Hotel Management System

Members:

- *Sachin Hansda (111601019)*
- *Surendra Baskey (111601027)*
- *Akash Cheerla (111601029)*

Contributions:

Sachin:

Week 1:

Requirement specifications and relations between entities

Week 2:

Collectively developed schema with other group members, mostly correcting the schemas and sql queries for schema development

Week 3:

Added few more entities and their attributes, discussed roles, views and triggers

Week 4:

Created web pages

Week 5:

Wrote the sql command for views and roles.

Surendra:

Week 1:

Made ERD

Week 2:

Collectively developed schemas with group members, most parts were done by him

Week 3:

Extended the ERD, discussed roles, views, triggers

Week 4:

Inserted some datas in project database and gave few ideas for web pages

Week 5:

Normalize some tables in BCNF form and write the sql command for Trigger Implementation

Akash:

Week 1:

Created of different entities and their attributes

Week 2:

Collectively developed schema with other group members

Week 3:

Wrote roles, views and triggers with few discussions with other group members

Week 4:

Inserted some datas in project database and gave ideas for web pages

Week 5:

Normalize some tables in BCNF form and write the sql command for Trigger Implementation

The main objective of the entire activity is to automate the process of day to day activities of Hotel like:

- Room activities,
- Admission of a New Customer,
- Assign a room according to customer's demand,
- Checkout of a computer and releasing the room
- Finally compute the bill etc.
- Packages available.
- Advance online bookings.
- Online Cancellation.
- List of Regular customers.
- Feedbacks
-

Requirements from users point of view

- *Each Hotel has different kinds of rooms*
- *Each room has different facilities*
- Each hotel can have more 1 room of same type
- Services should be associated with a room type
- A room should be in a hotel

- A customer *can book any number of rooms at any hotel*
- *An employee can work at only hotel*
- *Every booking is associated with hotel, room and customer*
- *Every booking will have a unique payment*
- *Can Cancel the room at any point*
- *Can choose the payment method*
- *Availability of room*

Entities and their attributes :

HOTEL ENTITY : Attributes of Hotel are

- ***hotel_id,***
- ***hotel_name,***
- ***hotel_type,***
- ***hotel_rent,***
- ***hotel_description,***
- ***hotel_address***

ROOMS Entity: Attributes of rooms are

- ***room_number,***
- ***room_category,***
- ***room_type,***
- ***room_description,***
- ***occupied***

SERVICES Entity: Attributes of Services are

- ***service_id,***
- ***service_name,***
- ***service_type,***
- ***service_description***

PAYMENT Entity: Attributes of Payments are

- ***payment_id,***
- ***payment_date,***
- ***payment_amount,***
- ***payment_description***

BOOKING Entity: Attributes of Booking are

- ***booking_id,***
- ***booking_title,***
- ***booking_type,***

- ***booking_date,***
- ***booking_description***

CUSTOMER Entity: ***Attributes of Customers are***

- ***customer_id,***
- ***customer_name,***
- ***customer_mobile,***
- ***customer_email,***
- ***customer_address***

EMPLOYEE Entity: ***Attributes of Employee are***

- ***emp_id,***
- ***emp_name,***
- ***emp_contact,***
- ***emp_salary,***
- ***emp_address,***
- ***emp_designation***

FEEDBACK Entity: Attributes of Feedback are

- ***feedback_date***
- ***rating***
- ***review***

FOOD_SERVICE Entity: Attributes of Food_service are

- ***food_service_id***
- ***food_service_date***
- ***food_service_time***
- ***food_service_bill***

FOOD_ORDER Entity: Attributes of Food_order are

- ***Food***
- ***Quantity***
- ***Price***

VEHICLE_RENT Entity: Attributes of Vechicle_rent are

- ***Vehicle_type***
- ***Vehicle_no***
- ***Rental_date***
- ***Rental_time***
- ***Rental_rate***

