

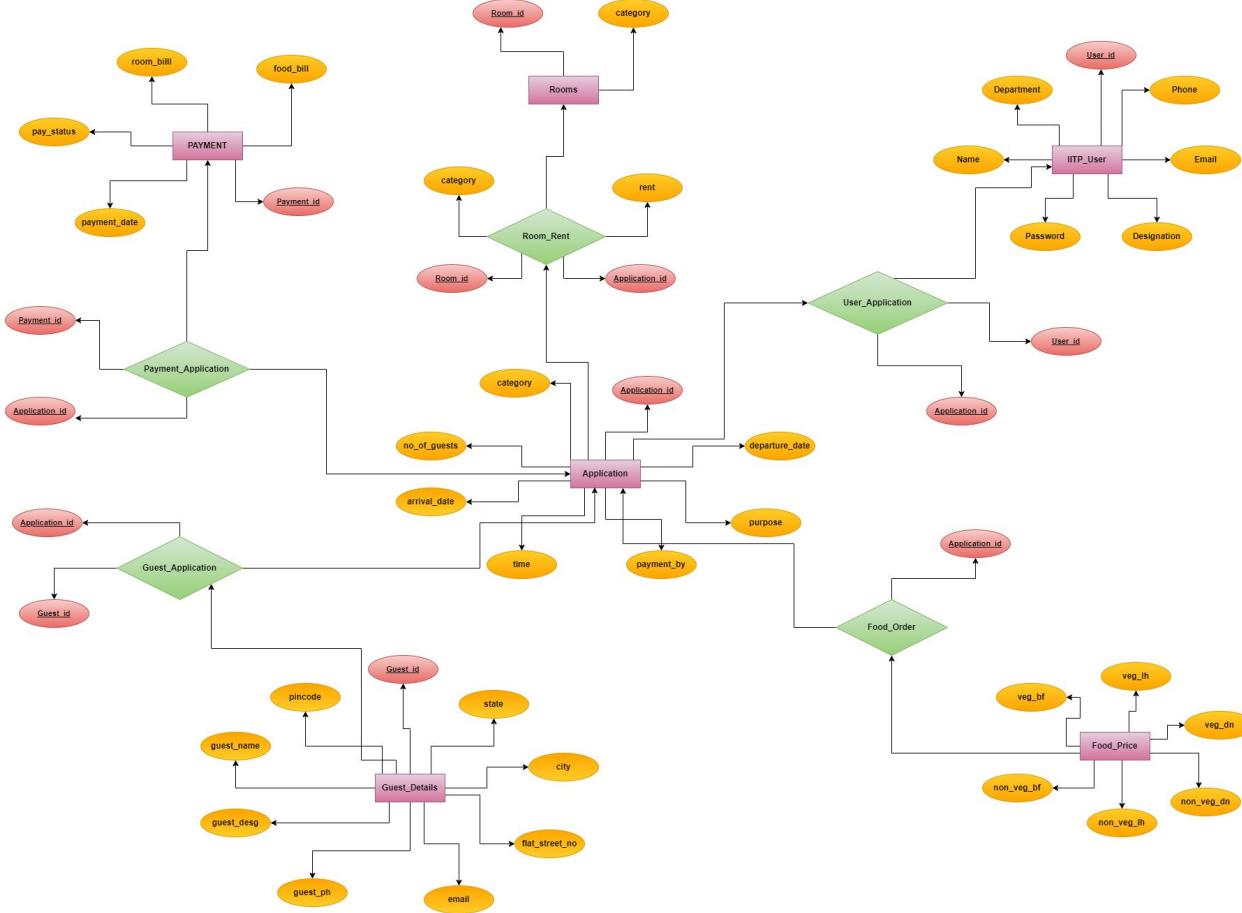
Guest House Service

Services Provided:

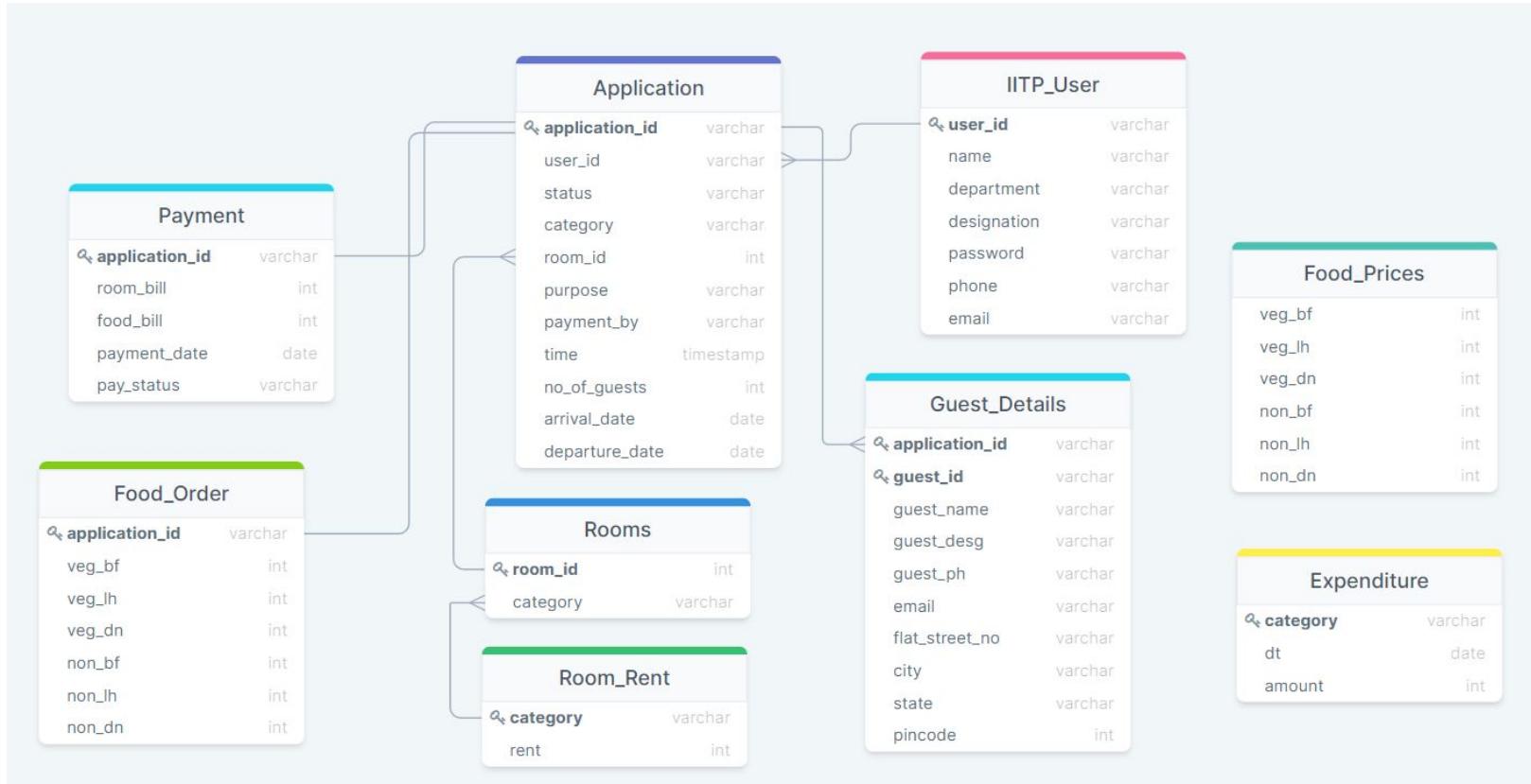
- User Registration
- Login and Update Profile
- Room Booking Request
- Food Booking
- Rooms Availability
- Application Approval
- Check Application Status
- Payment Details
- Bills Generation
- Guest House Expenditures
- Update Room and Food Prices



