

School of Engineering and Applied Science
CSE100 Fundamentals of Computer Programming
Project - Problem Definition and Team Details

Project Title: Supermarket management system

TEAM DETAILS

Roll No	Name (Firstname Lastname)	Email Id	Contact No.
AU2140121	Bhargav Kargatiya	bhargav.k1@ahduni.edu.in	8320529965
AU2140123	Dhruv Gajjar	dhruv.g3@ahduni.edu.in	6352255861
AU2140129	Priyank Patel	Priyankkumar.p@ahduni.edu.in	8866035740
AU2140184	Darshan Vasani	Vasani.p@ahduni.edu.in	9313181210

[1] PROBLEM DEFINITION

Title of the project	Supermarket management system
Objective/vision/main goal of developing the software application	Choose or drop different items with ease. We can also see the remaining stock and manage the pricing of the items in the store using this software.
What Problem will be solved by the proposed software application (or real-life need/use of the software application)	It reduces the time and manpower required for management and maintenance of different tasks. It reduces the paper work in existing system, hence it is economical and efficient.
End-Users of the software: different types of users/roles who are going to use the software like admin, customers, manager, employee, etc.	Super Admin, Customer

<p>Listing of functionality/features/main modules to be provided in the software to different end-users</p>	<p>Admin user:</p> <ol style="list-style-type: none"> 1. Login or Registration. 2. Add and Remove products. 3. Manage cost of different items. 4. See the previous Bills <p>Customer:</p> <ol style="list-style-type: none"> 1. See all the products with their Price. 2. Pick the products and add in the basket. 3. Can remove products from the basket. 4. Get the Bill After Purchases.
<p>Important outputs/reports to be generated from the software</p>	<ul style="list-style-type: none"> • List of all categories and their Products • price of the product. • Billing.

[2] PROJECT DESIGN

2.1 User Interface Design

1. MAIN MENU:

```
##### WELCOME TO SUPERMARKET #####

CUSTOMER      -- 1
SUPER ADMIN   -- 2
Enter your choice:
```

2. ADMIN LOGIN MENU:

```
##### ADMIN #####

1. Register   [For new Admin]
2. Login      [For Exiting member]
3. Exit       [To go to main window]
Enter your choice :
```

3. ADMIN REGISTER MENU:

```
##### ADMIN REGISTRATION #####
1. Creat your name :- Example
2. Creat your password :- @example
Success!
```

4. ADMIN MAIN MENU:

```
##### ADMIN MENU #####
1. Add item
2. Remove item
3. Change The Price
4. See Previous Bills
5. EXIT
Enter your choice :
```

5. Customer Categories:

```
##### CUSTOMER MENU #####
Categories
1. Grocery
2. Dairy & Frozen
3. Bed and Bath
4. Crockery
5. Kitchen
6. Clothes
7. Daily Essentials
8. Home and personal care
9. Electrical things
10. Footwear
11. Toys & Games
12. Fruits & Vegetables
13. For Continue...
14. Return to main menu
Enter the Category number: _
```

Category Example:

```
##### Fruits And Vegetables #####
Carrot: 65
Potato: 23
Tomato: 74
Broccoli: 92
Onion: 48
Cauliflower: 52
Cucumber: 25
Capsicum: 100
Greenpeas: 91
Beans: 43
Cabbage: 44
Beetroot: 70
Ginger: 62
Banana: 60
Strawberry: 248
Apple: 162
Pomegranate: 209
Kiwi: 60
Papaya: 68
Guava: 56
Grapes: 90
Pineapple: 52
Orange: 48
To go to main menu enter 'Exit', for continue Enter 'yes':
```

6. Customer's Basket

```
Customer BASKET
bajari : Quantity = 13
bajari : Subtotal = 494.0

pista : Quantity = 9
pista : Subtotal = 6750.0

kettle : Quantity = 1
kettle : Subtotal = 1500.0

comb : Quantity = 5
comb : Subtotal = 400.0

Do you want to Remove any item?:_
```

