 

Project Title: [UNITED SUPERMARKET]

# INTRODUCTION:

The software (developed via OOP techniques) is a supermarket for customers. It will provide the user a list of options to choose from the menu. The program will then also allow the owner to keep track of his stock, revenue and other details while also keeping a track of employees. The program will store the data in files and allow users to buy from the stock (after entering address information and phone number) that can be updated with time by the owner and will be delivered by the employee to home. All of this will be done by keeping data of employees and customers safe and sound.

# BACKGROUND:

The tough times of covid has made life hard for all especially for the supermarkets’ owners because of nationwide lockdown. The main reason for making a supermarket software is so that we can have a social distanced and SOP followed system for all and so that we can cancel out the spread of covid-19.

# Problem Analysis:

We have gone through many management systems and the major issues that came we came across are:

## Need of Computerization:

A few factors that direct us to develop a new system are given below -:

* 1. Faster System
  2. Accuracy
  3. Reliability
  4. Informative
  5. Keeping track of all the records of employees and all the items of the store and also updating them.

## Existing System:

The system is very time consuming and lazy. This system is more prone to errors and sometimes the approach to various problems is unstructured. If any old data or information is to be fetched then it is a great problem for users to get the information in a short span of time as to get information from files is not an easy task. As everything is done manually, so if any record is misplaced then this would lead to a great loss to the owner and to the sales of products of the supermarket.

# METHODOLOGY:

## Prototype: Class Diagrams:

All the classes are inherited

## Features:

Most parts of our syllabus will be covered.

Classes, Inheritance, Encapsulation, Arrays, Conditions, Constructors, Access Modifiers, Data Hiding, Filing and many more!

## Libraries used:

* #include<iostream>
* #include<string.h>
* #include<conio.h>
* #include<unistd.h>
* #include<math.h>
* #include<fstream>
* #include<cstdio>
* #include<windows.h>

# Implementation:

The designed system implementation was done to replace a manual system with the computerized one. The objective was to put the tested system into operation. Critical aspects of conversion are not disrupting the functioning of the organization. This phase gives us clear pictures of our new system and all the points that have been carefully looked at, when designing the computerized system. Sincere efforts were taken for the implementation of the following goals.

* Maximizing the output reliability
* Maximizing the source test readability
* Minimizing the development time.

# RESULTS:

The results are concluded as follows:

* The owner checks in the stock and can make changes to employee data and have access to making changes in stock and changes in employee data.
* The customer can register or login if they have already registered, they can also login as a guest for seeing the stock and buying things from the inventory. The data taken from the customer will be hidden. The bill will be printed out at the end of the program.

# CONCLUSION:

We can hereby conclude that:

* The system effectively automated the functions involved in the processes being handled manually before.
* The system is secure & scalable. The system design has been done keeping user friendliness and efficiency in mind.