

**Even Semester 2018**

**SDF Project report on: Customer billing system**

**Submitted by:**

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**Introduction:**

It is a console application to demonstrate practical use of C programming language and its features as wells as to generate an application which can be used in any departmental stores,hotels, shops, cafes etc. for billing to the customer.

You can use this application to keep the records such as name, address, mobile number, paid amount, due amount, payment date etc. of your regular costumer. Moreover, if you have a new customer, you can add and edit the account at any time.

The source code of Customer Billing System Project in C has been written in C programming language without of the use of any graphics. It is compiled in Code::Blocks 13.12 using GCC compiler.

**Basic Data Structures used:**

**Arrays:**

Arrays a kind of data structure that can store a fixed-size sequential collection of elements of the same type. An array is used to store a collection of data, but it is often more useful to think of an array as a collection of variables of the same type.

Instead of declaring individual variables, such as number0, number1, ..., and number99, you declare one array variable such as numbers and use numbers[0], numbers[1], and ..., numbers[99] to represent individual variables. A specific element in an array is accessed by an index.

All arrays consist of contiguous memory locations. The lowest address corresponds to the first element and the highest address to the last element.

**Implementation of Arrays in the Project:**

Declaration of name , street, city, etc in character data type.

Moreover File handling is also implemented in the project.

**File Handling** concept in C language is used for store a data permanently in computer. Using this concept we can store our data in Secondary memory (Hard disk). All files related function are available in **stdio.h** header file.

**Implementation of File handling in the Project:**

The details entered by the customer must be stored for future references. Hence all the details must be written into a file and must be retrieved from it later on.

The data retrieval is done using the basic file handling function ‘fwrite’ in C.

**Important functions Implemented in the Project:**

The major user defined functions used in this C project are:

\* void input (): The function void input () is used to add the new customer account i.e. with the help of this functions the parameters such as name, address, phone number, amount paid etc. are asked and entered.

\* void writefile (): Another function void writefile () has been utilized to create a file on hard disc of computer for storing the information and data of a customer.

\* void search (): The function void search () has been used to look for previously stored accounts either by name or by number of the customer.

\* void output (): The function void output () has been used to show the result as console output.