ER Diagram



Relational Model



Creating Database and Tables

```
mysql> -- Creating the Database
mysql> CREATE DATABASE GuestHouse;
Query OK, 1 row affected (0.08 sec)

mysql> USE GuestHouse;
Database changed
mysql> -- Creating the Tables
mysql> -- IIT Patna Registered User Details
mysql> CREATE TABLE IITP_User(user_id varchar(10) PRIMARY KEY, password varchar(255), name varchar(30), designation varchar(10), department varchar(3), phone varchar(15), email varchar(30));
Query OK, 0 rows affected (0.26 sec)

mysql> -- Guest House Room Details
mysql> CREATE TABLE Rooms(room_id int PRIMARY KEY, category varchar(30));
Query OK, 0 rows affected (0.40 sec)

mysql> -- Room rent per day in different categories
mysql> CREATE TABLE Room_Rent(category varchar(30), rent int);
Query OK, 0 rows affected (0.24 sec)

mysql> -- Food price for differnt categories
mysql> CREATE TABLE Food_Price(veg_bf int, non_veg_bf int, veg_lh int, non_veg_lh int, veg_dn int, non_veg_dn int);
Query OK, 0 rows affected (0.20 sec)

mysql> -- Room Booking Applications
mysql> CREATE TABLE Application(application_id varchar(4) PRIMARY KEY, user_id varchar(10), no_of_guests int, status varchar(10), category varchar(30), room_id int, arrival_date date, departure_date date, purpose varchar(20), payment_by varchar(20), time timestamp, FOREIGN KEY(user_id) REFERENCES IITP_User(user_id), FOREIGN KEY(room_id) REFERENCES Rooms(room_id));
Query OK, 0 rows affected (0.30 sec)

mysql> -- Guest Details of Applications
mysql> CREATE TABLE Guest_Details(application_id varchar(4), guest_id varchar(4), guest_name varchar(30), guest_desg varchar(30), guest_ph varchar(15), email varchar(30), flat_street_no varchar(30), city varchar(30), state varchar(30), pincode varchar(10), PRIMARY KEY(application_id, guest_id), FOREIGN KEY(application_id) REFERENCES Application(application_id));
Query OK, 0 rows affected (0.13 sec)

mysql> -- Food ordered by Guests
mysql> CREATE TABLE Food_Order(application_id varchar(4) PRIMARY KEY, veg_bf int, non_veg_bf int, veg_lh int, non_veg_lh int, veg_dn int, non_veg_dn int, FOREIGN KEY(application_id) REFERENCES Application(application_id));
Query OK, 0 rows affected (0.36 sec)

mysql> -- Payment Details of Room and Food Bills
mysql> CREATE TABLE Payment(application_id varchar(4) PRIMARY KEY, room_bill int, food_bill int, pay_status varchar(8), payment_date date, FOREIGN KEY (application_id) REFERENCES Application(application_id));
Query OK, 0 rows affected (0.20 sec)

mysql> -- Guest House Expenditures
mysql> CREATE TABLE Expenditure(category varchar(30), dt date, amount int);
Query OK, 0 rows affected (0.28 sec)
```

