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IMPLEMENTATION OF PROJECT USING OOP

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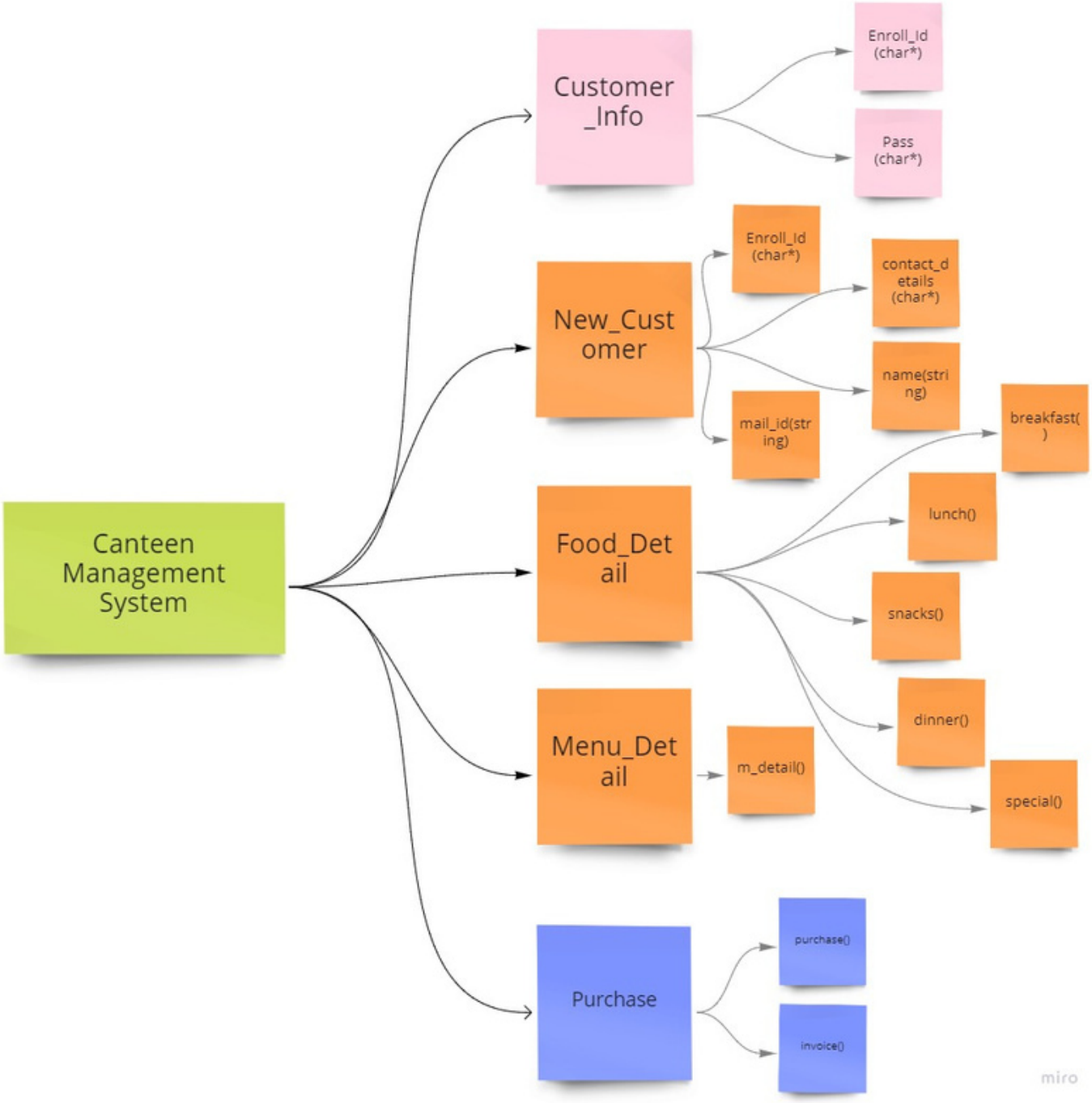
INTRODUCTION

It happens with most of the students when they don't know the menu of mess or canteen. They need to go from the classroom till the mess or canteen, just in order to check what has cooked in the mess or canteen.
There should be such a system where canteen management staff update the menu of mess for each time (includes breakfast, lunch and dinner) as well as in the canteen so that students need not to struggle for going in the mess or canteen. Students must be able to get the things on his device as soon as the menu gets updated.
The flow of program will go as below -
Note -

- This is the one time process, other than this user (food staff) will be able to update or change the menu list at every time he wants.
- Menu list of mess will show up all the things including roti/paratha, sabji, namkeen, achaar, sweet and any other thing if made.
- Canteen management system will able to provide fast services to their customers by using their records which has been saved previously
- The receptionist can add the employee and update the employee details.
- Similarly, the employee manages the sales and order.
- Developed using C++ language.
- Easy to operate and understandable..

