

THE ONLINE RAILWAY TICKET BOOKING SYSTEM

SUBMITTED BY:

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UNDER THE ESTEEMED GUIDANCE OF

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ABSTRACT

- ▶ This project is about Online Railway Ticket Booking.
- ▶ For journey of longer distances though we have airways most of the people use the railways, which is most convenient, affordable means of transport in India. So keeping this in view, the reservation of railways is a most important task and it must be faster and efficient as the demand (travellers) is very high.
- ▶ In order to meet this demand, manual reservation is completely ruled out and it requires an efficient program to implement the online reservation. This program enables us to choose the train even there is no necessary to fill a form at the railway reservation counter, i.e. we can directly select from the choices provided for us with train numbers and their origin, departure time, destination & arrival time at that station and the class to travel in.
- ▶ If there is any concession, we can also avail it and then program gives us the final output as train ticket with the amount to be paid. It is completely developed in C language without using graphics.
- ▶ This project is compiled using DEV C++.

REQUIREMENTS

- ▶ **Creating Structures.**
- ▶ **String functions.**
- ▶ **Accessing different elements of Structure Array**
- ▶ **Files Handling.**

ADVANTAGES

- ▶ Online Reservation systems reduce workload for staff, waiting time in ticket counters for passengers, and optimise customer service. These can make bookings easier, simpler and the availabilities are updated with each booking.
- ▶ Structures gather more than one piece of data about the same subject together in the same place.
- ▶ It is helpful when you want to gather the data of similar data types and parameters like first name, last name, etc.
- ▶ It is very easy to maintain as we can represent the whole record by using a single name.
- ▶ You can use an array of structure to store more records with similar types.

CONCEPTS USED

- Structure
- Structure arrays
- Files
- Switch Case Statements
- If Else Statements

FILES

A file is a collection of data that is kept on a secondary device such as a hard disc. A file is typically used to store significant amounts of data in real-world applications. Regardless matter whether it's a text or binary file, a file represents a sequence of bytes.

STRUCTURES

In C/C++, a structure is a key word that defines a user-defined data type. A structure provides a data type that can be used to combine objects of potentially disparate types into a single type. Structure variables can be defined either as part of the structure declaration or as a separate declaration, similar to basic types.

STRUCTURE ARRAYS

An array of structures in C can be defined as the collection of multiple structures variables where each variable contains information about different entities. The array of structures in C are used to store information about multiple entities of different data types. The array of structures is also known as the collection of structures.

