



Final Project

เสนอ

ผศ.สนั่น สระแก้ว

จัดทำโดย

นางสาว จันทรรัตน์ ชุมแสง 62070505216

นาย ชินพัฒน์ อ่อนประเสริฐ 62070505218

รายงานนี้เป็นส่วนหนึ่งของวิชา ระบบฐานข้อมูล(CPE231)

สาขาวิทยาศาสตร์ข้อมูลสุขภาพ คณะวิศวกรรมคอมพิวเตอร์

มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี

ภาคการศึกษาที่ 1 ปีการศึกษา 2563

สารบัญ

เรื่อง	หน้า
State all assumptions	1
ER diagrams and schema	3 - 4
BCNF table ,SQL commands to create tables	
Insert, delete, update the tables	4 – 8
Queries to view room category, booking, cancel booking and print receipt	9 - 13

State all assumptions

2. Hotel Management

The Lay View Hotel wants to create a hotel management system to offer the best service to customers. Many more things may consider including the following:

- Allow guest to view room category, fare and availability.
- Potential customer must register and provide basic information including Name, Lastname, Phone number, E-mail address.
- Registered customer can book rooms by specifying room types, number of rooms, and period of stay
- Registered customer can view total payment plus tax and confirm the booking
- Salesperson can sign in with user ID and print receipt
- Customer can pay by cash or provide credit card information

Room Types and rates

Single: One bed for one person. B1,500 per night

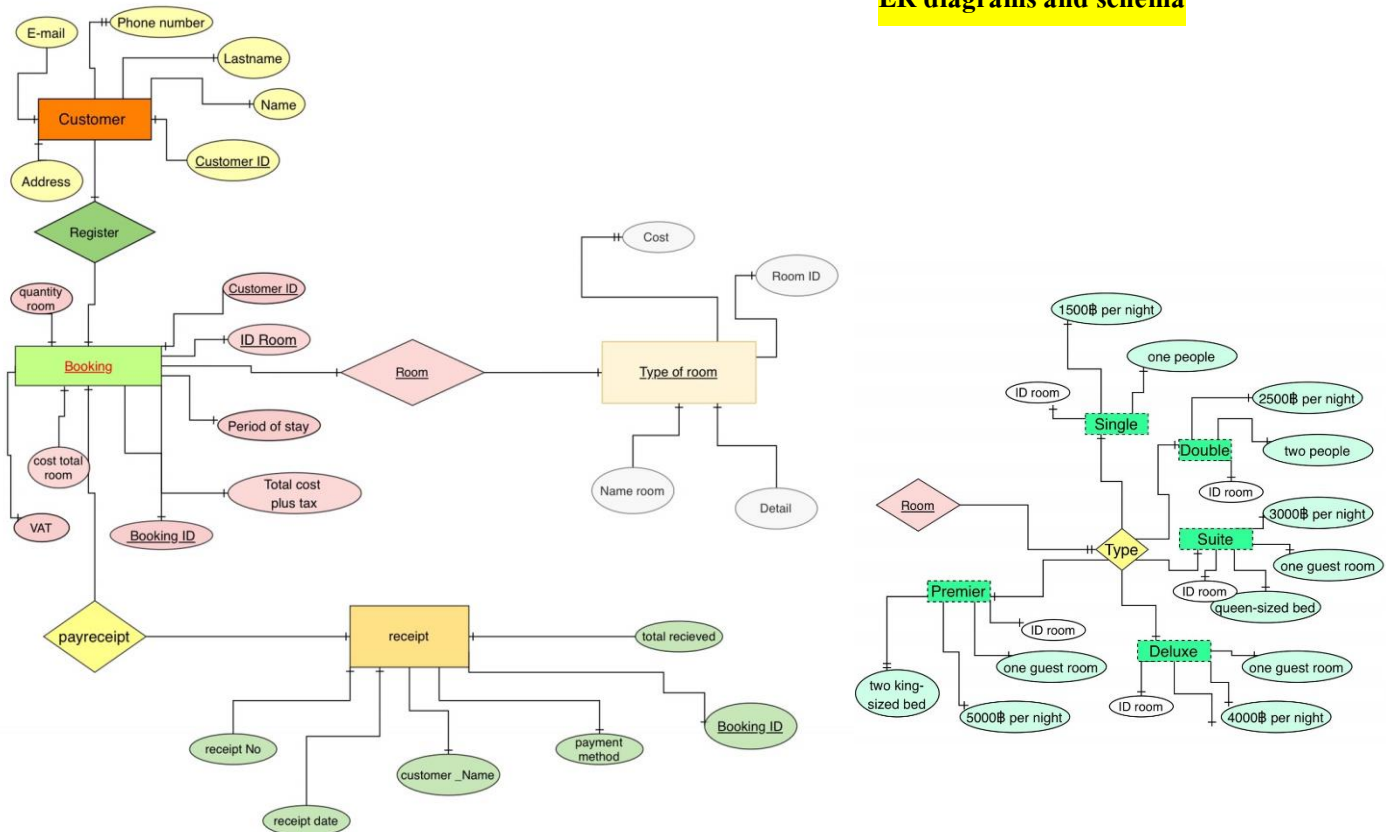
Double: Two beds for two people. B2,500 per night

