

CSC 107 2.0 Introduction to Computer Programming
Final Assignment – 2020

Project topic on
Sales management system
for
XYZ Distributors

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INTRODUCTION

The goal of any retail management software is to help you focus on your sales. In order to manage XYZ Distributor's tasks conveniently, "XYZ Distributors sales management system" is built that enables the salesman or managers to perform the basic tasks by sitting at their offices or on the way for sales through PC or laptop.

The program for sales management will be useful in managing vehicles, items, stocks, facilitating loading and unloading & producing various reports and overcome the drawbacks of the manual system.

PROGRAM OBJECTIVES

The main objective of designing the sales management system for XYZ Distributors is to provide efficient sales facilities for salesmen & managers.

Traditionally, in a company we have to keep records of stocks & everytime its needs to check the stocks on manually. But this system will overcome the above problem and will ease the sales tasks for salesmen & managers.

FUNCTIONALITY OF THE SYSTEM

XYZ Distributors sales management system consists of following functionalities.

- Managing Vehicles
- Managing Sales Items
- Managing Stock Items
- Facilitating Loading
- Facilitating Unloading
- Producing report
- Exit

Validations

The following code was used in the program to handle password & username.

```
if (strcmp (username, "xyz") == 0) {  
    if (strcmp(password,"123") == 0) {  
        printf ("Welcome. Login Success! \n \n");  
    }  
    else {  
        printf ("wrong password! \n");  
        return 0;  
    }  
}  
else {  
    printf ("User doesn't exist! \n");  
}
```

File handling and data structures are also used in the program.

File handling

```
FILE *fptrVehicles;  
FILE *fptrItems;  
FILE *fptrStocks;  
FILE *fptrloads;  
  
fptrVehicles = fopen("VEHICLES.txt","r");  
fptrItems = fopen("ITEMS.txt","r");  
fptrStocks = fopen("STOCKS.txt","r");  
fptrloads = fopen("LOADS.txt","r");  
  
  
fptrVehicles = fopen("VEHICLES.txt","w");  
fptrItems = fopen("ITEMS.txt","w");  
fptrStocks = fopen("STOCKS.txt","w");  
fptrloads = fopen("LOADS.txt","w");
```

Data structures

```
typedef struct vehicles
{
    char vehicleId[100];
    char vehicleName[100];
    char salesmanId[100];
} vehicles;
```

```
typedef struct items
{
    char itemId[10];
    char itemName[20];
    float unitPrice;
} items;
```

```
typedef struct stocks
{
    char itemId[10];
    int quantity;
} stocks;
```

```
typedef struct load
{ char vehicleId[100];
  char itemId[10];
  int loadQuantity;
} load;
```

Functions

//Home page functions

void manage_vehicles(void);

void manage_items(void);

void manage_stocks(void);

void load_items(void);

void unload_items(void);

void report(void);

//file reading and writing

void read_all_files(void);

void write_all_files(void);

// related to vehicle page

void display_vehicles(void);

void add_vehicle(void);

void delete_vehicle(void);

// related to items page

void display_items(void);

void add_item(void);

void delete_item(void);

// related to stocks page

void display_stocks(void);

void add_stock(void);

void delete_stock(void);