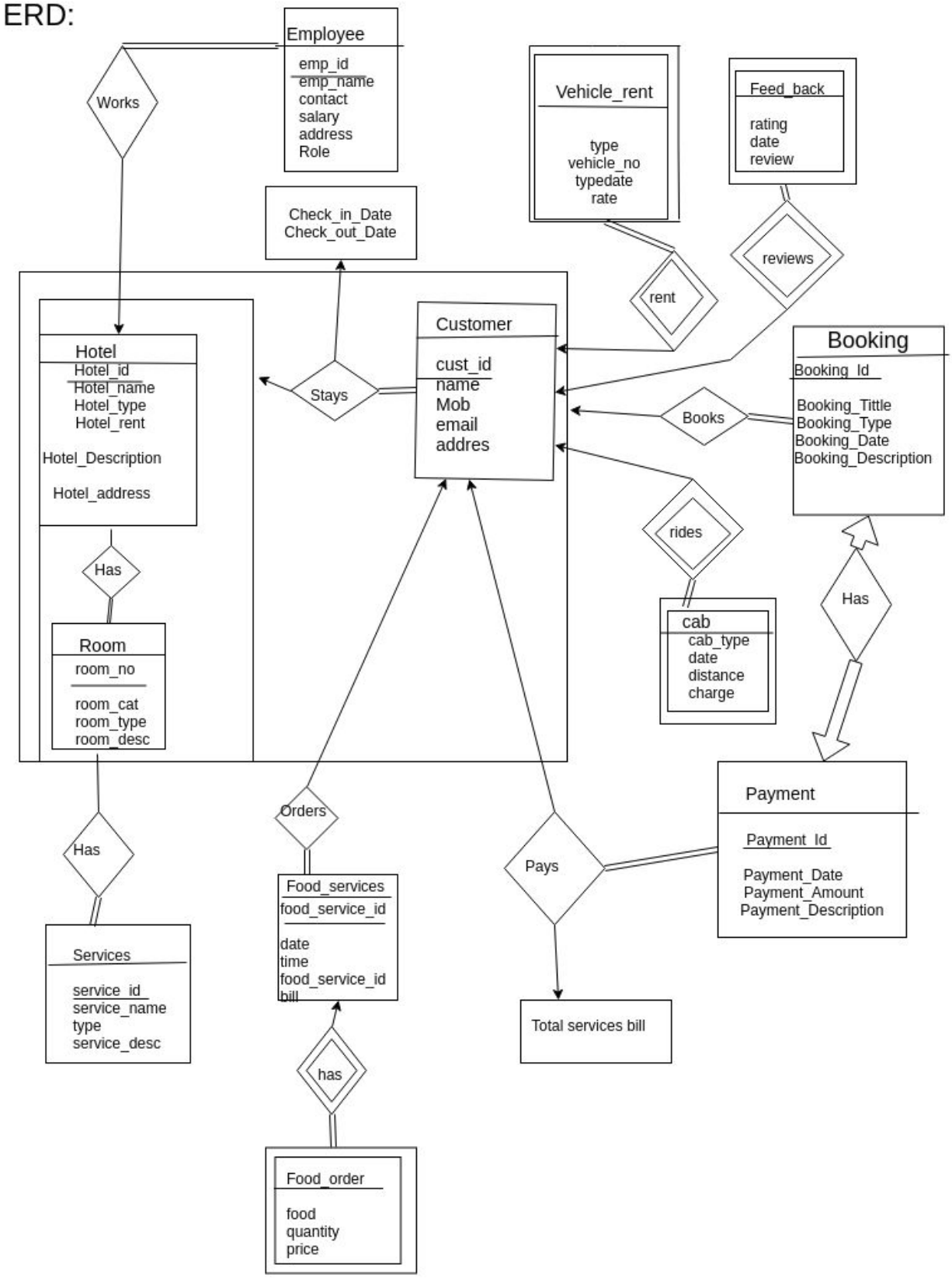
CAB Entity: Attributes of Cab are

- ***Cab_type***
- ***Cab_no***
- ***Cab_date***
- ***Cab_time***
- ***Cab_rate***
- ***Distance***

Description of HMS Database:

- ***Each entity (Customers,Services,Booking,Rooms,Hotel,Employee) contains primary and unique keys.***
- ***The entity Services,Booking has binded with Hotel,Rooms entities with foreign keys.***
- ***There is one-one and one-many relations between Booking,Payments,Customers, Hotel***
- ***All the entities Booking,Services,Hotel,Customers are normalized to reduce duplicacy of records.***