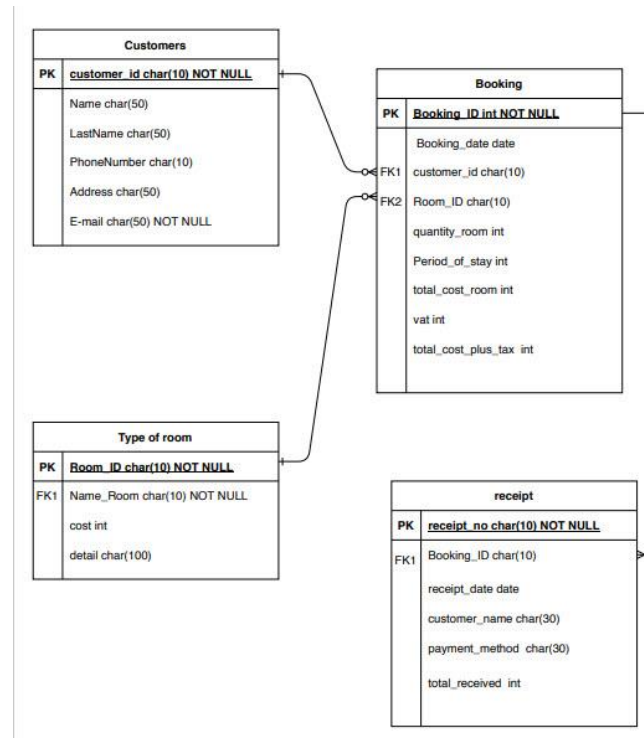
Suite: One guest room and one queen-sized bed. B3,000 per night

Deluxe: One guest room and one king-sized bed. B4,000 per night

Premier: One guest room and two king-sized beds. B5,000 per night

ER diagrams and schema





BCNF table, SQL commands to create tables

Data Output	Explain	Messages
User ID	Name	Surname
integer	character varying (150)	character varying (150)
21	1	
22	1	
23	1	
24	3 wawa	naja
25	3 wawa	naja
26	3 wawa	naja
27	3 wawa	naja
28	3 wawa	naja
29	3 wawa	naja
30	2 Chinapat	Onprasert
31	2 Chinapat	Onprasert
32	2 Chinapat	Onprasert
33	2 Chinapat	Onprasert
34	2 Chinapat	Onprasert
35	2 Chinapat	Onprasert
36	2 Chinapat	Onprasert

Code:

```

select bb.user_id as "User ID", au.first_name as "Name", au.last_name as "Surname", br.category as "Room booked",
br.cost as "Price", (check_out - check_in ) as "Period of days", bb.check_in as "Check in", bb.check_out as "Check Out",
(cost * (DATE_PART('day', check_out ::date ) - DATE_PART('day', check_in ::date))) as "Amount"
from blogapp_booking bb join blogapp_room br on bb.room_id = br.id
join auth_user au on au.id = bb.user_id
  