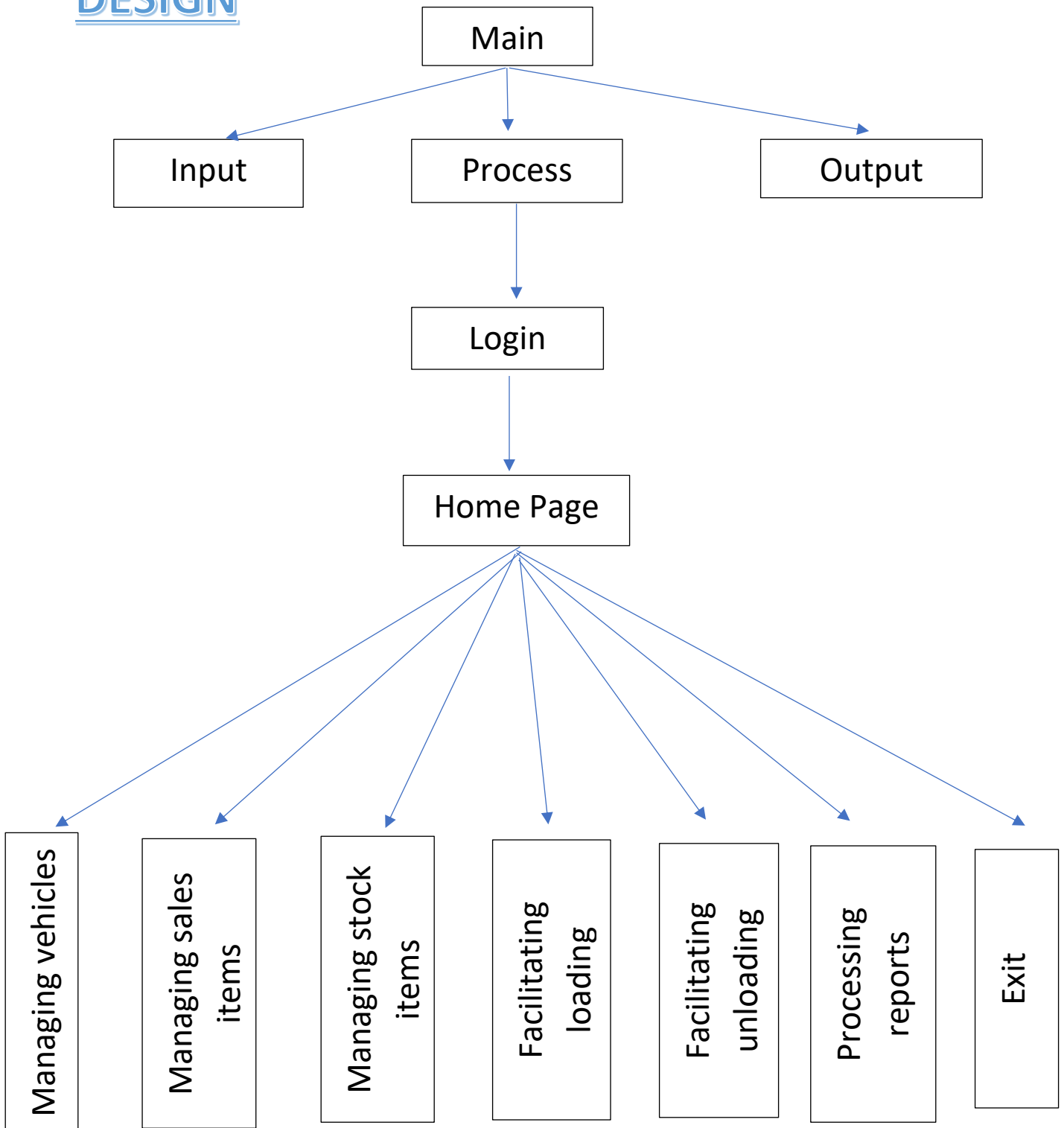
// related to loads page

void display_loads(void);

void add_load(void);

void delete_load(void);

DESIGN



TEST PLAN

Test case1- Login

Condition	Test data	Result
Correct username	123	Enter your password:
Wrong username	234	User doesn't exist!
Correct password	xyz	Welcome. Login Success!
Wrong password	xzy	wrong password!

- i) If the both username & password are correct.

```
-----
----- XYZ Distributors -----
-----
Enter your username:
xyz
Enter your password:
123
Welcome. Login Success!
_
```

- ii) If the username is correct but password is wrong.

```
-----  
-----  
----- XYZ Distributors -----  
-----  
-----  
  
Enter your username:  
xyz  
  
Enter your password:  
234  
wrong password!  
  
Process returned 0 (0x0)   execution time : 4.766 s  
Press any key to continue.
```

- iii) If the username is wrong but password is correct.

```
-----  
-----  
----- XYZ Distributors -----  
-----  
-----  
  
Enter your username:  
xzy  
  
Enter your password:  
123  
User doesn't exist!  
  
Process returned 0 (0x0)   execution time : 9.767 s  
Press any key to continue.
```

Test case 2 – Main menu

Condition	Test data	Result
Case 1	1	Entered to managing vehicle page
Case 2	2	Entered to managing sales item page
Case 3	3	Entered to managing stock item page
Case 4	4	Entered to Facilitating loading page
Case 5	5	Entered to Facilitating unloading page
Case 6	6	Entered to Producing report page
Case 7	0	Thank you !!!

```
-----  
HOME PAGE  
-----  
  
[1]:Managing Vehicles  
[2]:Managing Sales Items  
[3]:Managing Stock Items  
[4]:Facilitating Loading  
[5]:Facilitating Unloading  
[6]:Producing report  
[0]:Exit  
  
Enter your choice:
```

