REPORT

C Programming on Multiple Platforms - Project Based Learning Approach

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Project Title: Tourism Management system

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1. Requirements

1.1 Description

- The Tourism management system allows user to access all the details regarding complete tour package such as Traveller details, amount, events, etc. The main purpose of this system is to help tourism companies to manage customer details and hotels.

1.2 Identifying feature

1. Choice of international and India tour.
2. Display of different places based on selected tour type.
3. Traveler details are stored.
4. Generating nodes based on number of Traveler.
5. Display of booked tour receipt.

1.3 State of Art/Research

Tourism management project helps to automate all the process of travel and tourism, that deals with booking, display of visiting places with package, user details etc. This design is built using simple C programming structures. The main purpose is to help tourism companies to manage customer details and hotels. This design is very user friendly, easy to access the details regarding tour package with confirmation details displayed on generated receipt.

1.4 High level requirements

Id	Description	Category	Status
HLR1	User menu display regarding tour	Technical	Implemented
HLR2	Choose of tour package	Technical	Implemented
HLR3	Details of Traveler	Technical	Implemented
HLR4	Generation of booked package receipt	Technical	Implemented

Table 1.4

1.5 Low level requirements

Id	Description	Category	Status
LLR1	user choice to select international or national tour	Technical	Implemented
LLR2	user choice of different tour package	Technical	Implemented
LLR3	Details of Traveler such as date, gender, name, age	Technical	Implemented
LLR4	Receipt if generated regarding booked package with details	Technical	Implemented

Table 1.5

1.6 SWOT Analysis

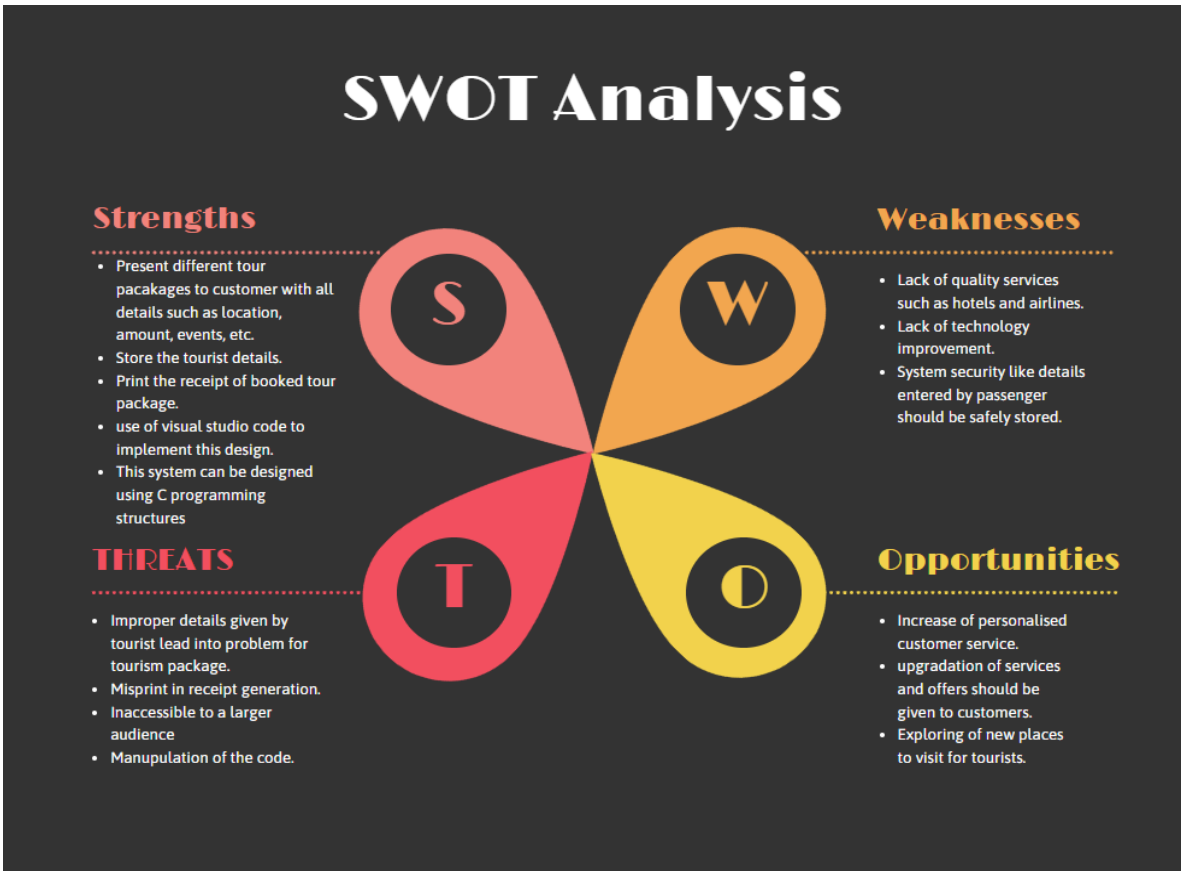
SWOT Analysis
Strengths
Present different tour pacakages to customer with all details such as location, amount, events, etc.
Store the tourist details.
Print the receipt of booked tour package.
use of visual studio code to implement this design.
This system can be designed using C programming structures
Weaknesses
Lack of quality services such as hotels and airlines.
Lack of technology improvement.
System security like details entered by passenger should be safely stored.
S
W
T
O
THREATS
Improper details given by tourist lead into problem for tourism package.
Misprint in receipt generation.
Inaccessible to a larger audience
Manupulation of the code.
Opportunities
Increase of personalised customer service.
upgradation of services and offers should be given to customers.
Exploring of new places to visit for tourists.