PROGRAM FLOW



CLASSES CHECKMARK

All the classes which were got discussed in problem description (Review 1) has got implemented in the final code of "Canteen Management System" and their completion status is given below-

Class name	Implement Status
Consumer _Info	Implemented
Food_Detail	Implemented
Purchase_Detail	Implemented
New_Customer	Implemented

CLASSES CHECKMARK

```
class customer_info
{
    char id[9];
    char password[10];
```

```
class Food_detail
{
public:
    void breakfast()
```

```
class Menu_Detail : public Food_detail
{
public:
    void m_detail()
```

Need of an Extra Class

```
class purchase : public Menu_Detail
{
public:
    purchase(int a)
    {
        cout << "\tHope you are enjoying your food at \n\t\tAVANTIKA UNIVERSITY" << endl;
    }
    purchase()
    {
    }
```

```
class new_customer
{
    string mail;
    char ph_no[10];
    char id[9];
    string customer;
```

METHODS CHECKMARK

Different methods which were planned in problem description (Review 1) are implemented and listed below -

Method Name	Implement Status
• name() • Enroll_id() • Contact_no()	Implemented
• Breakfasr() • Lunch() • Snacks() • Dinner()	Implemented
Purchase_Detail	Implemented
• get_name() • Set_Enroll_id() • Set_Contact_no()	Implemented

Some Extra Methods which are needed for successful execution of project -

Method Name	Outcome
• Dash	Aesthetical Table
• Special()	Complementary item in canteen
• Pass()	Password for User id
• Mail_id()	To record the mail id of a new customer

METHODS CHECKMARK

```
void dash(int no)
{
    for (int i = 0; i < no; i++)
    {
        cout << "-";
    }
    cout << endl;
}
```

```
void enroll_id(char *p)
{
    strcpy(id, p);
}
```

```
void pass(char *p)
{
    strcpy(password, p);
}
```

```
void Special()
{
    cout << "Following will be as an special item" << endl;
    dash(55);
    cout << "S.no.\t|\tItem\t|\tPrice/item(in Rs.))" << endl;
    dash(55);
    cout << "1.\t|\tIce-Cream\t|\t15" << endl;
    cout << "2.\t|\tChocolates\t|\t10" << endl;
    cout << "3.\t|\tPaani Puri\t|\t10" << endl;
    dash(55);
    cout << "\n\n";
}
```

```
void breakfast()
{
    dash(55);
    cout << "S.no.\t|\tItem\t|\tPrice/Platen(in Rs.)" << endl;
    dash(55);
    cout << "1.\t|\tTea\t|\t10" << endl;
    cout << "2.\t|\tCofee\t|\t10" << endl;
    cout << "3.\t|\tPoha\t|\t30" << endl;
    cout << "\n\n";
}
```

```
void contact_detail(char *p)
{
    strcpy(ph_no, p);
}
void name(string cust)
{
    customer = cust;
}
void mail_id(string mailid)
{
    mail = mailid;
}
```

