AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY DHAKA-1208, BANGLADESH.

# Department of Computer Science and Engineering Spring 2019

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Course Title: Distributed Database Systems Lab Topic: Project Submission

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**Introduction**: ***The Restaurant Management System***facilitates the needy persons with providing delicious food items into different branches. Available food item can be ordered, canceled or upgraded through the system. The aim of this case study is to design and develop a database maintaining the records of different food orders, customer’s information, available food items and different branch information.Our aim is to reduce the manual errors involved in the order and cancellation of food items in order to make it convenient for the customers and providers to maintain the data about their customers.

## Relations and Sites:

Global Relations:

menu( m\_id int,m\_name varchar(30),price number,m\_type varchar(15), PRIMARY KEY(m\_id)).

branch(b\_id int,b\_name varchar(15),b\_address varchar(80),PRIMARY KEY(b\_id)).

customer(c\_id int,c\_name varchar(15),c\_address varchar(15),c\_phone number,c\_type varchar(15),b\_id int,

PRIMARY KEY(c\_id),FOREIGN KEY(b\_id) REFERENCES branch(b\_id)).

orders(o\_id int,o\_date date,o\_quantity int,o\_type varchar(15),c\_id int,m\_id int,b\_id int,PRIMARY KEY(o\_id),

FOREIGN KEY(c\_id) REFERENCES customer(c\_id),FOREIGN KEY(m\_id) REFERENCES menu(m\_id)

FOREIGN KEY(b\_id) REFERENCES branch(b\_id)).

booking(RID int,duration varchar(15),RDate date,RTime varchar(15),RType varchar(15),c\_id int,

PRIMARY KEY(RID),FOREIGN KEY(c\_id) REFERENCES customer(c\_id)).

**Fragmentation Schema:**

customer1 = SLCID < 200 (Customer)

customer2=SLCID > =200 (Customer)

branch1=SLb\_id == 1 (branch)

branch2=SLb\_id == 2 (branch)

order1=SLo\_id == 1 (orders)

order2=SLo\_id == 2 (orders)

menu1 = SLm\_id ==1(menu)

menu2 = SLm\_id ==2(menu)

**Allocation Schema:**

There are three sites in our project.

Fahim (Banani): menu1, order1, customer1, branch1, booking1

Farhan (Gulshan): menu2, order2, customer2, branch2, booking2

Shibbir (Admin)

## Procedures, Functions, Triggers, Exception, Views:

Procedures:

1. all\_branch\_selling (s in varchar): The procedure was created to calculate and show the total selling of a specific branch.
2. bookingCheck(givendate in DATE): The procedure was created for an admin in order to check the booking list of food items in a specific date.
3. delete\_customer(CCID in number) The procedure was created to delete any customer using a perimeter CCID as customer ID.
4. update\_customer(new\_CID in number,old\_CID in number): The procedure was created to update the customer id.
5. ordering\_list(fromDate varchar,toDate varchar): The procedure was created for the items have been ordered within a date range.
6. searchMenu(fromPrice in number,toPrice in number): The procedure was created to show the food menu which have been priced within a specific range.
7. updatemenu(id number,p number): The procedure takes id of an item as parameter and update the price of the menu.

Function:

1. branchsellingfunction(s in varchar): The function takes the current station no as input and looks for the cheapest train available and returns the fair value. The function was created for passenger who are looking for the cheapest priced trains.
2. Checkbookingfunction(given in date): The function takes a date as input and check the total booking list of food items in a specific date.
3. Update\_customer(new\_CID in number,old\_CID in number): The function is created to update the customer id.
4. Ordering\_list(given in date,given in date): The function takes two date as parameter and shows the ordered list of all items between the date range.
5. Searchmenu(s in number, y in number): The function takes two number as parameter in order to show the menu item available between these two price that is previously taken as parameter.
6. Updatemenu(s in number, y in number): The function takes two number as parameter to change or update the price of a specific food item where first parameter is for menu id and the last one is for updated price value.

Triggers:

* Customer\_trigger\_farhan: This trigger is created to delete or update a customer id from site farhan(Gulshan).
* Customer\_trigger\_fahim: This trigger is created to delete or update a customer id from site fahim(Banani)

## Functionality of the project:

* Any branch can include customer,menu,order.
* Admin can control every information of the branches
* Admin can see the orderlist,update price,update customer information, update the menu items.