Figure 1.6

1.7 4W's-1H

- **WHO -**

This system will help the tourism company members to manage customer details and hotels.

- **WHAT -**

Provide easy actions that can be done by the customers to book their tour.

- **WHEN -**

Online management is trending in today's era and Tourism management system plays an important role in present century.

- **WHERE -**

This is implemented in tourism companies and hotels.

- **HOW -**

It can be used by everyone, its user friendly, ease of use.

2. Design

2.1 Structural diagram

2.1.1 Class diagram

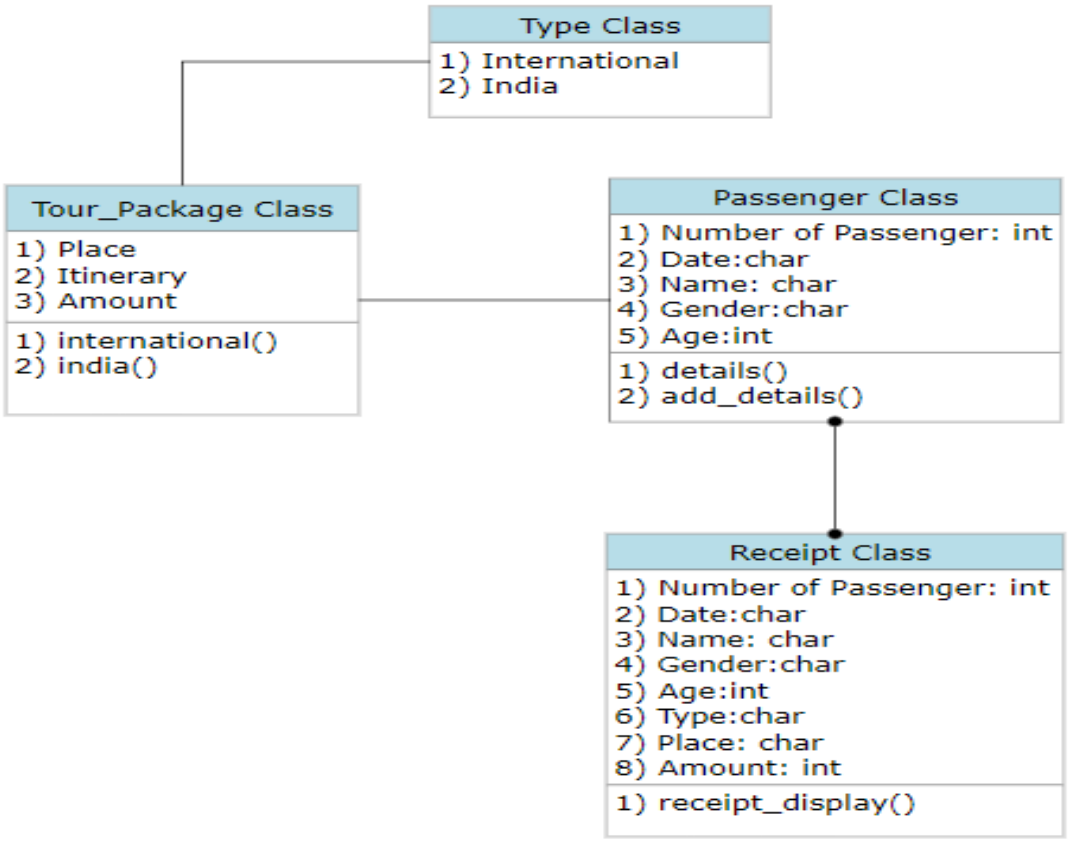

Figure 2.1.1

2.2 Behavioral diagram

2.2.2 Use case diagram

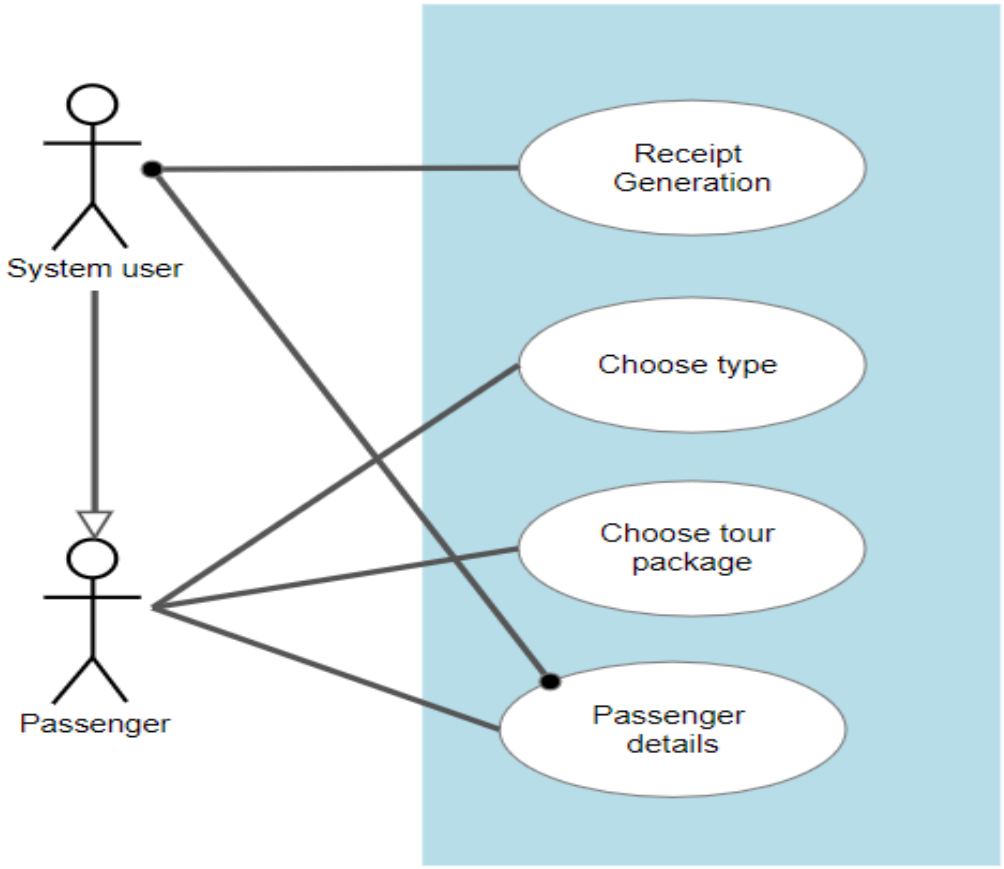

