Ghulam Ishaq Khan Institute of Engineering Science and Technology

Database Management Systems (CE-431)

Project Title: **Hotel Management System**

Group Members:

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Description:

Hotel Management System will be developed for smooth running and management of hotel. Due to the traditional manual systems implemented in most of the hotels, there are chances of frequent errors that may lead to financial losses and poor quality of services. So we have opted for a computerized management system, which would:

- Be user friendly
- Provide effective and efficient customer care and services.
- Increase the hotel performance and profit.
- Reduce the operational costs.

Technologies:

Technologies involved in this web-application are:

- PHP
- HTML
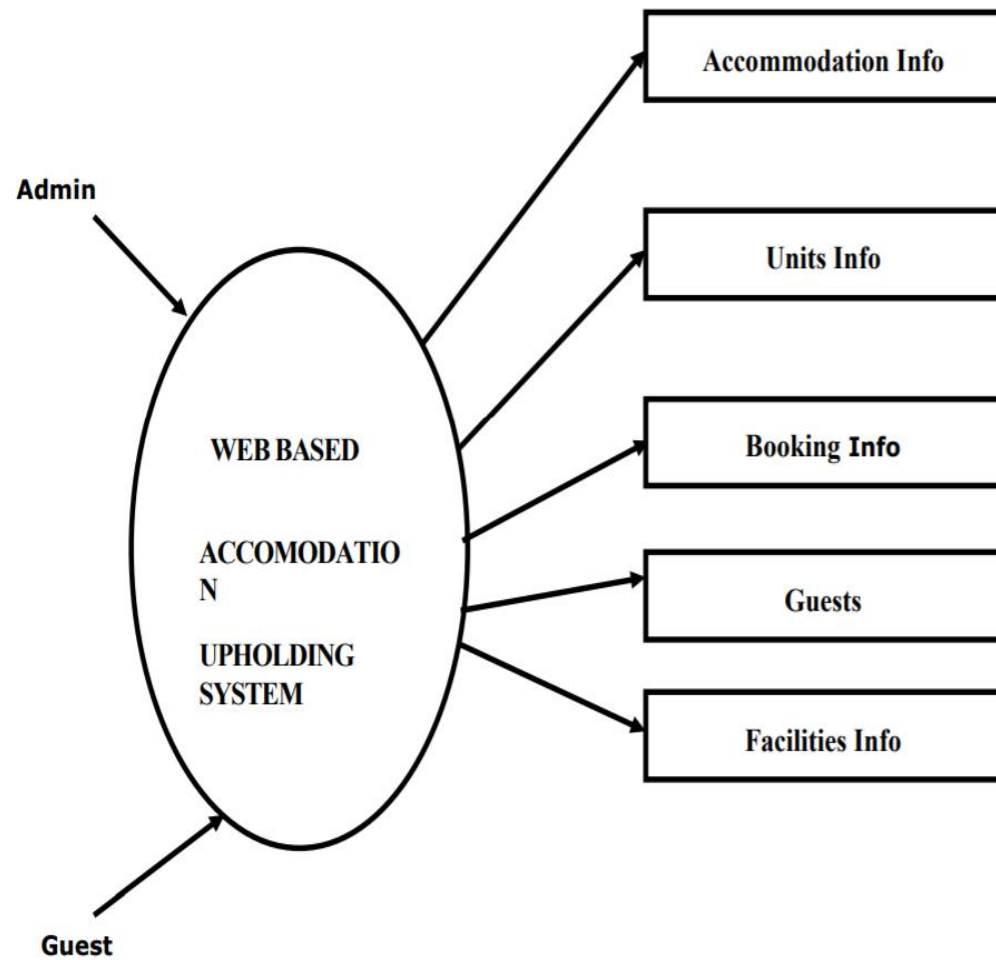- CSS
- MySQL
- Wampp

User Categories:

There are two user categories involved in this web-application. These are:

- Administration
- Guests

GitHub:

https://github.com/Streban/dbms_Project.git

Data Flow Diagram:

Admin

Accommodation Info

Units Info

WEB BASED

ACCOMODATION

UPHOLDING SYSTEM

Booking Info

Guests

Facilities Info

Guest

Dataflow Scenario of Hotel Management System:

Hotel Management System is a hotel reservation site script where site users will be able to search rooms availability with an online booking reservations system. Site users can also browse hotels, view room inventory, check availability, and book reservations in real-time.

Site users enter check in date and check out date then search for availability and rates. After choosing the right room in the wanted hotel – all booking and reservation process is done on the site and an SMS is sent to confirm the booking.

Administrator Panel

Account Manager

- Administrator – Administrator can manage administrator accounts and conform the rooms.

- Room Types – Administrator can define the type of rooms in the hotels, room's prices and upload an image for each room.

