Jewellery Shop Management System

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Abstract. Using Jewellery Management System, shop managers can easily handle their shop and businesstransactions by accessing in a single window. This Jewellery Management System will have Utilities,Transactions, and Report generation menus. The utility section will deal with backing updatabases. Transaction will deal with the financial accounting part of this business scenario. It willprovide information on sales, and purchase associated with this business process. Generating reports by accessing information stored in a database is another important feature of this system. This Jewellery Management System will able to generate as per user requirements in a user- friendly manner. The date option will not be used; it will generate a report from the starting date of business to the current date. In this project, the user can view and buy the jewellery online. The employee can add the all jewellery based on category. The admin can view all.

Keywords: Jewellery Management System, Sales Portal, Sales Management System.

1. Introduction

The Automation of Jewellery shop will be measured with purchasing and selling of Jewellery shop. Current Jewellery shop provides the details of overall business transactions but they do not provide easy way information on sells/purchase in and sells/purchase out. Jewellery shop uses written document but it is very time expensive and cannot generate report in short time. It can't be provided when it is needed. [3][5]

In an ideal situation, Automation of Jewellery shop will follow the steps and rules to meet user requirements on demand and on time. Apart from this it will remove the difficulties faced by the admin to manage their shop and can be easily handled by the admin to manage their shop and can be easily handled by the admin without any technical knowledge of the platform used and about the system. Through this jewellery shop management system, working under a particular shop can be easily managed and overall transactions of particular date and time can easily be viewed. In this Automation of Jewellery, shop that will be solved above mentioned problem. [1][2]

2. Objective

The main objective behind this angular application Jewellery shop Management system is to provideall the details about jewellery items. There is a single rule user and admin in the project who can manage all the activity. Admin can manage Jewellery items, Jewellery item Type, the bill also managed the sales details. To reduce the manual effort needed to manage transactions and historical data used in various god owns. In addition, this application provides an interface for users to view the detailsof events. [4][6]

3. Existing System

The existing system is handled manually. The system has a formatted online jewellery shop management system for Sales in paperwork. The indent is prepared when items are to be purchased and a bill is generated for the sale of items. The system follows a large number of paperwork for maintaining jewelry details and users can be difficult to search the jewelry details in the database. [9] [10]

Disadvantage

1. Have to physically go to the store.

2. Could get there and the store doesn't have the item you're looking for.

3. Salespeople can get pushy.

4. Waiting in line.

5. More difficult to compare prices from one store to the next.

6. Sales are limited to what is offered in the store.

4. Proposed System

In the Jewellery shop Management system, the project can give any kind of information through reports and queries if required. This is very sophisticated to use and modify. The project is designed in such a way that it can afford any changes that occur in the future. The project can also be modified analog to the needs. It is feasible to have an integrated system with GUI and Relational Database for Jewellery Resource Management. The wastage of storage space is avoided by eliminating data redundancy, which needs careful programming. The careful programming minimizes the processing time. The user can easily handle the system.[7][8]

Advantages

1. Shop from the home

2. More options to choose

3. Low transportation fees

4. Time saver

5. Problem Definition

The problem with the current system is that people need to drive around, find parking, and get stressed out in traffic. Customers have to travel a certain distance for the product. Not all shops will have the exact item for the customer. Crowds may annoy some people and standing around in a queueis a waste of time.

6. Overview of The Project

The proposed system is a website that can be used by anyone who has an account on the website. The customer can browse the products and can buy the same online. The administrator/manager can manage all the details regarding the products and the orders of the customers. The data is stored in thedatabase and can be retrieved later for future reference. The proposed website can be used to buy bakery products such as sweets, chocolates, ice- creams, biscuits, etc. It also stores all the details of the products and the customers in the database. The manager can view the orders placed by each customer. Once the order is received, the respective customer will get a call from the store to ensure the delivery address and that the product is delivered to their doorstep.

7. Module Description

ADMIN Login: In this module, the admin can log in to the system using his/her username and password.

Add Jewellery Details: In this module, the employee can add the jewellery details like jewellery id, name, price, category, etc.

View Booking: This module is used to view the booking details. The booking details contain user information and jewellery pieces of information.

View User Details: In this module, the admin can view all the user's information in this portal.

USER Register: There is a registration form available where the new user can create their account by providing the required information to the system. The registration form details are name, email, gender, mobile number, address, etc. These details are stored in the database. And then can get to the username and password in the system.

Login: In this module, the user can log in to the system using his/her username and password.