Figure 2.2.2

2.3 Flowchart

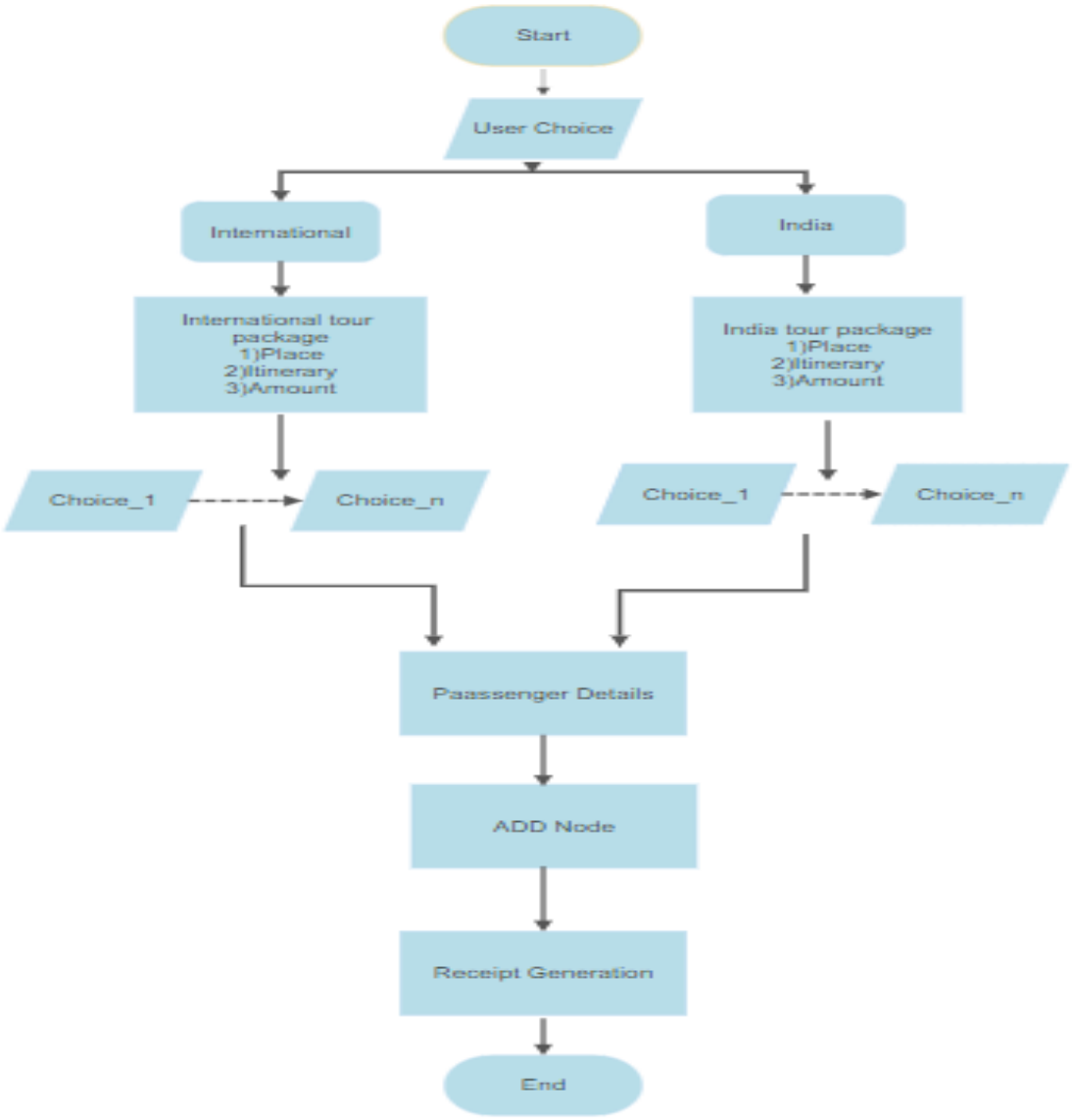

Figure 2.3

3. IMPLEMENTATION

This design is implemented in visual studio code using WSL Linux commands.

1. Ask the user to choose between international or India tour package.

- This operation is implemented using switch case statements.

2. Display the particular tour packages with amount.

- This function is implemented in if-else condition statement after user's choice.

3. Traveler details are entered like number of Travelers, name, age, gender.

- After the user entered details, we add nodes using structures based on number of Travelers.

4. Finally a receipt is generated of booked package tour, containing name, age, gender, tour package, date, etc.

4. Test plan and Output

4.1 High level Test plan

Test ID	Description	Expected i/p	Expected o/p	Actual o/p	Type of test
H_01	Check for the tour menu display	Program execution	Formatted menu display	Formatted menu display	Requirement
H_02	check if all package tour is available	user choice	Formatted menu display	Formatted menu display	Requirement
H_03	Check the details to enter for Traveller menu is displayed	enter details	Proper display of details menu and read the input details	Proper display of details menu and read the input details	Requirement
H_04	display of receipt	Program execution	Formatted Package tour display	Formatted Package tour display	Requirement