ERD:


Employee
emp_id
emp_name
contact
salary
address
Role
Works
Vehicle_rent
type
vehicle_no
typedate
rate
Feed_back
rating
date
review
Check_in_Date
Check_out_Date
rent
reviews
Hotel
Hotel_id
Hotel_name
Hotel_type
Hotel_rent
Hotel_Description
Hotel_address
Stays
Customer
cust_id
name
Mob
email
addres
Booking
Booking_Id
Booking_Tittle
Booking_Type
Booking_Date
Booking_Description
Books
rides
Has
Room
room_no
room_cat
room_type
room_desc
cab
cab_type
date
distance
charge
Has
Has
Orders
Pays
Payment
Payment_Id
Payment_Date
Payment_Amount
Payment_Description
Services
service_id
service_name
type
service_desc
Food_services
food_service_id
date
time
food_service_id
bill
Total services bill
has
Food_order
food
quantity
price

Roles:

- **Customer:**
  1. multiple users can have the role of Customer
  2. They can only book rooms,food and have access of their own history.
  3. Can check the availability of rooms and services.
  4. Can give ratings and reviews

- **Manager :**
  1. Can have the access to every data that belongs to that hotel they work in.
  2. Cannot edit the customers ratings and reviews,

Admins :

Sachin,akash,surendra.

Views:

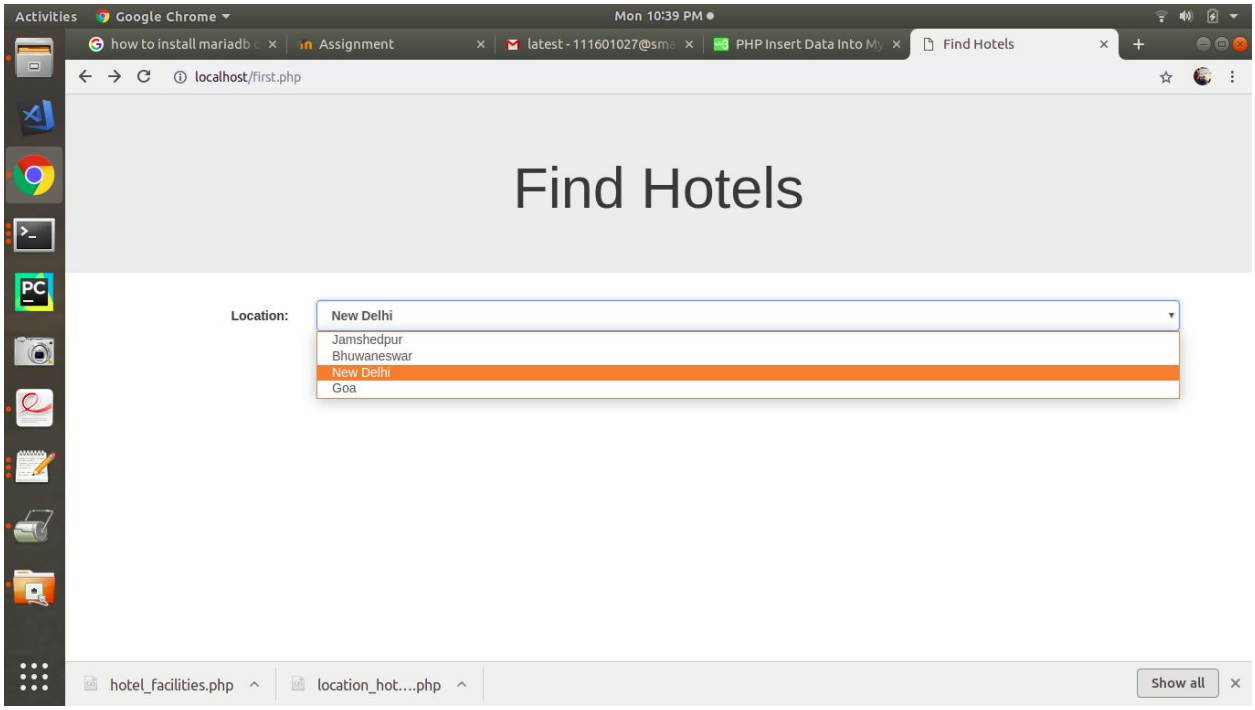
1. Customers booking history
2. Availability of rooms
3. Review and ratings
4. Location

