

Customer Manager v1.0

Introduction:

Customer Manager is a revolutionary product for the market. The system helps manage customers, billing, view fees etc. This system is made from scratch and has high usability in managing your customer base whether it is small, medium or large.

Customer Manager was made with an understanding that it can handle huge data easily and keeps a record of each entry. This system is a huge upgrade for the business that manages records of their client, it can be a shop, mall, club or any warehouse.

This system is lightweight, user-friendly, quick and works smoothly on any device from laptop to any computer irrespective of the operating system. The software is robust, accurate and usable. This system is built on Java which runs on more than 3 billion devices. Since it is built Java language the internal data structure have not an issue working with a large set of data. So if your device can run Java it surely can run our system.

This system has no database attached to it so there is no hassle of creating any system admins/ logins/ database in your system. It works on CSV (Comma Separated Values) format file which is another way to store data in “.txt” or “.csv” (.csv is preferred). CSV files are easy to make handling and save data. Most popular spreadsheet tools have a function to convert the files to CSV.

Once that is done and your CSV file is ready you can use the CSV file as a database with this software.

System Requirement:

- Any modern operating system macOS, Windows or any flavour of Linux (like Ubuntu, Mint, Fedora etc.)
- Installed JAVA16 JRE 16, JDK 16 on the system

User Interface:

Customer Manager v1.0

Customer Type:

First Name:

Last Name:

Date of Birth:

Gender: ☐ Male ☐ Female

Address:

Contact No.:

Start Date:

Export

Search: **Find** **Clear** Filter:

ID	First Na...	Last Na...	Date of ...	Gender	Address	Contact ...	Age	Fees	Start Date	End Date	Membe...
485617	world	hello	13/08/...	Male	26	36	26		01/01/...		
225820	Aaron	Hank									
806305	Alba	Jessica									
913262	Anthony	Susan									
372156	Austen	Jane									
990660	Bacon	Francis									
869722	Barton	Joey									
568689	Beckett	Samuel									
327601	Bishop	Linda	18/12/...	female	"Mayfiel...	Richmo...	33				
743709	Bishop	Linda	18/12/...				33				
20694	Bishop	Lindsey									
132515	Bowen	Elizabeth									
304802	Bronte	Emily									
354880	Bush	George									
698830	Cameron	Kirk									
816061	Christie	Agatha									
23607	Clark	Wesley									
84178	Cole	Andrew									
86301	Cooper	Matt	15/10/...	male	12-1 M...	2202378	52				
80654	Cooper	Matt	15/10/...	male			52				
975175	Darwin	Charles									
239405	Dickinson	Emily									
319970	Dylan	Bob									
252063	Einstein	Albert									
636802	Feynman	Richard									
183374	Garland	Judy									
447728	Golding	William									
449815	Graham	Lindsey									
515545	Hathaway	Anne									
50430	Hathaway	Anne									
112	Hirsch	Marv									