```

ผลรวมของ ค่าราคาทั้งหมดที่ต้องจ่าย

Data Output	Explain	Messages
sum double precision		
1		17000

Code:

```
select sum(ad.total)
from (select au.username , (br2.cost * (DATE_PART('day' , check_out ::date ) - DATE_PART('day' , check_in ::date)))
as total
from blogapp_booking bb2
join blogapp_room br2 on bb2.room_id = br2.id
join auth_user au on au.id = bb2.user_id) as ad
where ad.username = 'zaza123'
```

Create SQL table

```
CREATE TABLE public.auth_user
(
id integer NOT NULL DEFAULT nextval('auth_user_id_seq'::regclass),
password character varying(128) COLLATE pg_catalog."default" NOT NULL,
last_login timestamp with time zone,
is_superuser boolean NOT NULL,
username character varying(150) COLLATE pg_catalog."default" NOT NULL,
first_name character varying(150) COLLATE pg_catalog."default" NOT NULL,
last_name character varying(150) COLLATE pg_catalog."default" NOT NULL,
email character varying(254) COLLATE pg_catalog."default" NOT NULL,
is_staff boolean NOT NULL,
is_active boolean NOT NULL,
date_joined timestamp with time zone NOT NULL,
payment_method character varying(100) COLLATE pg_catalog."default",
CONSTRAINT auth_user_pkey PRIMARY KEY (id),
CONSTRAINT auth_user_username_key UNIQUE (username))
```

```
TABLESPACE pg_default;
```

```
ALTER TABLE public.auth_user
```

```
OWNER to postgres;
```

```
-- Index: auth_user_username_6821ab7c_like
```

```
-- DROP INDEX public.auth_user_username_6821ab7c_like;
```

```
CREATE INDEX auth_user_username_6821ab7c_like
```

```
ON public.auth_user USING btree
```

```
(username COLLATE pg_catalog."default" varchar_pattern_ops ASC NULLS LAST)
```

```
TABLESPACE pg_default;
```

```
Create Room Table
```

```
-- Table: public.blogapp_room
```

```
-- DROP TABLE public.blogapp_room;
```

```
CREATE TABLE public.blogapp_room
```

```
(
```

```
id integer NOT NULL DEFAULT nextval('blogapp_room_id_seq'::regclass),
```

```
"number" character varying(10) COLLATE pg_catalog."default" NOT NULL,
```

```
category character varying(7) COLLATE pg_catalog."default" NOT NULL,
```

```
bed integer NOT NULL,
```

```
capacity integer NOT NULL,
```

```
image character varying(100) COLLATE pg_catalog."default",
```

```
cost integer,
```

```
CONSTRAINT blogapp_room_pkey PRIMARY KEY (id)
```

```
)
```

```
TABLESPACE pg_default;
```

```
ALTER TABLE public.blogapp_room
```

```
OWNER to postgres;
```