Triggers

```
mysql>
mysql> -- trigger to allot a vacant room and initiate the payment receipt when an application gets accepted
mysql> DELIMITER $$;
mysql> CREATE TRIGGER after_application_accepted
->     BEFORE UPDATE ON Application FOR EACH ROW
->     BEGIN
->         DECLARE food_bill int DEFAULT 0;
->         DECLARE room_bill int;
->         DECLARE room_no int;
->         IF (OLD.status = 'Pending' AND NEW.status = 'Accepted') THEN
->             SELECT (Food_Count.veg_bf * Food_Price.veg_bf + Food_Count.non_veg_bf * Food_Price.non_veg_bf + Food_Count.veg_lh * Food_Price.veg_lh + Food_Count.non_veg_lh * Food_Price.non_veg_lh + Food_Count.veg_dn * Food_Price.veg_dn + Food_Count.non_veg_dn * Food_Price.non_veg_dn) INTO food_bill FROM (SELECT * FROM Food_Order WHERE application_id = NEW.application_id) AS Food_Count, Food_Price;
->             SELECT rent_per_day * days INTO room_bill FROM (SELECT rent AS rent_per_day FROM Room_Rent WHERE category = NEW.category) T1, (SELECT TIMESTAMPDIFF(DAY, NEW.arrival_date, NEW.departure_date) + 1 AS days) T2;
->             INSERT INTO Payment VALUES (NEW.application_id, room_bill, food_bill, 'Not Paid', NULL);
->             SELECT room_id INTO room_no FROM Rooms WHERE room_id NOT IN (SELECT DISTINCT room_id FROM Application WHERE status = 'Accepted' AND NOT (TIMESTAMPDIFF(DAY, NEW.arrival_date, departure_date) < 0 OR
TIMESTAMPDIFF(DAY, NEW.departure_date, arrival_date) > 0)) AND category = NEW.category LIMIT 1;
->             SET NEW.room_id = room_no;
->         END IF;
->     END $$;
Query OK, 0 rows affected (0.15 sec)

mysql> DELIMITER ;
mysql>
```

Loading CSV Data into Tables

```
mysql> -- Loading Data from CSV files
mysql> SET GLOBAL LOCAL_INFILE = TRUE;
Query OK, 0 rows affected (0.00 sec)

mysql> -- iitp registered users data
mysql> LOAD DATA LOCAL INFILE 'data/iitp_user.csv' INTO TABLE IITP_User FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 10 rows affected (0.06 sec)
Records: 10 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Guest House Rooms Data
mysql> LOAD DATA LOCAL INFILE 'data/rooms.csv' INTO TABLE Rooms FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 12 rows affected (0.06 sec)
Records: 12 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Guest House Prices Data
mysql> LOAD DATA LOCAL INFILE 'data/room_rent.csv' INTO TABLE Room_Rent FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 2 rows affected (0.02 sec)
Records: 2 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Food Prices Data
mysql> LOAD DATA LOCAL INFILE 'data/food_price.csv' INTO TABLE Food_Price FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 1 row affected (0.03 sec)
Records: 1 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Room Bookings Applications Data
mysql> LOAD DATA LOCAL INFILE 'data/application.csv' INTO TABLE Application FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 10 rows affected (0.08 sec)
Records: 10 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Guest Details Data
mysql> LOAD DATA LOCAL INFILE 'data/guest_details.csv' INTO TABLE Guest_Details FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 15 rows affected (0.06 sec)
Records: 15 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Food ordered by Guests
mysql> LOAD DATA LOCAL INFILE 'data/food_order.csv' INTO TABLE Food_Order FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 10 rows affected (0.06 sec)
Records: 10 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Room and Food Payment Data
mysql> LOAD DATA LOCAL INFILE 'data/payment.csv' INTO TABLE Payment FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 5 rows affected (0.03 sec)
Records: 5 Deleted: 0 Skipped: 0 Warnings: 0

mysql> -- Guest House Expenditures Data
mysql> LOAD DATA LOCAL INFILE 'data/expenditure.csv' INTO TABLE Expenditure FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n' IGNORE 1 LINES;
Query OK, 10 rows affected (0.20 sec)
Records: 10 Deleted: 0 Skipped: 0 Warnings: 0
```

Table Records

```
mysql> SELECT * FROM IITP_User;
+-----+-----+-----+-----+-----+-----+-----+
| user_id | password | name | designation | department | phone | email |
+-----+-----+-----+-----+-----+-----+-----+
| 1792CS02 | letmein | Vishal | Faculty | CS | 7846437783 | Vishal@yahoo.com |
| 1801ME38 | password | Mahesh | Student | ME | 9282746573 | Mahesh@gmail.com |
| 1901CE01 | passcode | Priyanka | Student | CE | 8277282618 | Priyanka@iitp.ac.in |
| 1901CS01 | pass | Abhay Kumar | Student | CS | 9282171814 | Abhay@gmail.com |
| 1901MM20 | @Sandeep | Sandeep Kishan | Student | MM | 8292846651 | SandeepK@gmail.com |
| 2001CS10 | 12345 | Krishna | Faculty | CS | 8336447383 | Krishna@iitp.ac.in |
| 2727EE82 | secret | Abhiram | Faculty | EE | 8372464728 | Abhiram@yahoo.com |
| 3676AD62 | 123abc | Sanjeev Kumar | Admin | AD | 9297262652 | Sanjeev@gmail.com |
| 3882PH74 | abc123 | Sanjiv Kumar | Faculty | PH | 7837364652 | Sanjiv@iitp.ac.in |
| 8474AD12 | 123 | Raghav | Admin | AD | 9483802918 | Raghav@iitp.ac.in |
+-----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> SELECT * FROM Rooms;
+-----+-----+
| room_id | category |
+-----+-----+
| 101 | Attached Bathroom |
| 102 | Attached Bathroom |
| 103 | Non Attached Bathroom |
| 104 | Non Attached Bathroom |
| 201 | Attached Bathroom |
| 202 | Attached Bathroom |
| 203 | Non Attached Bathroom |
| 204 | Non Attached Bathroom |
| 301 | Attached Bathroom |
| 302 | Attached Bathroom |
| 303 | Non Attached Bathroom |
| 304 | Non Attached Bathroom |
+-----+-----+
12 rows in set (0.00 sec)

mysql> SELECT * FROM Room_Rent;
+-----+-----+
| category | rent |
+-----+-----+
| Attached Bathroom | 500 |
| Non Attached Bathroom | 250 |
+-----+-----+
2 rows in set (0.00 sec)
```