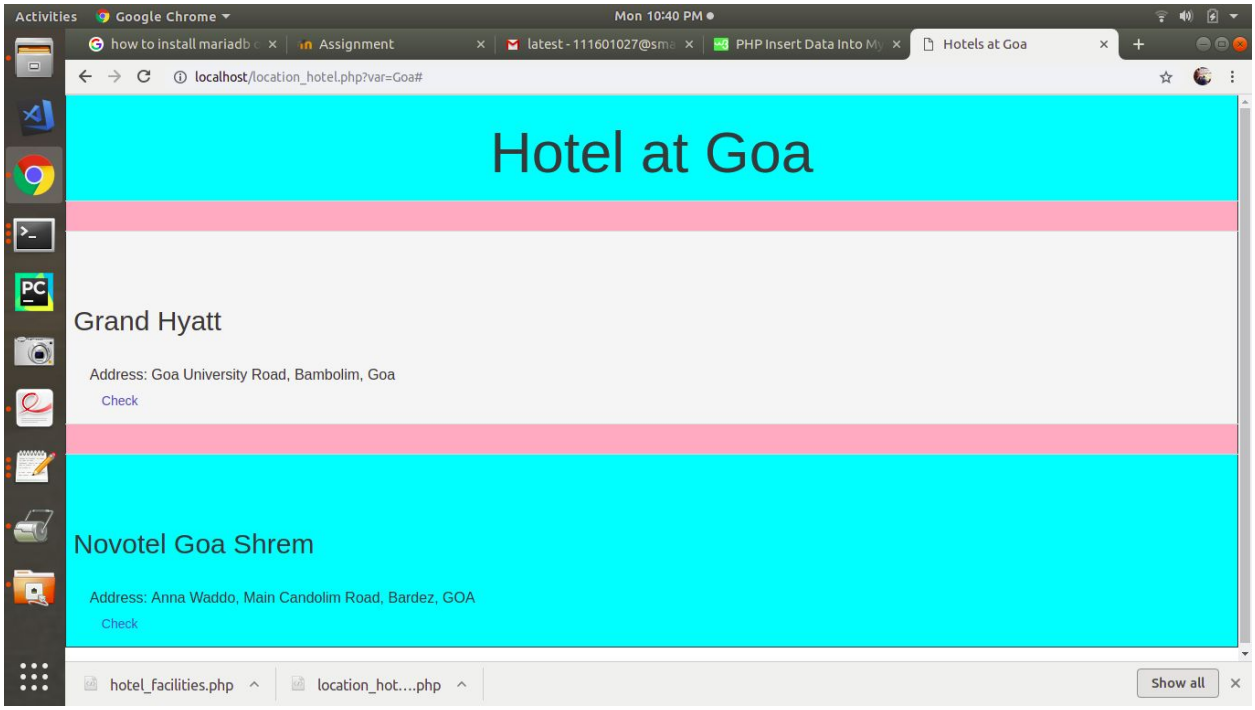
Triggers:

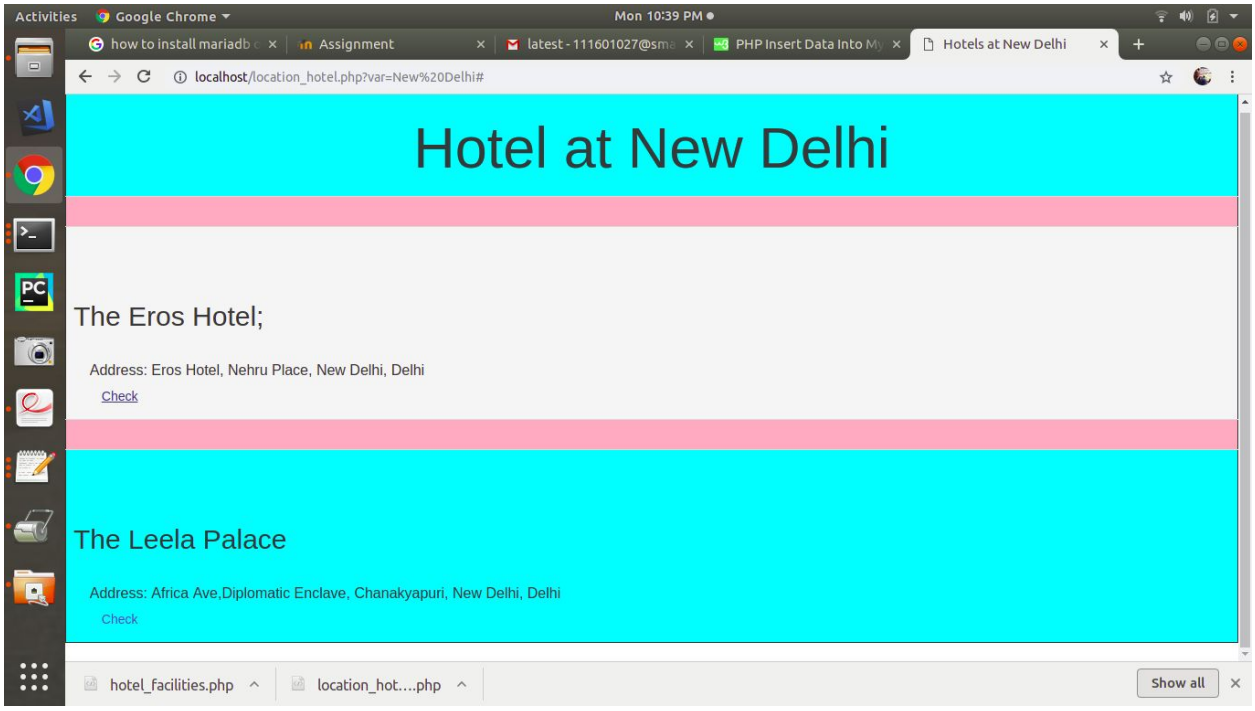
1. After_checking_out

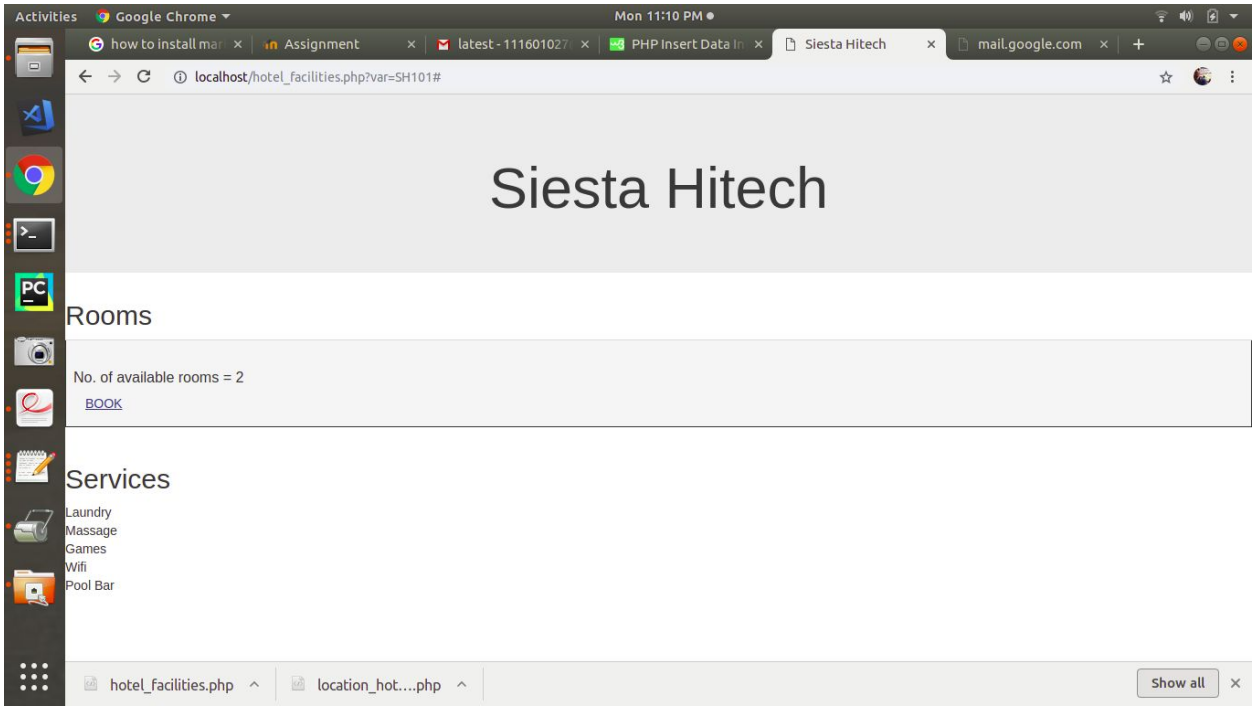
   When a customer checks out bill should be generated

