Department of Computer Engineering
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CS353 Database Systems

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Term Project Proposal Report

Tour Reservation Management System

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1. Introduction **3**

2. Description **3**

2.1 Why do we use a database for Tour Reservation Management System? 4

2.2 How do we use a database for Tour Reservation Management System? 4

3. Requirements **5**

3.1. Functional Requirements 5

3.2. Nonfunctional Requirements 5

3.2.1 Security 5

3.2.2 Usability 6

3.2.3 Performance 6

3.2.4 Reliability 6

4. Limitations **6**

5. E/R Diagram **7**

6. Conclusion **8**

7.Website **8**

1. Introduction

This is the project proposal for the Tour Reservation Management System named OscaTour which is designed for making reservations for a tour company.

This proposal includes the description of the project, functional and nonfunctional requirements, limitations and entity relationship model of this reservation system.

2. Description

OscaTour is a web-based tour reservation platform where the customers make reservations, which are created by the company, for a tour for their holidays.

When customers enter the system, in the home page, they are expected to select a tour type which are hotel and cruise. In cruise tours, customers stay the night in the ship. They can select their room types in the system as well because there are many rooms with different locations and sizes. In hotel tours, customers are not able to select their room types in this platform. Their rooms will be assigned them when they arrive at hotel. After selecting the tour type, number of adults who are older than 12 and number of children must be selected. Then the available tours will be listed. Customers can see the details of each tour. Tours will be arranged at least for 2 nights accommodation. In the details of tours, start and end day of the trip, cities that will be visited, transportation types between the cities, detailed hotel information if it is a hotel tour or cruise information otherwise, the number of days of accomodation for each city, the price and city-specific subtours can be seen. Subtours are short-term optional tours. For each city in the selected tour, there will be a couple of small trips according to the number of places that should be visited in the city. Thus, subtours will be held in the current city. Subtours have extra prices. Customer must select which subtour(s) s/he will attend on the system before the payment. Children benefit from some promotions. A person who is 12 or under 12 years old, is accepted as a child according to the system. For one adult, no payment is needed for one children for any tour. For example, if there are 2 adults and 2 children, no payment is taken for children. If there are 2 adults and 3 children, the price for one children must be paid. For subtours, payment is needed for children who are older than 6 years old. After all the selections for a tour, payment must be done. A person who made payment is accepted as a Customer in this system. A customer can make payment for other people, called Dependants. For example, a customer can make a reservation for his whole family. Customer becomes a contact person for tour. Customer’s identity card number, name, surname, phone number, e-mail address, date of birth, credit card number and passport number if it is an abroad tour are needed. Also, some information of others whose payment is done by

the customer is needed. For children second contact person is needed. After making payment, the reservation is done and reservation id is created. Customer can display his/her reservation with this reservation id number in detail. Also, customers are able to cancel their reservations until a specified day by the company.

2.1 Why do we use a database for Tour Reservation Management System?

We use database for several reasons.

Data storage: We need to store a big amount of information. There will be various tours and their subtours in our system. The hotel information, cruise information, prices, the rotations, transformation types, dates etc. are all needed to be stored in the system. Database is the most appropriate way to do this.

Manipulation: Database allows manipulation of data. In our system, customers can cancel their reservations until a specified deadline and tours that are out of date should not be shown to the customers. Thus, to update and analyze data easily and quickly, database is needed.

Accessing data: Accessing data easily is an important issue for our system. After payment, customers should be able to display their detailed reservation informations. Admins should be able to display current tours and subtours to maintain the system. Since simple data structures cannot be used in such a large amount of data, we need database.

2.2 How do we use a database for Tour Reservation Management System?

We will use database to store the information of tours that are composed of subtours, prices, promotions, dates, rotations, transformation types, accomodation types which includes hotel and cruise information in detail. Also, we will store the reservation information for a customer who made reservation through the system. Customer's and his/her accompanists' (such as children) identity information will also be stored. When customer entered the system with reservation id which is given after the payment, customer should be able to display the reservation information. In addition, customers will be able to cancel their reservations until a specified day so that if a customer cancels his/her reservation, we must also update the data. Thus, we will use database for updating data.

3. Requirements

Functional and Non-Functional requirements explained comprehensively in the following sections.

3.1. Functional Requirements

There are two main users of the platform: Customer and Admin.

- All Customers should be able
    - to make reservations for more than one person
    - to cancel their reservations due to a specified day
    - to benefit from promotions for their children according to their ages
    - to select the tour type which are hotel and cruise
    - to select the room types for cruise tours
    - to see all the dates for a tour
    - to see the hotel/cruise information in detail (number of stars, capacity of the cruise ship etc.)
    - to see all the transportation types (plane, bus, train etc.)
    - to see all the subtours within the selected tour
    - to select the subtours to attend
    - to see the total price that will be paid
    - to make payment through the system
    - to display their reservation information in detail

- Admin should be able
    - to get payment from the customer
    - to create a reservation for a customer
    - to add/delete tours to the system
    - to add/delete subtours to the system

3.2. Nonfunctional Requirements

Non-functional requirements are:

3.2.1 Security

- Customers should make the payment securely through the system.
- Customers' personal information such as identity numbers should be kept in secure.

3.2.2 Usability

- The website should be understandable and usable for all people who are older than age 18.
- User interface should be functional for users.

3.2.3 Performance

- The response time of the system should be sufficiently short.