Test case 3 – VEHICLE PAGE

When choice is 1 you are logged to VEHICLE PAGE.

```
-----  
VEHICLE PAGE  
-----  
  
[1]:Display vehicle list:  
[2]:Add new vehicle:  
[3]:Delete an entry:  
[4]:Edit an entry:  
  
Enter your choice:
```

Condition	Test data	Result
Case 1	1	Display vehicle list
Case 2	2	Add new vehicle
Case 3	3	Delete an entry

I) CASE 1 – Display the vehicle list

```
Vehicle List :  
  
VehicleID      Name      SalesmanID  
01             CBC3456    001  
02             FGH3467    003  
04             sdf4567    004  
03             dfr2345    003  
05             sdf2394    002
```

II) CASE 2 – Adding a new vehicle

```
Add "vehicle ID" "Vehicle Name" "salesman ID":  
005      WER4567 02  
Entry 005      WER4567 02  
successfull added!
```

```
Vehicle List :  
  
VehicleID      Name      SalesmanID  
01             CBC3456     001  
02             FGH3467     003  
04             sdf4567     004  
03             dfr2345     003  
05             sdf2394     002  
005            WER4567     02
```

III) CASE 3 – Deleting an entry

```
Entry List:  
VehicleID      Name      SalesmanID  
01             CBC3456     001  
02             FGH3467     003  
04             sdf4567     004  
03             dfr2345     003  
05             sdf2394     002  
005            WER4567     02  
Enter the vehicle ID to delete that entry:  
005      WER4567 02
```

```
Entry List:  
VehicleID      Name      SalesmanID  
01             CBC3456     001  
02             FGH3467     003  
04             sdf4567     004  
03             dfr2345     003  
05             sdf2394     002  
005            WER4567     02  
Enter the vehicle ID to delete that entry:  
005      WER4567 02  
Deleting entry 005      WER4567      02  
...
```

```
Vehicle List :  
  
VehicleID      Name      SalesmanID  
01             CBC3456     001  
02             FGH3467     003  
04             sdf4567     004  
03             dfr2345     003  
05             sdf2394     002
```

Test case 4 – ITEMS PAGE

When choice is 2 you are logged to ITEMS PAGE.

```
-----  
ITEMS PAGE  
-----  
  
[1]:Display Item list:  
[2]:Add new Item:  
[3]:Delete an entry:  
[4]:Edit an entry:  
  
Enter your choice:
```

Condition	Test data	Result
Case 1	1	Display item list
Case 2	2	Add new item
Case 3	3	Delete an entry

Test case 5 – STOCKS PAGE

When choice is 3 you are logged to STOCKS PAGE.

```
-----  
STOCK PAGE  
-----  
  
[1]:Display Stock list:  
[2]:Add new Stock:  
[3]:Delete a Stock:  
[4]:Edit an entry:  
  
Enter your choice:
```

Condition	Test data	Result
Case 1	1	Display stock list
Case 2	2	Add new stock
Case 3	3	Delete a stock

Test case 5 – LOAD PAGE

When choice is 3 you are logged to LOAD PAGE.

```
-----  
LOAD PAGE  
-----  
  
[1]:Display Load list:  
[2]:Add new Load:  
[3]:Delete a Load:  
[4]:Edit an entry:  
  
Enter your choice:
```

Condition	Test data	Result
Case 1	1	Display load list
Case 2	2	Add new load
Case 3	3	Delete a load

BUGS

- The system doesn't facilitate to update entries, it only can add a new entry & delete an existing one.
- Though I have written codes for **facilitating loading**, due to an error it doesn't work, so I couldn't reach to the sales side. In the program I have commented it.

LIMITATIONS

- Maximum vehicles -25
- Maximum salesmen - 25
- Maximum items -20

Assumptions

- In this system we assume that there is a salesman assigned to each vehicle. So, each entry we can find the salesman through vehicle ID.
- Ignore the duplicate files entries.
- In the load list same vehicle ID is written in consecutive lines.
- We move another vehicle ID when only after recording one vehicle's loading information.