7. Customer's Bill:

```
*****
Name:Example                               Date:23/02/2022
=====
Product Name    Product Quantity    Subtotal
banana          12                144.0
pasta           7                1400.0
mug             10               690.0
spoon           4                160.0
clay            7                420.0
=====
Total
Rs.2814.0
=====

Thanks for shopping with us!

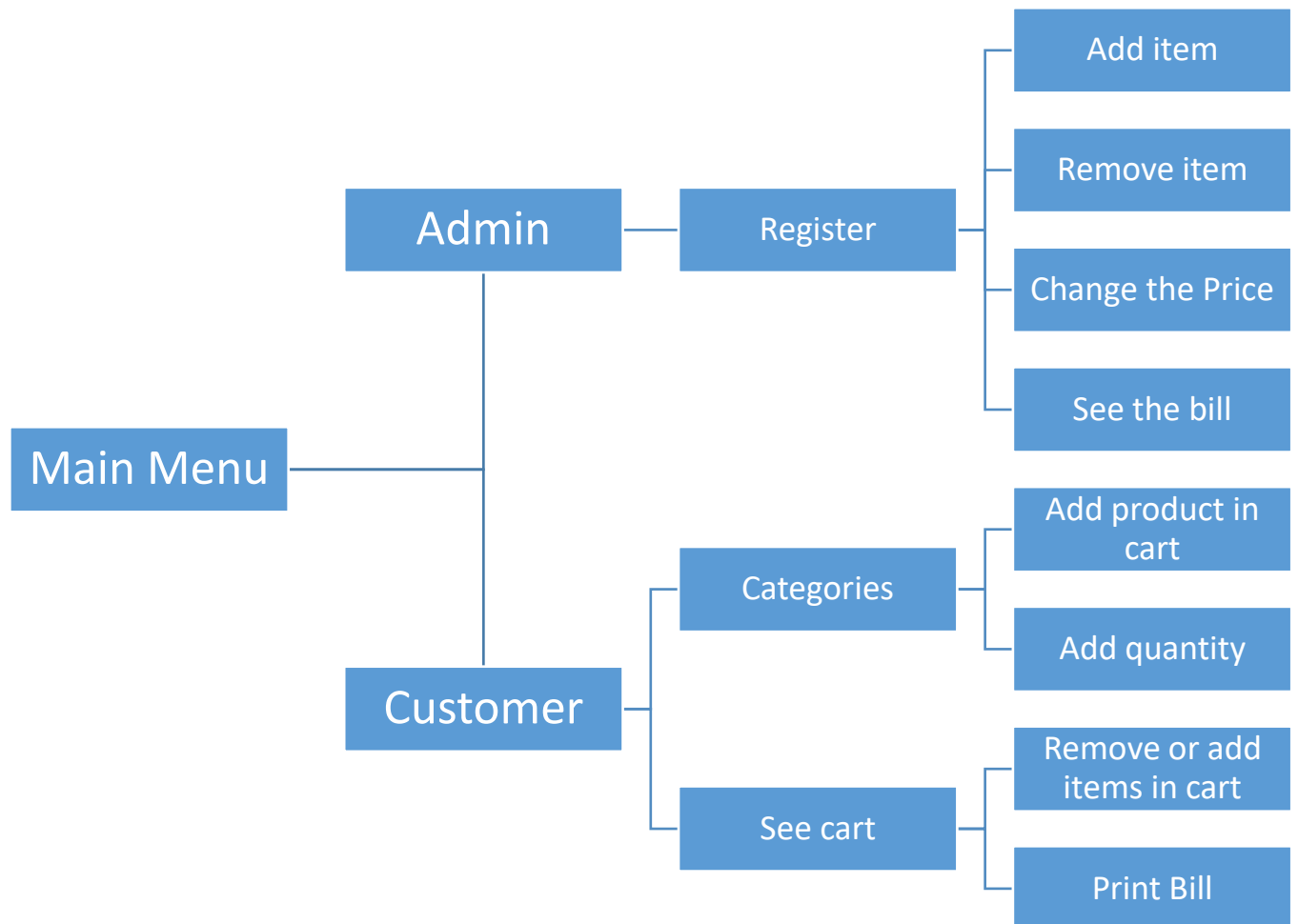
*****
_
```

2.2 Database Design:

Supermarket management System have the following file created to store the username and password of the admin and each categories item and their price.

Sr. No.	Name of the field	Data Type	Sample Data
1	Admin Name	String	Example
2	Admin Password	String	@example
3	Product Name	String	Mug
4	Product Price	Int	70 Rs.
5	Product quantity	Int	12
6	Customer bill	String	

2.3 Structure Chart:



[3] Important Algorithms/logic in the Project

Important Functionalities

1) Add item in basket:

1. Start
2. Select the customer option
3. Display the categories
4. Take Input from user in which category he wants to buy items
5. Display the Item Name and Price
6. Get item Name and quantity
7. Add items Dictionary called 'basket'
8. Stop

2) Print the bill

1. Start
2. Select "To continue" option from costumer menu
3. Get input as a costumer name
4. Print bill style with total
5. Stop

3) Add items in stock

1. Start
2. Select Admin option
3. Login with your password and username
4. Select the “Add items” option
5. Select Category
6. Take input from admin in which items he/she want to add in
stock
7. Get item’s price
8. Item added in stock
9. Stop

4) Remove item from Stock

1. Start
2. Select Admin option
3. Login with your password and username
4. Select the “Remove item” option
5. Select Category
6. Enter the item name which you want to remove
7. Stop

5) Change the price of items

1. Start
2. Select Admin option
3. Login with your password and username
4. Select the “Change the Price” option
5. Select Category
6. Enter Item name
7. Enter Item’s new price
8. Stop