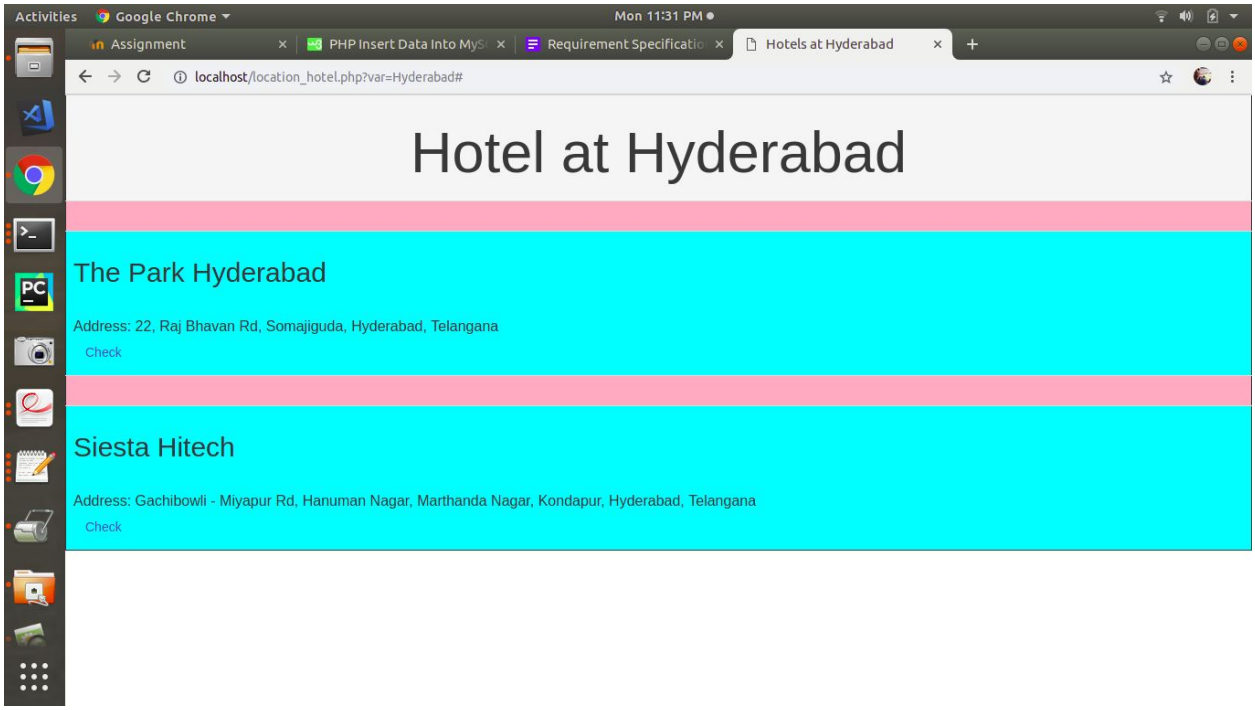
Screenshots of webpages




Activities
Google Chrome
Mon 10:40 PM
how to install mariadb
Assignment
latest - 111601027@sma
PHP Insert Data Into My
Hotels at Goa
localhost/location_hotel.php?var=Goa#
Hotel at Goa
Grand Hyatt
Address: Goa University Road, Bambolim, Goa
Check
Novotel Goa Shrem
Address: Anna Waddo, Main Candolim Road, Bardez, GOA
Check
hotel_facilities.php
location_hot....php
Show all