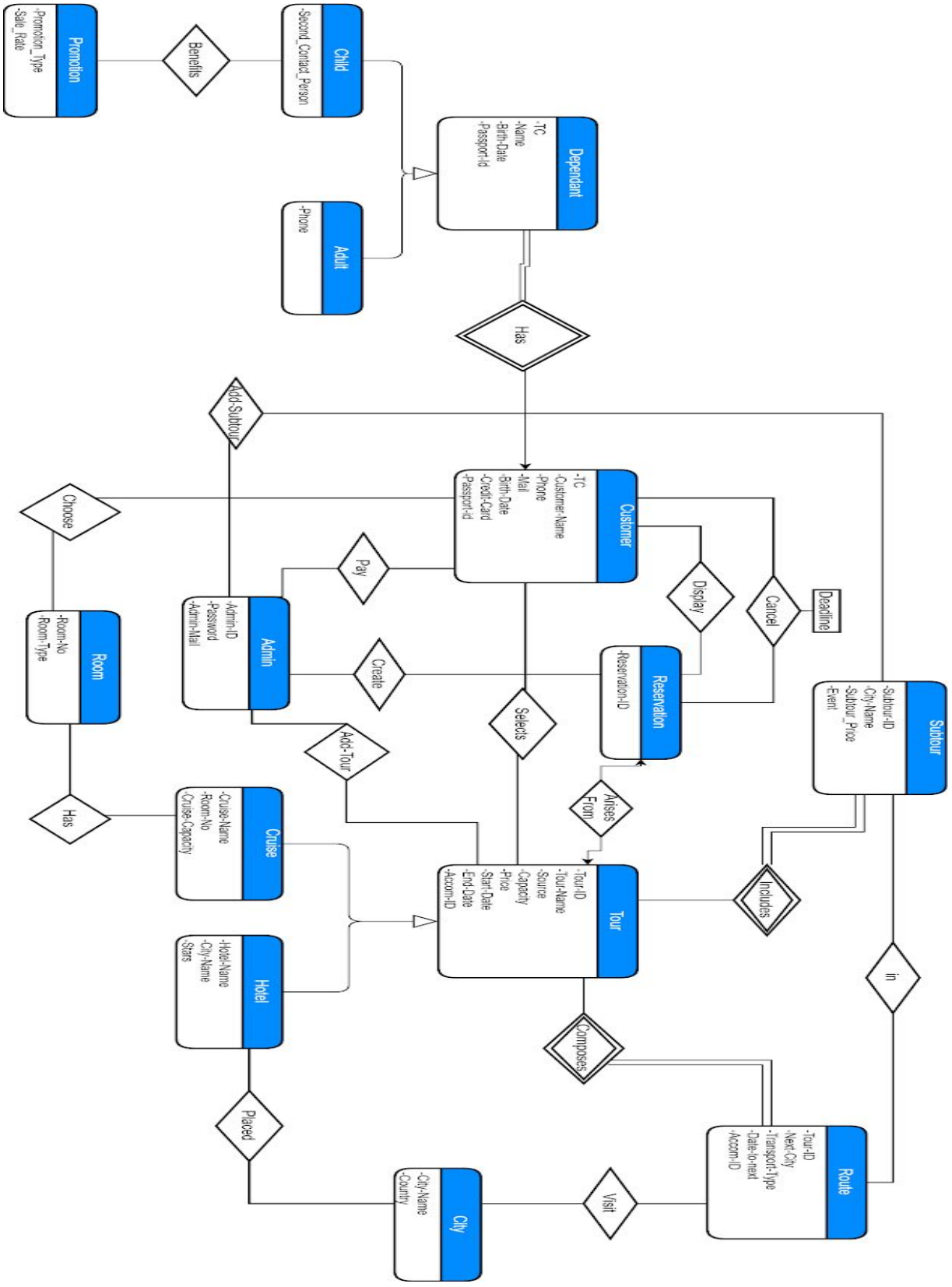
3.2.4 Reliability

- The procedure for reservation should work without any failure that constrains the customer return to beginning.
- System should be updated and always gives correct information

4. Limitations

- Customers cannot cancel their reservations after the the specified day for cancellation.
- Customers cannot select their hotels within a tour.
- Customers cannot select their rooms for hotel tours.
- Customers cannot select transportation types between cities.
- Customers cannot change the arrival days for any city in the tour.
- Customers cannot make reservations without making payment in the last step.
- Customers should be at least 18 years old to make a reservation.

5. E/R Diagram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-Sale_Rate
Benefits
Child
-Second_Contact_Person
Dependant
-TC
-Name
-Birth-Date
-Passport-id
Adult
-Phone
Has
Add-Subtour
Choose
Customer
-TC
-Customer-Name
-Phone
-Mail
-Birth-Date
-Credit-Card
-Passport-id
Pay
Display
Cancel
Deadline
Room
-Room-No
-Room-Type
Admin
-Admin-ID
-Password
-Admin-Mail
Create
Reservation
-Reservation-ID
Subtour
-Subtour-ID
-City-Name
-Subtour_Price
-Event
Add-Tour
Selects
Has
Cruise
-Cruise-Name
-Room-No
-Cruise-Capacity
Arises From
Includes
Tour
-Tour-ID
-Tour-Name
-Source
-Capacity
-Price
-Start-Date
-End-Date
-Accom-ID
in
Hotel
-Hotel-Name
-City-Name
-Stars
Composes
Placed
Route
-Tour-ID
-Next-City
-Transport-Type
-Date-to-next
-Accom-ID
City
-City-Name
-Country
Visit

6. Conclusion

OscaTour is a web-based Tour Reservation Management System which allows customers make reservations for various tours online. With this reservation system, customers can easily find holiday tours according to their interests and make their reservations securely at their home. There are two different tour types classified for their accomodation types, hotel and cruise. Customers are able to see all the current tours in the system and look their detailed information. They can make reservation any tour that is available by making payment. Customers can cancel their reservations until a specific day.

This report denoted the tour reservation management system's properties and how the procedure is, its functional and non-functional requirements, its limitations and its visualized E/R diagram.

7.Website

Our project website : http://seckin93.github.io/oscatour