8. Data Flow Diagram

A Data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system. DFD can also be used for the visualization of data processing (structured design). On a DFD, data items flow froman external data source or an internal data store, or an external data sink, via an internal process

Level 0

Figure 1 shows the level 0 DFD, the complete flow of data through the proposed system (Online shopping cart).Admin will add the items in the store that will be purchased by the customer. Admin can control and view all the information.
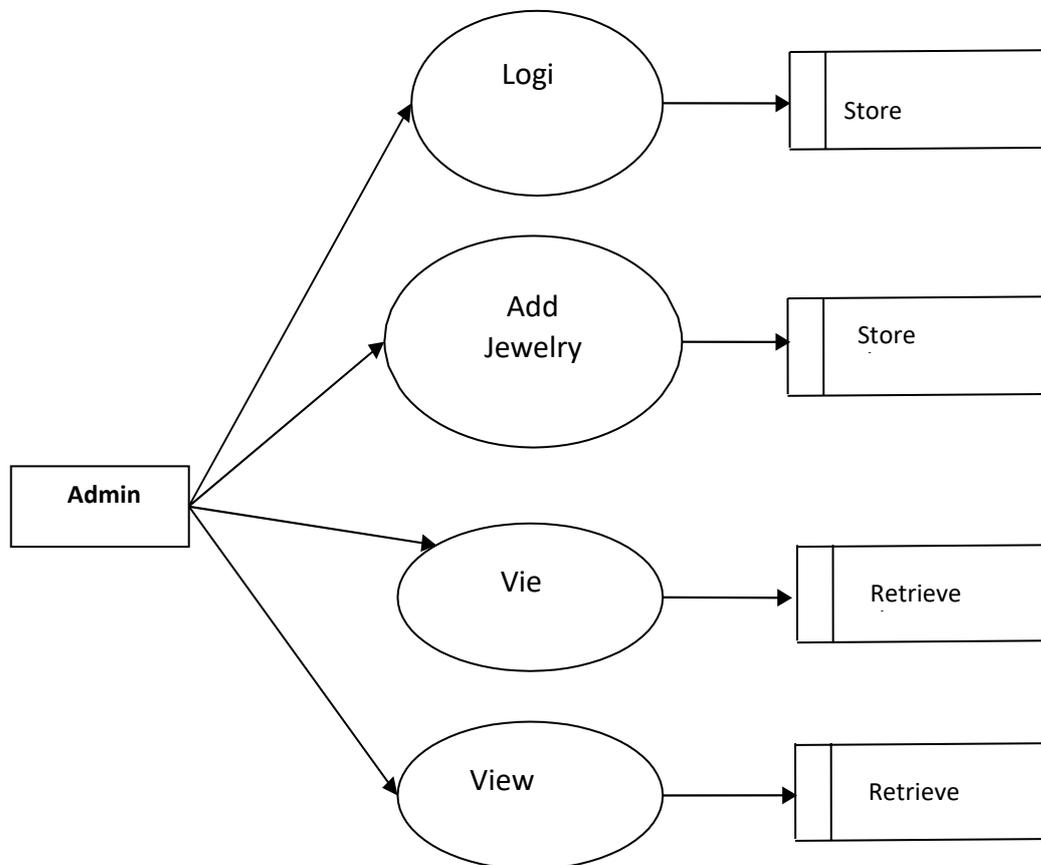
Figure 1: Level 0 DFD