Activities
Google Chrome
Mon 10:39 PM
how to install mariadb
Assignment
latest - 111601027@sma
PHP Insert Data Into My
Hotels at New Delhi
localhost/location_hotel.php?var=New%20Delhi#
Hotel at New Delhi
The Eros Hotel;
Address: Eros Hotel, Nehru Place, New Delhi, Delhi
Check
The Leela Palace
Address: Africa Ave,Diplomatic Enclave, Chanakyapuri, New Delhi, Delhi
Check
hotel_facilities.php
location_hot....php
Show all


Activities
Google Chrome
Mon 11:10 PM
how to install mar
Assignment
latest - 111601027
PHP Insert Data In
Siesta Hitech
mail.google.com
localhost/hotel_facilities.php?var=SH101#
Siesta Hitech
Rooms
No. of available rooms = 2
BOOK
Services
Laundry
Massage
Games
Wifi
Pool Bar
hotel_facilities.php
location_hot....php
Show all


Activities
Google Chrome
Mon 11:31 PM
Assignment
PHP Insert Data Into MyS
Requirement Specificatio
Hotels at Hyderabad
localhost/location_hotel.php?var=Hyderabad#
Hotel at Hyderabad
The Park Hyderabad
Address: 22, Raj Bhavan Rd, Somajiguda, Hyderabad, Telangana
Check
Siesta Hitech
Address: Gachibowli - Miyapur Rd, Hanuman Nagar, Marthanda Nagar, Kondapur, Hyderabad, Telangana
Check

CHECKING FUNCTIONAL DEPENDENCIES

hotel(hotel_id,hotel_name,hotel_desc,hotel_city,hotel_address)
hotel_id is the relevant dependency and hence it is in BCNF

services(service_id,service_name,service_desc,service_type)
service_id,hotel_id are the relevant dependencies as it can derive all other attributes Hence it is in BCNF.

room(room_no,hotel_id,service_id,room_type,room_rent,room_desc,occupied)
hotel_id,room_no are the relevant dependencies Hence it is in BCNF.

customer(customer_id,customer_name,customer_mobile,customer_email,customer_address)
customer_id can derive all the other attributes, Hence it is in BCNF.

booking(booking_id,hotel_id,room_no,customer_id,booking_type,booking_date)
booking_id can derive all the other attributes, Hence it is in BCNF.

payment(payment_id,booking_id,payment_date,payment_amount,payment_desc)
payment_id is the relevant dependency and hence it is in BCNF

employee(emp_id,hotel_id,emp_contact,emp_name,emp_salary, emp_address,emp_role)

emp_id can derive all the other attributes, Hence it is in BCNF.

stays(customer_id,check_in,check_id,room_no)

(customer_id,check_in,check_id,room_no) is primary key.So it is in BCNF form

food_services(customer_id,service_date,service_time,food_service_id,price)

'food_service_id' can derive all other attributes.Hence it is in BCNF Form.

food_order(food_service_id,food,quantity,price)

'food_service_id' can derive all other attributes.Hence it is in BCNF form

vehicle(customer_id,date_rent,time_of_rent,vehicle_type,vehicle_num,charge)

(customer_id,datte_of_rent,time_of_rent) can derive other attributes.Hence it is in BCNF form

cab(customer_id,cab_type,booking_date,charge,distance)

(customer_id,booking_date) can derive all other attributes.Hence it is in BCNF form

bill(customer_id,service_type,service,price)

(customer_id,service_type) can derives all other attributes.Hence it is in BCNF form

feed_back(customer_id,feed_back_date,hotel_id,rating,review)

(customer_id,feed_back_date) derives other attributes.Hence it is in BCNF form

Views , Roles and Triggers Implementation

```
create view room_available as
select room_no, hotel_name, occupied, hotel_addres
from room, hotel
where room.hotel_id=hotel.hotel_id;

create view reviews as
select hotel_name,review,rating
from hotel, feed_back
where hotel.hotel_id=feed_back.hotel_id;

create role customers;
grant select on room_available to customers;
grant select on reviews to customers;

create role manager;
grant all on employee to manager;
grant select on reviews to manager;
```