Table Records

```
mysql> SELECT * FROM Food_Price;
```

veg_bf	non_veg_bf	veg_lh	non_veg_lh	veg_dn	non_veg_dn
20	25	30	30	30	40

1 row in set (0.00 sec)

```
mysql> SELECT * FROM Application;
```

application_id	user_id	no_of_guests	status	category	room_id	arrival_date	departure_date	purpose	payment_by	time
0001	2727EE82	1	Accepted	Attached Bathroom	101	2021-11-27	2021-11-30	Official	Institute	2021-11-23 14:03:34
0002	1901CS01	2	Pending	Attached Bathroom	NULL	2021-11-26	2021-11-29	Personal	Indentor	2021-11-23 14:07:40
0003	8474AD12	1	Accepted	Non Attached Bathroom	103	2021-12-02	2021-12-04	Official	Project Fund	2021-11-23 14:10:21
0004	1801ME38	2	Accepted	Non Attached Bathroom	203	2021-11-23	2021-11-27	Official	Guest	2021-11-23 14:14:28
0005	2727EE82	2	Accepted	Attached Bathroom	301	2021-12-01	2021-12-03	Personal	Indentor	2021-11-23 14:17:52
0006	3882PH74	1	Rejected	Non Attached Bathroom	NULL	2021-11-25	2021-11-28	Official	Institute	2021-11-23 14:20:16
0007	1901MM20	2	Pending	Attached Bathroom	NULL	2021-11-27	2021-12-05	Official	Guest	2021-11-23 14:24:44
0008	1901CS01	1	Pending	Attached Bathroom	NULL	2021-12-02	2021-12-04	Personal	Guest	2021-11-23 14:28:03
0009	1792CS02	1	Accepted	Non Attached Bathroom	104	2021-11-24	2021-11-27	Official	Guest	2021-11-23 14:31:00
0010	2727EE82	2	Pending	Attached Bathroom	NULL	2021-11-26	2021-11-30	Personal	Indentor	2021-11-23 14:33:52

10 rows in set (0.00 sec)

```
mysql> SELECT * FROM Guest_Details;
```

application_id	guest_id	guest_name	guest_desg	guest_ph	email	flat_street_no	city	state	pincode
0001	0001	Baskar	Director of IITB	7826274751	Baskar@gmail.com	368/Gandhi Nagar-2nd lane	Mumbai	Maharashtra	371823
0002	0002	Sravan Kumar	Businessman	8276252617	Sravan@gmail.com	491/Balaji Nagar	Hyderabad	Telangana	373614
0002	0003	Lakshmi	Housewife	7363538163	Lakshmi@gmail.com	491/Balaji Nagar	Hyderabad	Telangana	373614
0003	0004	Bhargav	Professor of IITM	8474626319	Bhargav@gmail.com	1st lane road-3383	Indore	Madhya Pradesh	163663
0004	0005	Prakash	CEO of Youth foundation	6828928265	Prakash@gmail.com	2442B-2nd Street	Lucknow	Uttar Pradesh	452431
0004	0006	Priyanka	Manager of Youth foundation	7365352522	Priyanka@gmail.com	2442B-2nd Street	Lucknow	Uttar Pradesh	452431
0005	0007	Srinivas	Relative	9266543210	Srinivas@yahoo.com	100A3-Sriram Mandir Street	Chennai	Tamilnadu	973731
0005	0008	Varshitha	Relative	9028311011	Varshitha@gmail.com	100A3-Sriram Mandir Street	Chennai	Tamilnadu	973731
0006	0009	Vikram Kumar	Deputy Minister	9073621430	Vikram@ind.gov.in	Anand Bhavan/1883G	Bengaluru	Karnataka	377321
0007	0010	Swathi Naidu	TEDx Speaker	8366567191	Swathi@tedx.ind.com	Z-Plaza Apartments	Mumbai	Maharashtra	099383
0007	0011	Kiran	TEDx Speaker	9737636372	Kiran@tedx.ind.com	KV Nagar/BYPASS road	Bhopal	Madhya Pradesh	163663
0008	0012	Nagarjuna	Relative	784642728	Nagarjuna@gmail.com	Sangeeta Towers - 874AB Nagar	Patna	Bihar	058757
0009	0013	Sandeep Kumar	Sports Committee Head	7893764610	Sandeep@iitp.ac.in	2nd Street-Baba Nagar	Patna	Bihar	782718
0010	0014	Karthik reddy	Relative	8736110181	Karthik@yahoo.com	1A74 - Srivalli Bazaar	Hyderabad	Telangana	746632
0010	0015	Kavya	Relative	7484993221	Kavya@gmail.com	1A74 - Srivalli Bazaar	Hyderabad	Telangana	746632

15 rows in set (0.00 sec)

Table Records

```
mysql> SELECT * FROM Food_Order;
```

application_id	veg_bf	non_veg_bf	veg_lh	non_veg_lh	veg_dn	non_veg_dn
0001	3	0	2	1	2	1
0002	3	0	3	0	3	0
0003	2	0	0	2	2	0
0004	4	0	3	1	4	0
0005	2	2	2	2	2	2
0006	3	0	3	0	3	0
0007	5	0	3	2	4	1
0008	4	0	4	0	4	0
0009	0	0	0	0	0	0
0010	6	0	3	3	6	0

10 rows in set (0.00 sec)

```
mysql> SELECT * FROM Payment;
```

application_id	room_bill	food_bill	pay_status	payment_date
0001	2000	250	Paid	2021-11-23
0003	750	160	Not Paid	NULL
0004	1250	320	Paid	2021-11-23
0005	1500	350	Not Paid	NULL
0009	1000	0	Not Paid	NULL

5 rows in set (0.00 sec)

```
mysql> SELECT * FROM Expenditure;
```

category	dt	amount
Water Bill	2021-10-29	3000
Current Bill	2021-10-20	5000
Vegetables Bill	2021-10-30	1300
Gas Bill	2021-10-04	3500
Milk Bill	2021-10-17	1200
Water Bill	2021-11-19	2500
Current Bill	2021-11-16	2000
Vegetables Bill	2021-11-23	1500
Gas Bill	2021-11-17	1000
Milk Bill	2021-11-03	1200