LEVEL 1

The next stage is to create the Level 1 Data Flow Diagram as shown in Figure 2. This highlights the main functions carried out by the system. As a rule, to describe the system was using between two and seven functions - two being a simple system and seven being a complicated system. This enables us tokeep the model manageable on screen or paper.
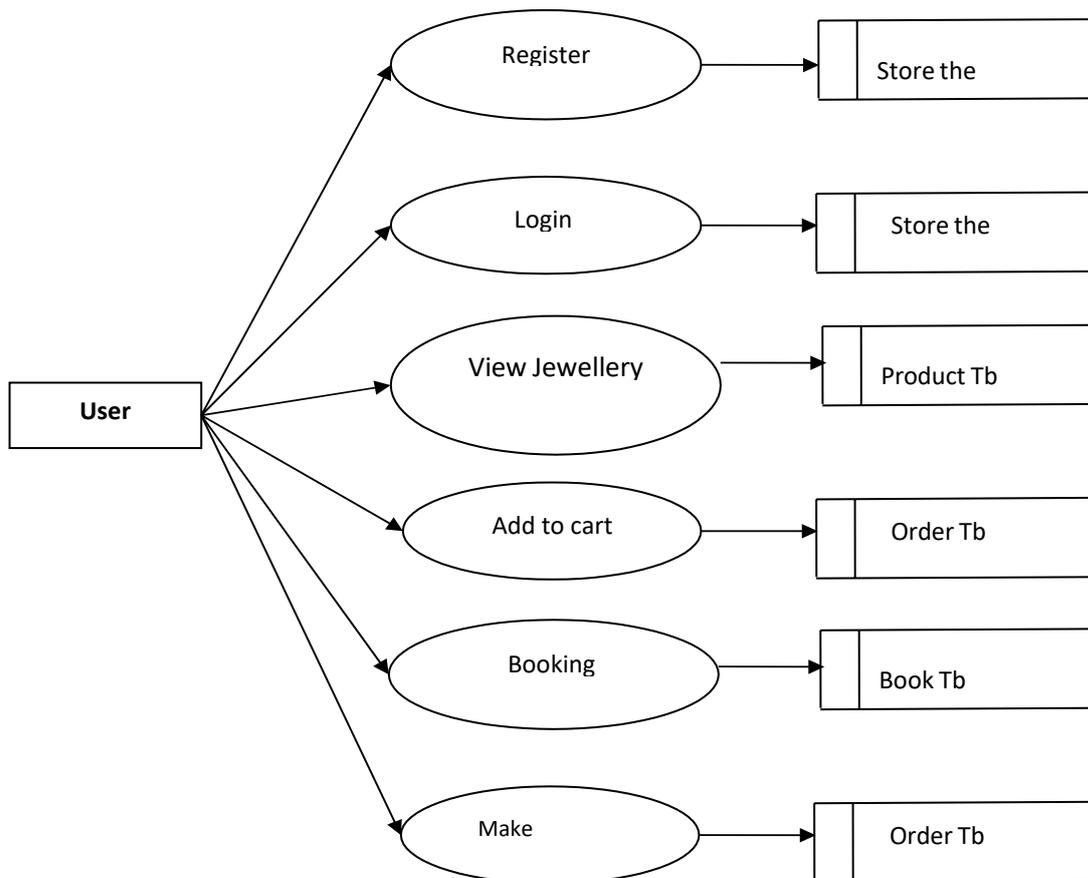
Figure 2: Level 1 DFD

New Customer

Customers have to register by entering the required information and the customer details are stored in the customer table (user) in the database.

Login

Customers can log in to the system by entering their username and password and the login details are checked with the customer table (user).

View jewellery

The customers can view the items available in the store that have been added by the Admin. The details regarding the items are retrieved from the item table (products).

Add to Cart

Customers can add the items to the cart one by one and purchase them all together at the end.

Booking

The customers can place the order after adding the items to the cart. All the details regarding theorders are stored in the order table

View Order

The customers can view their previous orders whenever necessary. All the details regarding the previous orders are retrieved from the order table

ER Diagram

In software engineering, an entity–relationship model (ER model) is a data model for describing the data or information aspects of a business domain or its process requirements, in an abstract way that lends itself to ultimately being implemented in a database such as a relational database. The main components of ER models are entities (things) and the relationships that can exist among them. Figure 3 represents the ER diagram of admin side to update products in the portal.
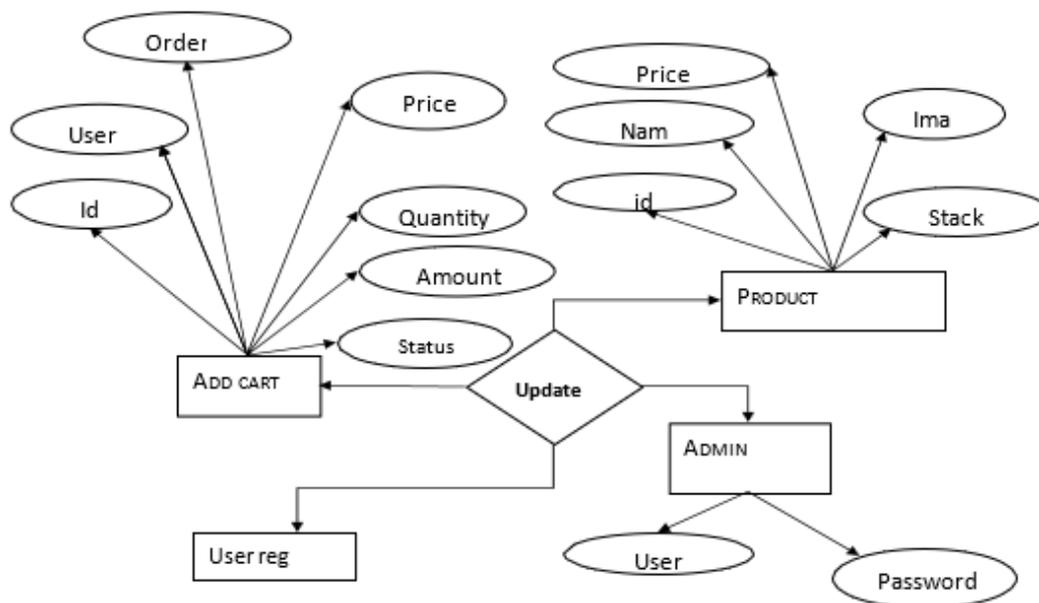