Add Customer

Edit Customer

Delete Customer

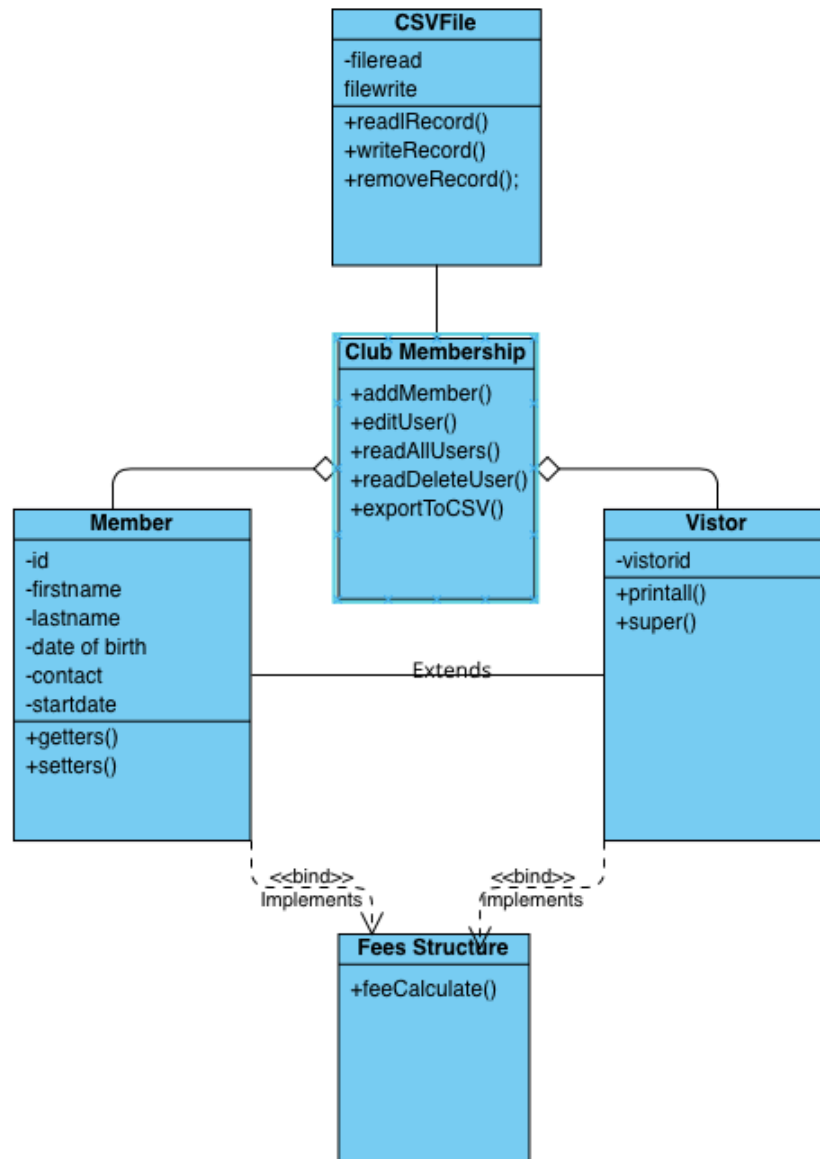
Gross Revenue

This is the user interface of Customer Manager v1.0. The user interface was made like this because it will be easier for a basic user to interact and perform the operation on the system. This is a single screen system so, there is no need for more windowed operations. The colour theme is dark so that it will be easy on the eye of the user whether the user/ operator is working day or night. We have also used a colour button so that it makes it easier for the user and do not accidentally click on the wrong button.

Core Functionalities:

- Automatically assign a new ID if the ID is not present for any record.
- You can perform basic CRUD (Create, Read, Update, Delete) operations on each record.
- Scalable table for large data which will be added.
- Can record all the basic information such as Name, Contact No. etc.
- Searching is a feature that can be used to search data in the table and
- Can also calculate the age of the date of birth is provided.
- You can filter your search using the "Filter" option and it can filter your data on basis of ID, First name etc.
- Understand the member division based on customer type (Single, Family, Visitor etc.)
- Automatically calculate the end date of the membership based on customer type elected.
- Can calculate the fees based on membership type.
- Can give the statistic of how many members are there in the system and total revenue.
- Export the table view into a CSV file.

System Architecture:



So there are two main classes `Member.java` and `Visitor.java`. Which have an interface common which is `Fees Structure`. The `feeCalculate` method is implemented in both classes. `Visitor` extends `Member` and due to that gets all the functions which are present in `Member`.

`Member` and `Visitor` classes are associated in `Club Membership` class which also hold the interface. This class has the main function from which the program starts. It creates new instances of `Member` and `Visitor` class and provides with CRUD operation (Create, Read, Update, Delete). `Club Membership` acts as a middle layer of the system.

`ClubMembership.java` also have an instance of the `CSVFile.java` file. `CSVFile.java` is responsible to read, write and deleting the record in the attached CSV file. The `CSVFile.java` acts as a data layer file.