10 rows in set (0.00 sec)

Procedures & Functions

```
mysql> -- Procedure for viewing monthly booking categories in a given month of particular year
mysql> DELIMITER $$
mysql> CREATE PROCEDURE Monthly_booking_categories(IN month int, IN year int)
    -> BEGIN
    ->     DECLARE dt date;
    ->     SELECT CONCAT(year, '-', month, '-', '01') INTO dt;
    ->     SELECT category, count(*) FROM Application WHERE status = 'Accepted' AND TIMESTAMPDIFF(DAY, dt, arrival_date)  >= 0 AND TIMESTAMPDIFF(DAY, LAST_DAY(dt), arrival_date) <= 0 GROUP BY category;
    -> END $$
Query OK, 0 rows affected (0.18 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Monthly_booking_categories(11, 2021);
+-----+-----+
| category | count(*) |
+-----+-----+
| Attached Bathroom |      1 |
| Non Attached Bathroom |      2 |
+-----+-----+
2 rows in set (0.00 sec)

Query OK, 0 rows affected (0.05 sec)

mysql> -- Procedure for viewing Total Monthly Expenditure of Guest House in a given month of particular year
mysql> DELIMITER $$
mysql> CREATE PROCEDURE Total_Monthly_Expenditure(IN month int, IN year int)
    -> BEGIN
    ->     DECLARE day date;
    ->     SELECT CONCAT(year, '-', month, '-', '01') INTO day;
    ->     SELECT SUM(amount) AS Total_Monthly_Expenditure FROM Expenditure WHERE TIMESTAMPDIFF(DAY, day, dt)  >= 0 AND TIMESTAMPDIFF(DAY, LAST_DAY(day), dt) <= 0;
    -> END $$
Query OK, 0 rows affected (0.04 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Total_Monthly_Expenditure(11, 2021);
+-----+
| Total_Monthly_Expenditure |
+-----+
|          8200 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```

Procedures & Functions

```
mysql> -- Procedure for generation the Payment bills
mysql> DELIMITER $$ 
mysql> CREATE PROCEDURE Generate_bills()
-> BEGIN
->     SELECT * FROM Payment;
-> END $$ 
Query OK, 0 rows affected (0.03 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Generate_bills();
+-----+-----+-----+-----+
| application_id | room_bill | food_bill | pay_status | payment_date |
+-----+-----+-----+-----+
| 0001 | 2000 | 250 | Paid | 2021-11-23 |
| 0003 | 750 | 160 | Not Paid | NULL |
| 0004 | 1250 | 320 | Paid | 2021-11-23 |
| 0005 | 1500 | 350 | Not Paid | NULL |
| 0009 | 1000 | 0 | Not Paid | NULL |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

Query OK, 0 rows affected (0.02 sec)

mysql> -- Procedure for checking Rooms Availability between two given dates
mysql> DELIMITER $$ 
mysql> CREATE PROCEDURE Rooms_Availability(IN arrival DATE, IN departure DATE)
-> BEGIN
->     SELECT * FROM Rooms WHERE room_id NOT IN (SELECT DISTINCT room_id FROM Application WHERE status = 'Accepted' AND NOT (TIMESTAMPDIFF(DAY, arrival, departure_date) < 0 OR TIMESTAMPDIFF(DAY, departure, arrival_date) > 0));
-> END $$ 
Query OK, 0 rows affected (0.04 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Rooms_Availability('2021-11-27','2021-11-30');
+-----+-----+
| room_id | category |
+-----+-----+
| 102 | Attached Bathroom |
| 103 | Non Attached Bathroom |
| 201 | Attached Bathroom |
| 202 | Attached Bathroom |
| 204 | Non Attached Bathroom |
| 301 | Attached Bathroom |
| 302 | Attached Bathroom |
| 303 | Non Attached Bathroom |
| 304 | Non Attached Bathroom |
+-----+-----+
9 rows in set (0.00 sec)
```

Procedures & Functions

```
mysql> -- Procedure for checking Rooms availability of Particular Category between two given dates
mysql> DELIMITER $$ 
mysql> CREATE PROCEDURE Category_Rooms_Availability(IN arrival DATE, IN departure DATE, IN cat varchar(20))
    -> BEGIN
    ->     SELECT * FROM Rooms WHERE room_id NOT IN (SELECT DISTINCT room_id FROM Application WHERE status = 'Accepted' AND NOT (TIMESTAMPDIFF(DAY, arrival, departure_date) < 0 OR TIMESTAMPDIFF(DAY, departure, arrival_date) > 0)) AND category = cat;
    -> END $$ 
Query OK, 0 rows affected (0.04 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Category_Rooms_Availability('2021-11-27', '2021-11-30', 'Attached Bathroom');
+-----+-----+
| room_id | category |
+-----+-----+
| 102 | Attached Bathroom |
| 201 | Attached Bathroom |
| 202 | Attached Bathroom |
| 301 | Attached Bathroom |
| 302 | Attached Bathroom |
+-----+-----+
5 rows in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

mysql> -- Procedure for viewing Total Food Billing in a given month of particular year
mysql> DELIMITER $$ 
mysql> CREATE PROCEDURE Monthly_food_billing(IN month int, IN year int)
    -> BEGIN
    ->     DECLARE dt date;
    ->     SELECT CONCAT(year, '-', month, '-', '01') INTO dt;
    ->     SELECT SUM(food_bill) AS Monthly_Food_Billing FROM Payment WHERE application_id IN (SELECT application_id FROM Application WHERE TIMESTAMPDIFF(DAY, dt, arrival_date) >= 0 AND TIMESTAMPDIFF(DAY, LAST_DAY(dt), arrival_date) <= 0);
    -> END $$ 
Query OK, 0 rows affected (0.13 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Monthly_food_billing(11, 2021);
+-----+
| Monthly_Food_Billing |
+-----+
| 570 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.02 sec)
```

Procedures & Functions