Figure 3: ER Diagram

Input Design

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction datainto a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having people keying the data directly into the system.The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps, and keeping the process simple. The input is designed in such away that it provides security and ease of use with retaining privacy.

Output Design

A quality output is one, which meets the requirements of the end user and presents the information. Inany system results of processing are communicated to the users and other systems through outputs. Inoutput design, it is determined how the information is to be displaced for immediate need and also thehard copy output. It is. Efficient and intelligent output design improves the system's relationship to help user decision-making.

Table 1, 2 and 3 represents the test case of various forms like login form, registration form and add products form. It includes Test condition, id, description, data, expected result and initial result.

Test case

Table 1: Login Form

Test condition id	Test Id	Test condition	Test Description	Test data	Expected Result	Initial Result
TC_ LF_0 1	TC_LF _1	Check whether the username textbox is blank	Username textbox should not be blank	Bla nk	System did not accept the blank value	Pass
TC_ LF_0 1	TC_LF _1	Username should be alphabet or numbers or combination of both	User can enter the required username	Santh iy a@12 3	System accept	pass
TC_ LF_0 1	TC_LF _2	Check whether the password textbox is blank	Password textbox should not be blank	blank	System did not accept the blank value	pass

Designing computer output should proceed in an organized, well-thought-out manner; theright output must be developed while ensuring that each output element is designed so that people will find the system can use easily and effectively. When analyzing design computer output, they should identify the specific output

that is needed to meet the requirements

Table 2: Registration Form

Test condition id	Test Id	Test condition	Test Description	Test data	Result	Actual result	Initial Result
TC_R_01	TC_R_01	Check whether the fullname textbox is blank	full name textbox should not be blank	Blank	System did not accept the blank value	System does not accept the blank value. Shows error msg.	Pass
TC_R_01	TC_R_1	Check whether full name textbox contains alpha-numeric values.	Name in the text box should contain only alphabets.	achu	System accept	System accept the data	Pass
TC_R_01	TC_R_2	Check whether the address textbox is blank.	Address textbox should not be blank.	Blank	System did not accept	System does not accept the blank value	Pass
TC_R_01	TC_R_2	Check whether the username textbox is blank	Username textbox should not be blank	Blank	System did not accept the blank value	System does not accept the blank value. Shows error msg.	Pass

TC_R_01	TC_R_3	Username should be alphabet or numbers or combination of both	User can enter the required username	achu@123	System accept	System accept the data	Pass
TC_R_01	TC_R_3	Check whether the Email ID text box is blank	Email ID textbox should not be blank	Blank	System did not accept the blank value	System does not accept the blank value. Shows error msg.	Pass
TC_R_01	TC_R_4	Check whether email textbox contains @ symbol an domain name	user enter a valid email	sa@gmail.com	System accept	System accept the data	Pass
TC_R_01	TC_R_4	Check whether the contact is blank.	Contact should not be blank.	Blank		System does not accept the data	Pass
TC_R_01	TC_R_5	Contact consists of 10 numeric value.	user enter valid mobile number.	9789322156	System accepts data value.	system accept the data	Pass

Table 3: Add products Form

Test condition id	Test Id	Test condition	Test Description	Test data	Result	Actual result	Initial Result
TC_SDT _01	TC_SDT_1	Check whether the store name text box is blank	product name textbox should not be blank.	Blank	System did not accept	System does not accept the data	Pass
TC_SDT _01	TC_SDT_1	Check whether the store name text box contain alphabet.	Admin enter valid product name	fan	System accept	System accept the data	pass
TC_SDT_01	TC_SDT_2	Check whether the Email ID text box is blank	Email ID textbox should not be blank	Blank	System did not accept the blank value	System does not accept the blank value. Shows error msg.	Pass
TC_SDT_01	TC_SDT_2	Check whether email textbox contains @ symbol and domain name	user enter a valid email	achu@gmail.com	System accept	System accept the data	Pass
TC_SDT _01	TC_SDT_3	Check Whether the contact is blank.	contact should not be blank	Blank	System did not accept	System does not accept the data	Pass
TC_SDT_01	TC_SDT_3	Check whether the address textbox is blank.	Address textbox should not be blank.	Blank	System did not accept blank value	System does not accept the blank value	Pass

