	Role of stage
1,2	Project idea	Generation of the system the i wants to develop
3-6	Proposal Writing	Writing the proposal from the information gathered
7	Submission and presentation	Presentation the proposal to the management and submits the final copy later.
8-10	Feasibility study	Gathering of the requirements from the customers/users to help develop the system.
11	System analysis	Analyses of the data collected and the requirements.
12	System Design	Designing of the system, both the logical and physical design of the system.
13-15	System Coding and testing	This will involve developing of the codes which will make the system operate and work accordingly. Testing is done to see that the system is giving the required outputs when given certain inputs.
16	System Implementation	This involves system installation and the website hosting.
17	System Documentation and user manual	This involves coming up with the user manual that will help the customer and other system users to use the system and also the documentation.

APPENDIX C: GANTT CHART

Gantt chart

No	Activity	DURATION IN WEEKS:																	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th
1	Proposal																		
2	Field Study																		
3	Analysis																		
4	Database Design																		
5	Interface Design																		
6	Coding and Testing																		
7	System testing & Integration																		
8	Documentation																		

APPENDIX D: SAMPLE CODES:

```
<?php
include("heading.php");
?>
<html>
<head>
<title>Admin</title>
<link href="css/design.css" rel="stylesheet" type="text/css" />
<style type="text/css">
#loginform {
        border: 2px solid #600;
        background:-color: #FFC;
        width: 280px
        }
 #loginform form {
        margin: 5px;
          }
label {
        display: block;
        width: 90px;
        float: left;
        clear: both;
          }
label, input {
        margin-bottom: 4px;
          }
</style>
</head>
<body>
<div id="wrapper">
```

```
<h1>Welcome To Admin Page</h1>
<h3>Pleaser enter admin username!</h3>
<div id="loginform">
        <form method="post" action="checklogin.php" name="form1" >
        <label for="username">Username:</label>
<input type="text" name="username" id="username" /><br/>
        <label for="password">Password:</label>
<input type="password" name="password" id="password" /><br/>
<input type="submit" name="submit" value="Login"/>
</form>
<!-- end div#welcome -->

</div>
<!-- end div#content -->
<div id="sidebar">

</ul>
</div>
<div style="clear: both; height: 1px"></div>
</div>

</div>

</body>
</html>
```