```
mysql> -- Procedure for viewing Total Guest House Room Billing in a given month of particular year
mysql> DELIMITER $$;
mysql> CREATE PROCEDURE Monthly_room_billing(IN month int, IN year int)
-> BEGIN
->     DECLARE dt date;
->     SELECT CONCAT(year, '-', month, '-', '01') INTO dt;
->     SELECT SUM(room_bill) AS Monthly_room_billing FROM Payment WHERE application_id IN (SELECT application_id FROM Application WHERE TIMESTAMPDIFF(DAY, dt, arrival_date) >= 0 AND TIMESTAMPDIFF(DAY, LAST_DAY(dt), arrival_date) <= 0);
-> END $$;
Query OK, 0 rows affected (0.03 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Monthly_room_billing(11, 2021);
+-----+
| Monthly_room_billing |
+-----+
|          4250 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

mysql> -- Procedure for viewing Total Billing(Room and Food Bill) in a given month of particular year
mysql> DELIMITER $$;
mysql> CREATE PROCEDURE Monthly_guest_house_billing(IN month int, IN year int)
-> BEGIN
->     DECLARE dt date;
->     SELECT CONCAT(year, '-', month, '-', '01') INTO dt;
->     SELECT SUM(room_bill + food_bill) AS Monthly_guest_house_billing FROM Payment WHERE application_id IN (SELECT application_id FROM Application WHERE TIMESTAMPDIFF(DAY, dt, arrival_date) >= 0 AND TIMESTAMPDIFF(DAY, LAST_DAY(dt), arrival_date) <= 0);
-> END $$;
Query OK, 0 rows affected (0.06 sec)

