CS211 Fundamentals of Programming Course Assignment   
Submission Template

**Team Number in Blackboard#: 6**

**Section Number #: F08**

**Chosen Program Topic: car rental system**

**Team Members:**

|  |  |  |
| --- | --- | --- |
|  | **Name** | **ID** |
| 1 (Leader) | Maimonah Altaweel | 2200002493 |
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Names of Arrays/arrays of structs in-use:

Dynamic arrays: new costumer[size], new booking[bSize], new cars[11].

date NotAvilableDate[20]

string bookingRecoredes[100]

List All Functions Prototype (Headers):

void addNewCostumer(costumer \*s, int &numOfItem,int size);

void addNewBooking(booking \*b ,int &bookingNOI, cars \*car,costumer \*cost, int carNumOfItems , int index);

int searchByCostumerID(costumer \* arr , int first , int last , string ID

int searchByBookingID( booking \* arr , int first , int last , string ID);

void disblayCarInfo(cars \*car, int numOfitems);

void updateCostumerInfo( costumer \*s, int index );

void deletebooking(booking \* arr, int& bookingNOI, costumer \*cost ,cars \*car, int numOfCars, int &numOfB , int &BCindex, int index, int Bindex);

void sortCustomers(costumer \* arr, int numOfItem);

void inFiles( costumer \* cost, int &numberOfItems, int size, booking \*BookingArr, int &bookingNumOf, cars \* carsArr, int &carsNumOfItem );

void outFiles( costumer \* cost, int &numberOfItems, int size, booking \*BookingArr, int &bookingNumOf, cars \* carsArr, int &carsNumOfItem );

void displayDate (int d,int m,int y , date \*dateArray);

void display( booking \*b, int index );

void display( costumer \*cost, int index );

void reportFile( costumer \*cost , int index , int Func);

Name the files used to read/write, and statistical report:

Book.txt

Car.txt

Cost.txt

Report.txt

Comments:

*Add here any comment or note you wish to pinpoint to your instructor.*

This system contains four structs ( booking, costumer, cars, and date) work together to enable the user to add a new customer and keep the old one in files with all related data. Besides that, it allows the user to add booking with specifications no prevent any conflicts. Also, the user can delete specific booking information, and it is all related data in the car array and customer array. Besides, enable the user to display customer information and save all data in the end in files. And provide a report that shows the action of the user.