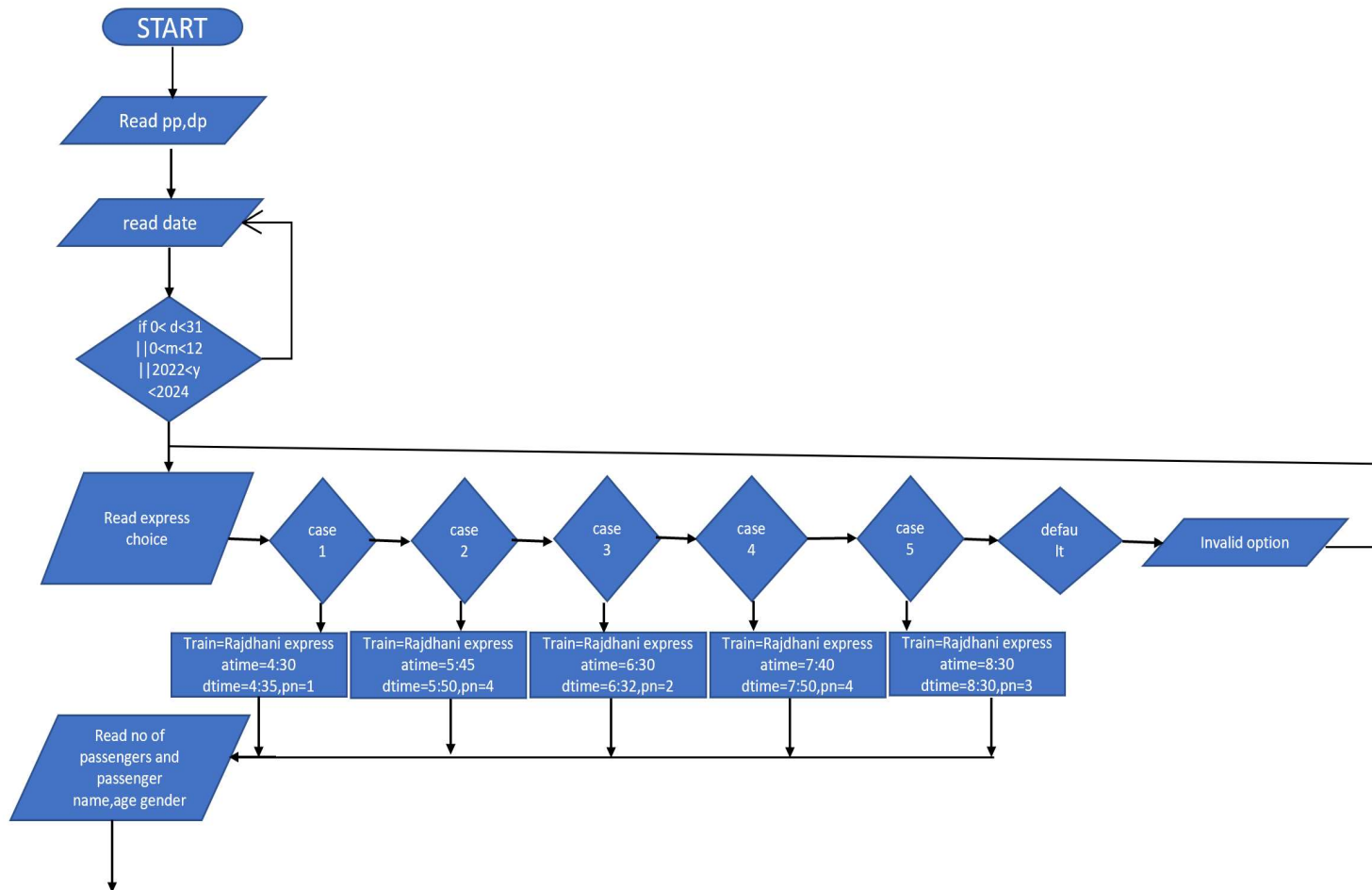
SWITCH CASE STATEMENTS

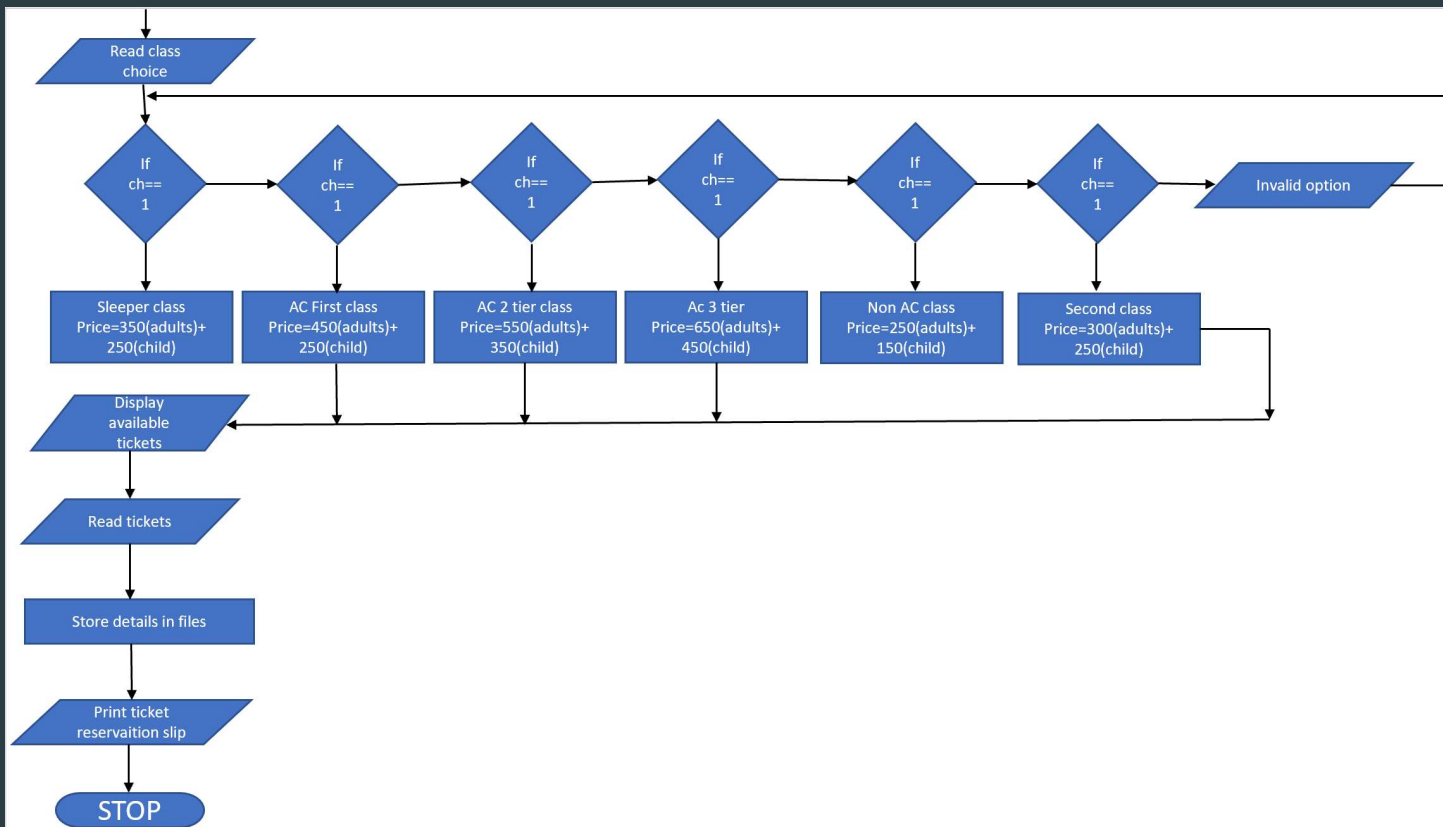
The switch statement allows us to choose one of many possible code blocks to execute. The switch statement's syntax, on the other hand, is significantly easier to read and write. The expression is evaluated once and the values of each case label are compared. If a match is found, the statements following the matching label are executed. If the expression's value is constant2, for example, sentences after case constant2: are performed until a break is met. If no match is found, the default statements are used.

IF ELSE STATEMENTS

If a particular condition is true, the if/else statement executes a block of code. Another block of code can be performed if the condition is false. The if/else statement is part "Conditional" Statements, which are used to conduct various actions depending on certain situations.