Table 4.1

4.2 Low level Test plan

Test ID	Description	Expected i/p	Expected o/p	Actual o/p	Type of test

L_01	Display of choice between international and india tour	User choice	Based on the choice particular fumction is called	Based on the choice particular fumction is called	Technical
L_02	Display of different tour packages for the corresponding selected type	user choice	Reading of input and copying data to string	Reading of input and copying data to string	Technical
L_03	Traveller details should be entered by user	enter details	Reading of input and adding node function is called based on number of traveller	Reading of input and adding node function is called based on number of traveller	Technical
L_04	Booked tour receipt is generated	-	Detailed information of traveller is displayed with selected tour package	Detailed informatio n of traveller is displayed with selected tour package	Technical

Table 4.2

4.3 Output:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL

yukta_k@LAPTOP-924I663U:/mnt/h/Github_module1/M1_ProjectGoal_App-1/3_Implementation$ gcc tour_manage.c
yukta_k@LAPTOP-924I663U:/mnt/h/Github_module1/M1_ProjectGoal_App-1/3_Implementation$ ./a.out
                              ***TOUR MANAGEMENT SYSTEM*
                              1. International Tour Packages
                              2. India Tour Packages
                              Enter Choice : 2
                              1. Kerala Tour Packages 5 Days 4 Nights (19880/-)
                              2. Manali Tour Packages 6 Days 5 Nights (37500/-)
                              3. Himachal Tour Packages 9 Days 8 Nights (20000/-)
                              Enter Choice: 3
                              Enter Number Of Travellers: 2
                              Enter Date (DD/MM/YY): 12/02/2022
                              Enter The 1th Traveller Name: scotch
                              Enter The 1th Traveller Gender: male
                              Enter The 1th Traveller Age: 21
                              Enter The 2th Traveller Name: jenny
                              Enter The 2th Traveller Gender: male
                              Enter The 2th Traveller Age: 21

                              **Take Screenshot For Further Use**
        1st Traveller  Name :scotch
        1st Traveller Gender:male
        1st Traveller Age: 21
        -------------------------
        2st Traveller  Name :jenny
        2st Traveller Gender:male
        2st Traveller Age: 21
        -------------------------
        Selected Type: India Tour Package
        Package: Himachal Tour
        Date:12/02/2022
        -------------------------
        Total Amount: 40000

                              **Thank You For registration**
yukta_k@LAPTOP-924I663U:/mnt/h/Github_module1/M1_ProjectGoal_App-1/3_Implementation$
```

Figure 4.3

4.3.1 Multifile output:

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL

yukta_k@LAPTOP-924I663U:/mnt/h/Github_module1/M1_ProjectGoal_App-1/3_Implementation/Multifile$ gcc project_main.o tour_manage.o -o tourm.out
yukta_k@LAPTOP-924I663U:/mnt/h/Github_module1/M1_ProjectGoal_App-1/3_Implementation/Multifile$ ./tourm.out
                            ***TOUR MANAGEMENT SYSTEM*
                            1. International Tour Packages
                            2. India Tour Packages
                            Enter Choice : 2
                            1. Kerala Tour Packages 5 Days 4 Nights (19880/-)
                            2. Manali Tour Packages 6 Days 5 Nights (37500/-)
                            3. Himachal Tour Packages 9 Days 8 Nights (20000/-)
                            Enter Choice: 2
                            Enter Number Of Travellers: 2
                            Enter Date (DD/MM/YY): 12/02/2022
                            Enter The 1th Traveller Name: jenn
                            Enter The 1th Traveller Gender: male
                            Enter The 1th Traveller Age: 22
                            Enter The 2th Traveller Name: scotch
                            Enter The 2th Traveller Gender: male
                            Enter The 2th Traveller Age: 22

                            **Take Screenshot For Further Use**
        1st Traveller  Name :jenn
        1st Traveller Gender:male
        1st Traveller Age: 22
        -------------------------
        2st Traveller  Name :scotch
        2st Traveller Gender:male
        2st Traveller Age: 22
        -------------------------
        Selected Type: India Tour Package
        Package: Manali Tour
        Date:12/02/2022
        -------------------------
        Total Amount: 75000

                            **Thank You For registration**
yukta_k@LAPTOP-924I663U:/mnt/h/Github_module1/M1_ProjectGoal_App-1/3_Implementation/Multifile$
```

Figure 4.3.1