mysql> DELIMITER ;
mysql>
mysql> CALL Monthly_guest_house_billing(11, 2021);
+-----+
| Monthly_guest_house_billing |
+-----+
|          4820 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.02 sec)
```

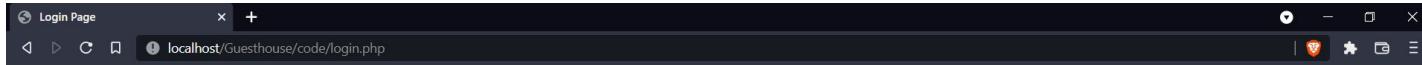
Registration Page

Description: Allows the Students or Faculty members to create an account if already not registered.

The screenshot shows a registration form titled "Register". The form consists of several input fields: "User ID", "Name", "Designation" (with a dropdown menu showing "Designation"), "Department", "Phone No", "Email", and "Password". Below these fields is a blue "Sign Up" button. At the bottom of the form, there is a link "Already have an account? [Login here](#)". The background of the form is light gray, and the title bar is dark gray.

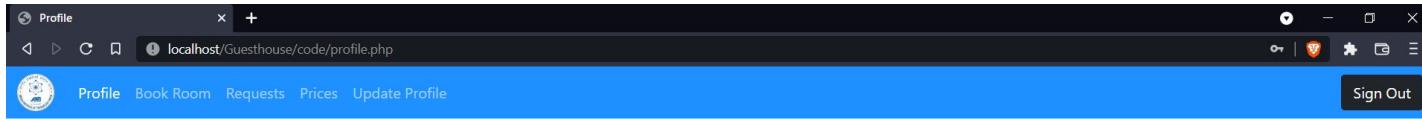
Login Page

Description: Allows the IITP users to login into their account when correct credentials are provided.

A screenshot of a "Login" page. The page has a dark header with the word "Login". Below it are two input fields: one for "User ID" and one for "Password", both with placeholder text. A large blue "Sign In" button is centered below the password field. At the bottom, there is a link for users who don't have an account: "Don't have an account? [Register here](#)".

Profile Page

Description: Displays the Personal Details of the user from the data stored in the Database.



Profile

User ID	2727EE82
Name	Abhiram
Designation	Faculty
Department	EE
Phone No	8372464728
Email	Abhiram@yahoo.com



Room Booking Application Page

Description: The user can book a guest room by filling the required details in the application.

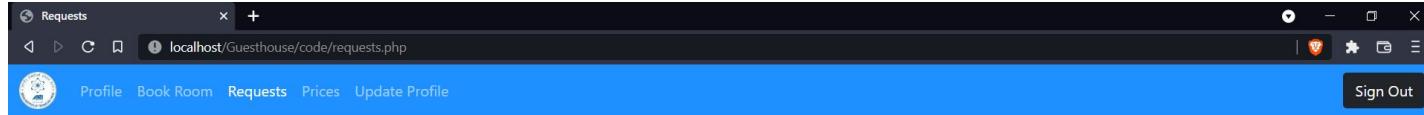
The screenshot displays a web-based room booking application interface. At the top, the title "Room Booking" is visible, along with a navigation bar containing links for "Profile", "Book Room", "Requests", "Prices", and "Update Profile". A "Sign Out" button is located in the top right corner. The main content area is divided into several sections:

- Guest Information:** This section contains two rows of input fields for "Guest 1 Name" and "Guest 2 Name", followed by "Designation", "Phone Number", "Email", "Flat/Street No.", "City", "State", and "Pincode" for both guests.
- Details:** This section includes dropdown menus for "No. of Guests" and "Accommodation Type", and date pickers for "Date of Arrival" and "Date of Departure". It also features dropdown menus for "Purpose of visit" and "Payment by".
- Food Details:** This section contains four input fields for "Breakfast", "Lunch", "Dinner", and "Vegetarian Food". Below these, there are two rows of input fields for "Non-Vegetarian Food".
- Indentor Information:** This section contains four input fields for "Emp. Id", "Indentor Name", "Designation", and "Department". It also includes a "Phone" field and an "Email" field with the value "Abhiram@yahoo.com".

A "Submit" button is located at the bottom center of the form. The entire application is set against a light beige background.

Requests Page

Description: The user can see the submitted applications and the current status of applications.



Applications

Application ID	Submitted Time	Status
0001	2021-11-23 14:03:34	Accepted
0005	2021-11-23 14:17:52	Accepted
0010	2021-11-23 14:33:52	Pending



Application Form

Description: The user can click on the Application ID displayed in the Requests Page, which will redirect to the application form previously filled by that user which the user can also take a print by clicking on the print button.

The screenshot shows a web-based application form titled "Room Booking". The URL in the address bar is "localhost/Guesthouse/code/application.php". The page displays a success message "Successfully submitted" above a form with the Application ID "0010".
Guest Information:
Guest 1 Name: Karthik reddy, Guest 2 Name: Kavya
Designation: Relative, Designation: Relative
Phone Number: 9798110181, Phone Number: 7484993221
Email: Karthik@yahoo.com, Email: Kavya@gmail.com
Flat/Street No: 1A74 - Small Bazaar, Flat/Street No: 1A74 - Small Bazaar
City: Hyderabad, City: Hyderabad
State: Telangana, State: Telangana
Pincode: 746632, Pincode: 746632
Details:
No. of Guests: 2, Accommodation Type: Attached Bathroom
Date of Arrival: 26-11-2021, Date of Departure: 30-11-2021
Purpose of visit: Personal, Payment by: Indentor
Food Details:
Food Type Breakfast Lunch Dinner
Vegetarian Food: 0 3 6
Non-Vegetarian Food: 0 3 0
Indentor Information:
Emp. Id: 2727E802, Indentor Name: Abhiram
Designation: Faculty, Department: EE
Phone: 8372164728, Email: Abhiram@yahoo.com

Signature of the concerned HOD/HOS
(in case the purpose of visit is official) Signature of the indentor with Date
Approval of the Registrar Signature of Incharge Guest House with Date

Prices Page

Description: The user can see the room and food prices of different categories available.

The screenshot shows a web browser window titled "Prices" with the URL "localhost/Guesthouse/code/prices.php". The page has a blue header bar with navigation links: Profile, Book Room, Requests, Prices (which is highlighted), and Update Profile. On the right side of the header is a "Sign Out" button. Below the header, there are two sections: "Room Rent Per Day (₹)" and "Food Prices (₹)".

Room Rent Per Day (₹)

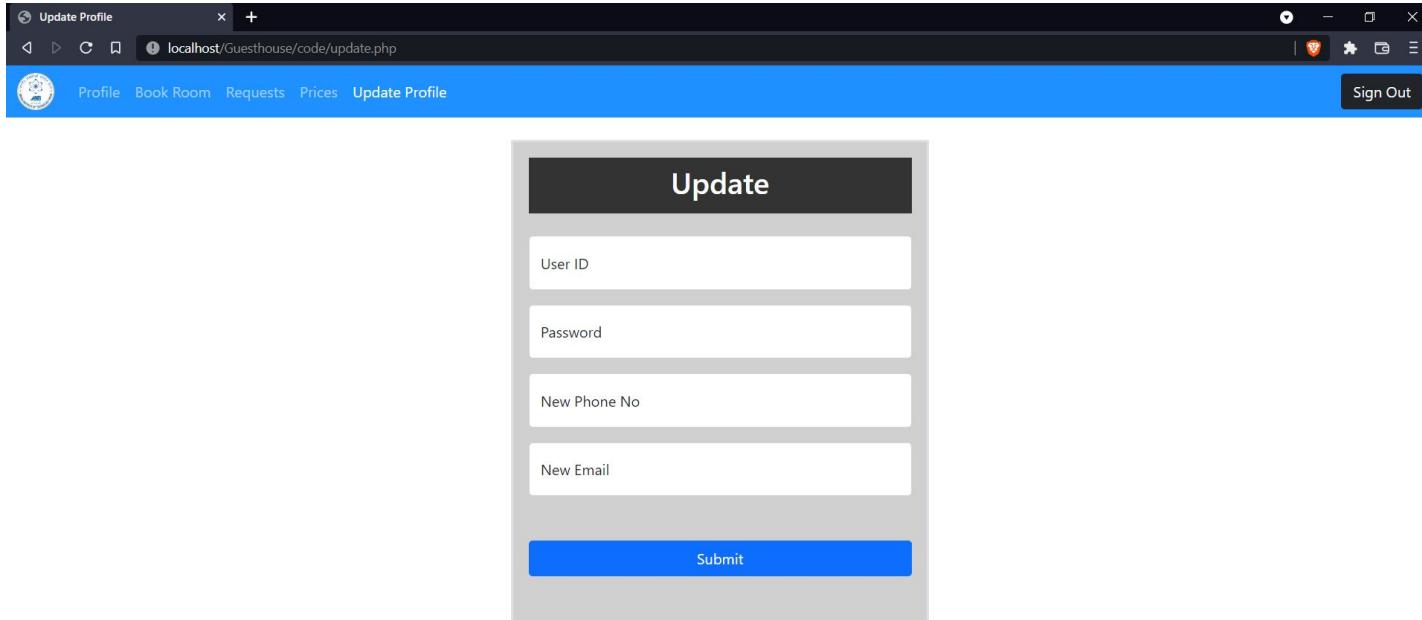
Attached Bathroom	500
Non Attached Bathroom	250

Food Prices (₹)

Veg Breakfast	20
Veg Lunch	30
Veg Dinner	30
Non Veg Breakfast	25
Non Veg Lunch	30
Non Veg Dinner	40

Profile Update Page

Description: The user can update mobile number and email by providing the correct credentials.