FLOW CHART





OUTPUTS

```
C:\Users\dhana\Downloads\Telegram Desktop\Train Ticket reservation.exe

*****
*          DS PROJECT ON          *
*    ONLINE RAILWAY TICKET BOOKING    *
*          SUBMITTED BY:          *
*    2010030057  A. Monika          *
*    2110030444  K.DHANA SREE        *
*    2110030093  SHAIK AMAAN HUSSAIN *
*          UNDER THE ESTEEMED GUIDANCE OF          *
*    Dr. Ramasubramanian Krishnamurthy          *
*          Associate Professor          *
*****
```

```
E:\Programming\Programs\2nd sem\Project\Train_booking_final.exe

=====
||      WELCOME TO IRCTC SERVICES      ||
=====

Enter source location      : Hyderabad

Enter destination point : Khammam

Enter date of journey
date : 07

month : 12

year :2022

=====

AVAILABLE TRAINS ARE
S.NO   TRAIN.NO   EXPRESS NAME   ARRIVES   DEPART   PLATFORM
1.     1217       Rajdhani Express   04:30     04:35     1
2.     1457       Godavari Express   05:45     05:50     4
3.     1218       Chennai Express    06:30     06:32     2
4.     1457       EastCoast Express   07:45     07:50     4
5.     1457       Satabdhi Express    08:30     08:33     3

enter your choice : 3

=====

CHOOSE CLASS
[1] => Sleeper Class
```

```
E:\Programming\Programs\2nd sem\Project\Train_booking_final.exe
CHOOSE CLASS
[1] => Sleeper Class
[2] => AC first class
[3] => AC 2 tier class
[4] => AC 3 tier class
[5] => NON AC
[6] => second class 3

Enter no of tickets : 1

Enter Passenger 1 details
    passenger 1 name: Amaan
    passenger 1 gender(M/F): M
    passenger 1 age: 18

Enter contact no : 9347268815

Seating arrangement is

[1]  [2]  [3]  [4]
[5]  [6]  [7]  [8]
[9]  [10] [11] [12]
[13] [14] [15] [16]
[17] [18] [19] [20]
[21] [22] [23] [24]
[25] [26] [27] [28]

Avaliable seats are in colour green
Select 1 seats 6

WELCOME TO IRCTC SERVICES

=====
|| ELECTRONIC RESERVATION SLIP ||
=====

Booking time and date : Wed Jun 01 20:24:23 2022

ticket ID : 444939347268815

Source location : Hyderabad

Destination point : Khammam

Date of journey : 2-12-2022
```

```

E:\Programming\Programs\2nd sem\Project\Train_booking_final.exe
||      ELECTRONIC RESERVATION SLIP      ||
=====
Booking time and date : Wed Jun 01 20:24:23 2022

ticket ID       : 444939347268815
Source location  : Hyderabad
Destination point : Khammam
Date of journey  : 2-12-2022
Date of Departure : 3-12-2022
No. of tickets   : 1
No of adults     : 1
No of children   : 0
contact number   : 9347268815
-----
S.No   Name      Gender  Age   TicketNo.
1      Amaan    M      18    6
-----

Total fare      : Rs.550
Express name     : Chennai Express
Train arrival time : 06:30 pm
Train departure time : 06:32 pm
Class Name       : AC 2 tier Class
Platform Number  : 2

For More Details Contact Us On
011-23340000 / 011-23340001 / 011-23340002 / 011-23340003

-----
Process exited after 45.65 seconds with return value 0
Press any key to continue . . .

```

WELCOME TO IRCTC SERVICES

=====

|| ELECTRONIC RESERVATION SLIP ||

=====

Booking time and date : Wed Jun 01 20:24:23 2022

Ticket ID : 21100304449347268815

Source location : Hyderabad contact number : 9347268815

Destination point : Khammam Total fare : Rs.550

Date of journey : 2-12-2022 Express name : Chennai Express

Depart on : 3-12-2022 Train arrival time : 06:30 pm

No. of tickets : 1 Train departure time : 06:32 pm

No of adults : 1 Class Name : AC 2 tier Class

No of children : 0 Platform number : 2

S.No	Name	Gender	Age	TicketNo.
1	Amaan	M	18	6

For More Details Contact Us On

011-23340000 / 011-23340001 / 011-23340002 / 011-23340003

CONCLUSION AND FUTURE ENHANCEMENT

- ▶ This project is about implementing online train ticket booking system. This simplifies the risks and makes things faster in the mode of railways.
- ▶ We are creating and operating a Structure array,files to store multiple records of people who booked a train ticket and update after every booking.
- ▶ We have successfully created a c program to book tickets online and stored the details in files.
- ▶ In future online booking applications will be widely used. Bookings are made simpler and easily accessible.
- ▶ In the future, we would like to implement cancel reserved tickets and add payment options as well.
- ▶ We would also like to add GPS tracking of train location and provide extra features to bookings.

OUTCOME

- ▶ Through this project, we are able to understand the backend working of real time applications.
- ▶ We learnt the importance and use of files, structures, array, switch cases etc. to drive the programming further.
- ▶ We are able to develop our skills in C language and got to know its importance in creating applications.
- ▶ We are thankful to Dr. Ramasubramanian Krishnamurthy Sir for assigning this project to our group.

*Thank
you*