9. System Testing

After a system has been verified, it needs to be thoroughly tested to ensure that every component of the system is performing in accordance with the specific requirements and that it is operating as it should include when the wrong functions are requested or the wrong data is introduced. Testing measures consist of developing a set of test criteria either for the entire system or for specific hardware, software and communications components. For an important and sensitive system such as an electronic voting system, a structured system testing program may be established to ensure that all aspects of the system are thoroughly tested. Testing measures that could be followed include:

- Applying functional tests to determine whether the test criteria have been met

- Applying qualitative assessments to determine whether the test criteria have been met.

- Conducting tests in "laboratory" conditions and conducting tests in a variety of "real life" conditions.

- Conducting tests over an extended period of time to ensure systems can perform consistently.

- Conducting "load tests", simulating as close as possible likely conditions while using or exceeding the amounts of data that can be expected to be handled in an actual situation. Test measures for hardware may include:

- Applying "non-operating" tests to ensure that equipment can stand up to expected levels of physical handling.

- Testing "hard wired" code in hardware (firmware) to ensure its logical correctness and that appropriate standards are followed. Tests for software components also include:

- Testing all programs to ensure its logical correctness and that appropriate design, development and implementation standards have been followed.

- Conducting "load tests", simulating as close as possible a variety of "real life" conditions using or exceeding the amounts of data that could be expected in an actual situation.

Software Testing

Testing is a series of different tests whose primary purpose is to fully exercise the computer-based system. Although each test has a different purpose, all work should verify thatall system element has been properly integrated and performed the allocated function. Testingis the process of checking whether the developed system works according to the actual requirement and objectives of the system. The philosophy behind testing is to find the errors. A good test has a high probability of finding an undiscovered error. A successful test uncoversthe undiscovered error. Test cases are devised with this purpose in mind. A test case is a set of data that the system will process as input.

Unit Testing

The first test in the development process is the unit test. The source code of the projectis normally divided into modules, which in turn are divided into smaller and it is called units.These units have specific behavior. The test done on these units of code is called a unit test. The unit test depends upon the language on which the project is used to develop. Unit tests ensure that each path of the project can perform accurately to the documented specifications and contains clearly defined inputs and expected results. . Producing tests for

the behavior of components (nodes and vertices) of a product to ensure their correct behavior before the systemintegration.

Integration Testing

Testing in projects in which modules are combined and tested as a group. Modules are typically code modules, which show individual applications, source and destination applications on a network, etc. Integration testing in the projects follows unit testing and precedes system testing.Testing after the product is known as code complete.

10. Conclusion

Online Jewellery shop management systemnowadays helps the customer to communicate with jewellery sellers or managers online which will easy to choose the right product time-consuming. Jewellery Management System is the term that will manage all the activity of a jewellery shop such that customers can feelfree to write their queries and can choose the rig product within a short time. Managers or sellers can communicate with customers through this System. Whenevery product is decorated on the website then it makes customer pleasure to find, share, andcollaborate effectively on content. This also makes it easier for management to usevaluable business information and data in the content.

11. Future Scope

The project developed here is just to ensurethat this product could be valid in today's real challenging world. Here all the facilities are made and tested. This producthas great future scope. This application canbe easily implemented in various situations.We can add new features and functionality when required. Here we tried to develop the project by analyzing the current system and considering the situation of the manualsystem. It is possible to make this system more dynamic by analyzing every side of the manual system.

The system is developed in such a way thatadditional enhancement can be done without much difficulty. The renovation ofthe project would increase the flexibility ofthe system. Also, the features are provided in such a way that the system can also be made better and more efficientfunctionality. The program was coded in aneasier and more structured manner, so that further modifications may be incorporated easily. The processing in this system is very lessercompared to an existing system. This system has good flexibility in accommodating any more changes that might arise in the future also.

In this system, data integrity is maintained and data redundancy is avoided to increasesystem efficiency. The database is designedin such a way that it will be also helpful enhancement of the system.

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