Create Booking Table

```
-- Table: public.blogapp_booking
```

```
-- DROP TABLE public.blogapp_booking;
```

```
CREATE TABLE public.blogapp_booking
```

```
(
```

```
id integer NOT NULL DEFAULT nextval('blogapp_booking_id_seq'::regclass),
```

```
check_in timestamp with time zone NOT NULL,
```

```
check_out timestamp with time zone NOT NULL,
```

```
room_id integer NOT NULL,
```

```
user_id integer,
```

```
CONSTRAINT blogapp_booking_pkey PRIMARY KEY (id),
```

```
CONSTRAINT blogapp_booking_room_id_e9afdba9_fk_blogapp_room_id FOREIGN KEY (room_id)
```

```
REFERENCES public.blogapp_room (id) MATCH SIMPLE
```

```
ON UPDATE NO ACTION
```

```
ON DELETE NO ACTION
```

```
DEFERRABLE INITIALLY DEFERRED,
```

```
CONSTRAINT blogapp_booking_user_id_a471a8d1_fk_auth_user_id FOREIGN KEY (user_id)
```

```
REFERENCES public.auth_user (id) MATCH SIMPLE
```

```
ON UPDATE NO ACTION
```

```
ON DELETE NO ACTION
```

```
DEFERRABLE INITIALLY DEFERRED
```

```
)
```

```
TABLESPACE pg_default;
```

```
ALTER TABLE public.blogapp_booking
    OWNER to postgres;

-- Index: blogapp_booking_room_id_e9afdba9

-- DROP INDEX public.blogapp_booking_room_id_e9afdba9;

CREATE INDEX blogapp_booking_room_id_e9afdba9
    ON public.blogapp_booking USING btree
    (room_id ASC NULLS LAST)
    TABLESPACE pg_default;

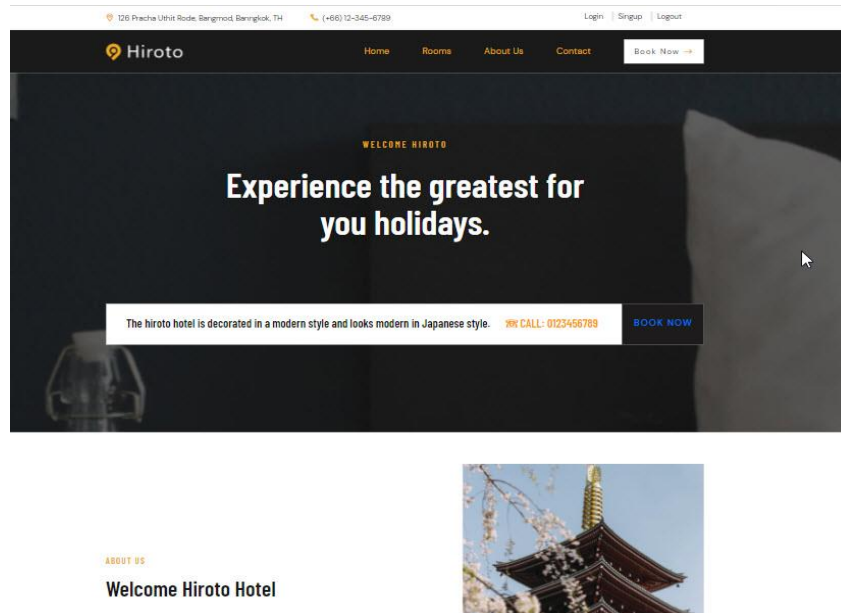
-- Index: blogapp_booking_user_id_a471a8d1

-- DROP INDEX public.blogapp_booking_user_id_a471a8d1;

CREATE INDEX blogapp_booking_user_id_a471a8d1
    ON public.blogapp_booking USING btree
    (user_id ASC NULLS LAST)
    TABLESPACE pg_default;
```


Queries to view room category, booking, cancel booking and print receipt

1.Template



Single Room


1500 per night


Size: 30 ft²

Capacity: One person

Bed: King Bed

Services: WiFi, Television, Bathroom...





Double Room

2500 per night

Size: 30 ft²

Capacity: Two people

Bed: King Bed

Services: WiFi, Television, Bathroom...

Suite Room

3000 per night


Size: 30 ft²


Capacity: Two people

Bed: Queen-sized Bed

Other: One guest room

Services: WiFi, Television, Bathroom...





Deluxe Room

4000 per night

Size: 30 ft²

Capacity: Max person: 3

Bed: King-sized Bed

Other: One guest room

Services: WiFi, Television, Bathroom...

Premier Room

5000 per night


Size: 30 ft²

Capacity: Max person: 4

Bed: Two King-sized Bed

Other: One guest room

Services: WiFi, Television, Bathroom...



2.Login - Signup – Logout

LOGIN ACCOUNT

Username*

Password*

Not got an account? [Sign Up](#)

Signup

Username*

Required, 150 characters or fewer. Letters, digits and @/!/+/_ only.

Email*

Phone number*

First name*

Last name*

Password*


- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation*


Enter the same password as before, for verification.