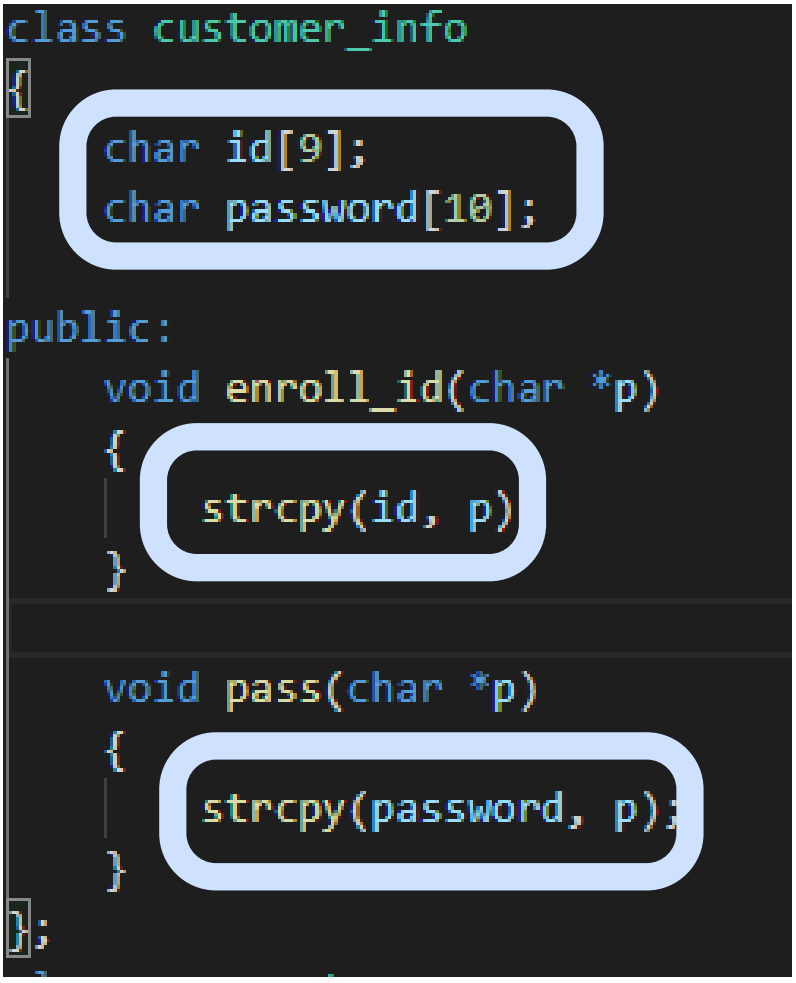
KINDLY VISIT BELOW GITHUB LINK FOR THE COMPLETE SOURCE CODE -

https://github.com/abhi0sen/Canteen_Management_Systemm.git

ENCAPSULATION-INHERITANCE-POLYMORPHISM

Encapsulation -

Encapsulation is one of the key features of object-oriented programming. It involves the bundling of data members and functions inside a single class. Bundling similar data members and functions inside a class together also helps in data hiding.



Inheritance

Inheritance is a process in which one object acquires all the properties and behaviors of its parent object automatically. In such way, you can reuse, extend or modify the attributes and behaviors which are defined in other class. The derived class is the specialized class for the base class

```
class Menu_Detail : public Food_detail
{
public:
    void m_detail()
```

```
if (wish == 1)
{
    breakfast();
}
else if (wish == 2)
{
    // Lunch
    Lunch();
}
else if (wish == 3)
{
    // Snacks
    snacks();
}
else if (wish == 4)
{
    // Dinner
    Dinner();
}
else if (wish == 5)
{
    // Special food
    Special();
}
```

OUTPUT

Existing Member

```
 Are you...
1.Existing Member
2.New Member
Choose 1 or 2- 1
Enter your id:
AU20B1010
Enter your password
Avantika
```

```
 Are you...
1.Existing Member
2.New Member
Choose 1 or 2- 2
Enter your mail id:
example@avantika.edu.in
Emter your phone number:
9876543210
Enter your name:
Example
Enter your enrollment id:
AU20B1010
```

```
 You have to choose the following..
1.Purchase Detail
2.Show Menu
3.Rules and Regulations
4.Food Suggestion
Enter your choice: 2
Which menu do you want to know
 1.Breakfast
 2.Lunch
 3.Snacks
 4.Dinner
 5.Special Food
Enter your choice:1
-----------------------------------------------------
S.no.   |       Item    |       Price/Platen(in Rs.)
-----------------------------------------------------
1.      |       Tea     |       10
2.      |       Cofee   |       10
3.      |       Poha    |       30
```

OUTPUT

```
        Hope you are enjoying your food at
                AVANTIKA UNIVERSITY


        Breakfast Purchased
what thing do you want to order?
Enter order S.No.

Kindly Press 0 for completing oreder
your purchase detail is given below
---------------------------------------------
Item    |       Qty.    |       Rate
---------------------------------------------
1
tea     |       1       |       10
1
tea     |       1       |       10
3
poha    |       1       |       30
0
your total payable amount is - 50
```

OUTPUT

```
Which menu do you want to know
 1.Breakfast
 2.Lunch
 3.Snacks
 4.Dinner
 5.Special Food
Enter your choice:2
Following will be there in a plate for lunch
----------------------------------------
S.no.   |       Item
----------------------------------------
1.      |       Matar Paneer
2.      |       Sev ki Sabji
3.      |       Tawa Roti
4.      |       Gulaab Jamun
5.      |       Achaar/Namkeen
----------------------------------------
Price of per plate is 70Rs.


        Hope you are enjoying your food at
                AVANTIKA UNIVERSITY


        Lunch Purchased
How many plates do you want to order?
3
your total payable amount is - 210
```

```
 You have to choose the following..
1.Purchase Detail
2.Show Menu
3.Rules and Regulations
4.Food Suggestion
Enter your choice: 4
Enter your kind suggestion here: There should be a add on of Pizza and Kit-Kat Shake
Your suggestion is very helpful for us. Thank You!      Hope you are enjoying your food at
```

CONCLUSION

After completion of the Assignment 1 and Assignment 2 we got a deeper understanding of c++ by implementing and integrating classes and methods in our program.
and what are the steps and how to proceed to make a Management system in c++ Program.

A Management System which aims to create a digital platform that. Bring down the gap between classroom and Mess that will give user's their need as well as Want Ultimately it will provide recreation, relaxation and other activities to user's especially students. This c++ project also aims to create a good circulation to prevent traffic. Moreover, to it aims to create a healthy environment in Mess