The screenshot shows a web browser window titled "Update Profile". The address bar indicates the URL is "localhost/Guesthouse/code/update.php". The page itself is titled "Update" and contains four input fields: "User ID", "Password", "New Phone No", and "New Email". Below these fields is a large blue "Submit" button. The browser interface includes standard navigation buttons (back, forward, search) and a toolbar with icons for file operations like cut, copy, paste, and save.

User ID
[Input Field]

Password
[Input Field]

New Phone No
[Input Field]

New Email
[Input Field]

Submit

Now, let's login as ADMIN and explore some additional features that only ADMIN has access.

The screenshot shows a web browser window with a blue header bar. The title bar reads "Profile" and the address bar shows "localhost/Guesthouse/code/profile.php". Below the header, there is a navigation menu with links: Profile, Book Room, Requests, Prices, Rooms, Payments, Expenditures, and Update Profile. On the right side of the header is a "Sign Out" button. The main content area is titled "Profile" and displays a table with the following data:

User ID	8474AD12
Name	Raghav
Designation	Admin
Department	AD
Phone No	9483802918
Email	Raghav@iitp.ac.in



Requests Page as ADMIN

The admin can see all the users applications and can ‘Accept’ or ‘Reject’ the applications. On clicking an Application ID, the admin gets redirected to that Application form and can see all the details.

localhost/Guesthouse/code/requests.php

Profile Book Room Requests Prices Rooms Payments Expenditures Update Profile Sign Out

Applications

Application ID	Submitted Time	Status		
0001	2021-11-23 14:03:34	Accepted		
0002	2021-11-23 14:07:40	Pending	Accept	Reject
0003	2021-11-23 14:10:21	Accepted		
0004	2021-11-23 14:14:28	Accepted		
0005	2021-11-23 14:17:52	Accepted		
0006	2021-11-23 14:20:16	Rejected		
0007	2021-11-23 14:24:44	Pending	Accept	Reject
0008	2021-11-23 14:28:03	Pending	Accept	Reject
0009	2021-11-23 14:31:00	Accepted		
0010	2021-11-23 14:33:52	Pending	Accept	Reject



Prices Page as ADMIN

The admin can update the prices of the room per day and food of different categories.

Room Rent Per Day (₹)

Attached Bathroom	500
Non Attached Bathroom	250

Food Prices (₹)

Veg Breakfast	20
Veg Lunch	30
Veg Dinner	30
Non Veg Breakfast	25
Non Veg Lunch	30
Non Veg Dinner	40

Update

Rooms Page

The admin can check the availability of rooms in the guest house in between two dates given. Only the admin can access this page.

The screenshot shows a web browser window with the title 'Rooms' at the top. The URL in the address bar is 'localhost/Guesthouse/code/rooms.php'. The page has a blue header bar with navigation links: Profile, Book Room, Requests, Prices, Rooms, Payments, Expenditures, Update Profile, and a 'Sign Out' button. Below the header, the word 'Rooms' is centered above a table. The table has three columns: Room No, Category, and Status. The rows show the following data:

Room No	Category	Status
101	Attached Bathroom	Occupied
102	Attached Bathroom	Vacant
103	Non Attached Bathroom	Vacant
104	Non Attached Bathroom	Occupied
201	Attached Bathroom	Vacant
202	Attached Bathroom	Vacant
203	Non Attached Bathroom	Occupied
204	Non Attached Bathroom	Vacant
301	Attached Bathroom	Occupied
302	Attached Bathroom	Vacant
303	Non Attached Bathroom	Vacant
304	Non Attached Bathroom	Vacant



Payments Page

The admin can see all the payments of the Guest House room Bookings and food orders generated in a particular month of a year. The admin can also update the ‘Pay Status’ by clicking on the ‘Paid’ button.

A screenshot of a web browser displaying the 'Payments' page. The URL is 'localhost/Guesthouse/code/payments.php'. The page has a blue header bar with navigation links: Profile, Book Room, Requests, Prices, Rooms, Payments (which is highlighted in blue), Expenditures, Update Profile, and a 'Sign Out' button. Below the header, the title 'Payments' is centered. There are two input fields: 'Month(MM):' with value '11' and 'Year(YYYY):' with value '2021'. A 'Submit' button is to the right. The main content is a table with columns: Application ID, Room Bill (₹), Food Bill (₹), Total (₹), Status, and Paid Date. Three rows of data are shown:

Application ID	Room Bill (₹)	Food Bill (₹)	Total (₹)	Status	Paid Date
0001	2000	250	2250	Paid	2021-11-23
0004	1250	320	1570	Paid	2021-11-23
0009	1000	0	1000	Not Paid	<input type="button" value="Paid"/>

Below the table, a summary row shows 'Total Bills: 4820'.

Expenditures Page

The admin can see all the expenditures of the Guest House made in a particular month of a year. The admin can also fill new expenses of the Guest House from time to time.

The screenshot shows a web application titled "Expenditures" on a browser window. The URL is "localhost/Guesthouse/code/expenditures.php". The page has a blue header bar with navigation links: Profile, Book Room, Requests, Prices, Rooms, Payments, Expenditures, Update Profile, and a Sign Out button. The main content area is titled "Expenditures". It features a search bar for "Month(MM)" (set to 11) and "Year(YYYY)" (set to 2021), followed by a "Submit" button. Below this is a table listing five bills:

Category	Date (YYYY-MM-DD)	Amount (₹)
Water Bill	2021-11-19	2500
Current Bill	2021-11-16	2000
Vegetables Bill	2021-11-23	1500
Gas Bill	2021-11-17	1000
Milk Bill	2021-11-03	1200
Total Bills:		8200

Below the table is a blue button labeled "Fill New Expenditure". Underneath it is a form with three fields: "Category" (input field), "Date" (input field with placeholder "dd-mm-yyyy" and a calendar icon), and "Amount" (input field). At the bottom right of the form is an "Update" button. The status bar at the bottom of the screen shows the Windows taskbar with various icons, the system tray, and a notification for "26°C Heavy t-storms".