3.Booking room


Hiroto




Single_Room Suit




Double_Room Suit




Suite_Room Suit



Deluxe_Room Suit



Premier_Room Suit



[Home](#)

Double_Room

Single Room → @1500/night
 Suite Room → @3000/night
 Double Room → @2500/night
 Premier Room → @5000/night
 Deluxe Room → @4000/night

Check In :

Check Out :


[Book the Room](#)

[Home](#)

[Next](#)


Your Booking

Welcome dear zaza123



Double_Room Suite

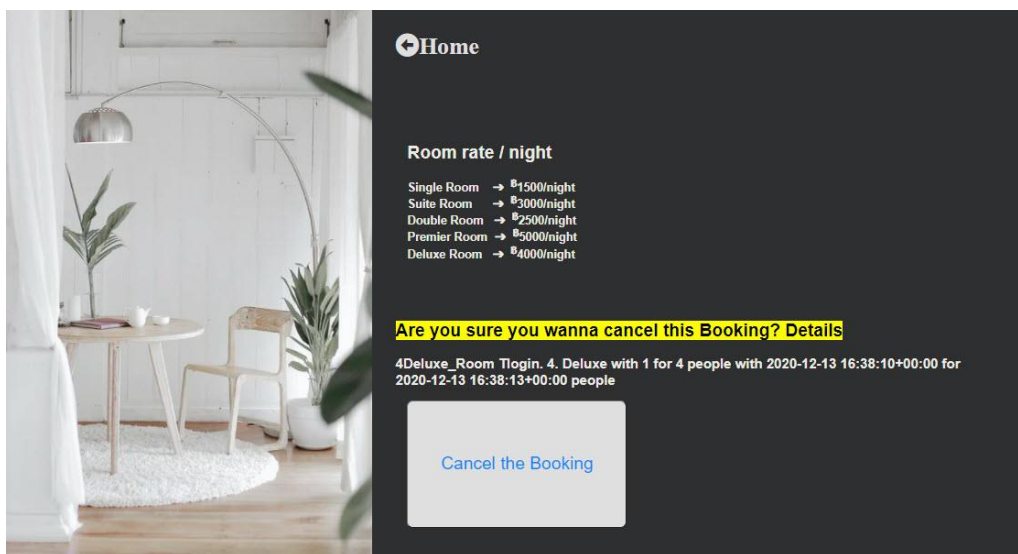
From: Dec. 16, 2020, 5:35 p.m.
 To: Dec. 17, 2020, 5:35 p.m.
 Beds:
 Capacity: 2



Double_Room Suite

From: Dec. 16, 2020, 5:35 p.m.
 To: Dec. 17, 2020, 5:35 p.m.
 Beds:
 Capacity: 2

4. Cancel Booking



5. Payment

126 Pracha Uthit Rode, Bangmod, Bangkok, TH (+66) 12-345-6789 Login Signup Logout

Hiroto Home Rooms About Us Contact [Book Now →](#)

Invoice Table

Total your cost is 6000.0 Bath

No.	User ID	Name	Surname	Room Booked	Price	Check In	Check Out	Period of days	Amount
1	2	Chinapat	Onprasert	Double	1500.00	Dec. 16, 2020, 5:35 p.m.	Dec. 17, 2020, 5:35 p.m.	1 day, 0:00:00	1500.0
2	2	Chinapat	Onprasert	Double	1500.00	Dec. 16, 2020, 5:35 p.m.	Dec. 17, 2020, 5:35 p.m.	1 day, 0:00:00	1500.0
3	2	Chinapat	Onprasert	Suite	3000.00	Dec. 14, 2020, 10:36 p.m.	Dec. 14, 2020, 10:36 p.m.	0:00:04	0.0
4	2	Chinapat	Onprasert	Deluxe	4000.00	Dec. 14, 2020, 10:36 p.m.	Dec. 14, 2020, 10:36 p.m.	0:00:05	0.0
5	2	Chinapat	Onprasert	Premier	5000.00	Dec. 14, 2020, 10:36 p.m.	Dec. 14, 2020, 10:36 p.m.	0:00:03	0.0
6	2	Chinapat	Onprasert	Suite	3000.00	Dec. 15, 2020, 10:37 p.m.	Dec. 16, 2020, 10:37 p.m.	1 day, 0:00:00	3000.0

[Download CSV](#)