- Bookings – All booking and reservations maid on the site are displayed with all booking details: arrival date, departure date, hotel name, room type, number of passengers, price.

Entities in Hotel Management ERD/EERD:

- login
- contact
- newsletterlog
- payment
- room
- roombook

Entities, Attributes and Keys in Hotel Management ERD/EERD:

- **login**
  1. id

2. usname
3. pass

- **Contact**
    1. <u>id</u>
    2. fullname
    3. phoneno
    4. email
    5. cdate
    6. approval

- **newsletterlog**

    1. <u>id</u>
    2. title
    3. subject
    4. news

- **payment**
    1. <u>id</u>
    2. title
    3. fname
    4. lname
    5. troom
    6. tbed
    7. nroom
    8. cin
    9. cout
    10. ttot
    11. fintot
    12. mepr
    13. meal
    14. btot
    15. noofdays
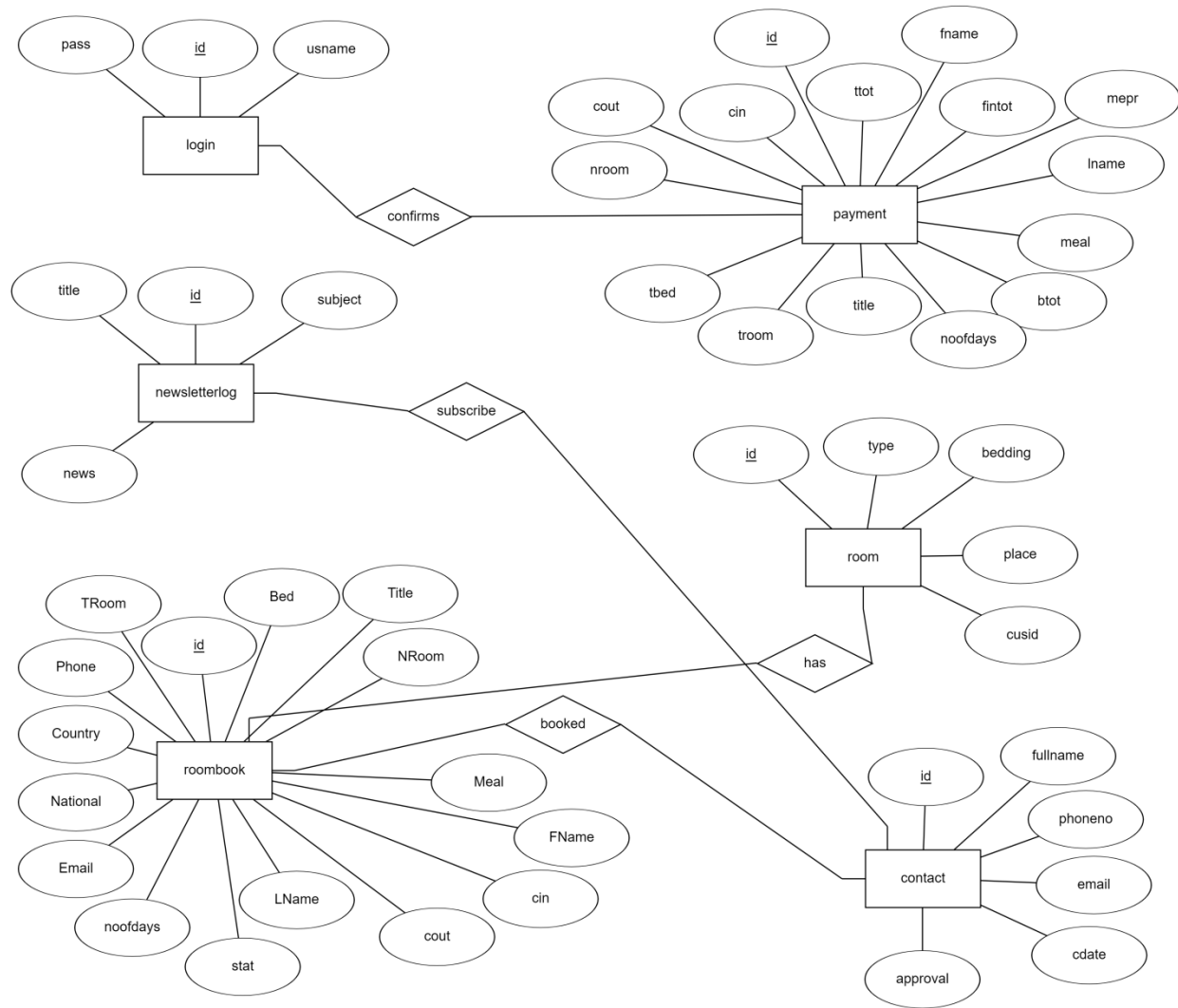
- **room**
    1. <u>id</u>
    2. type
    3. bedding
    4. place
    5. cusid

- **roombook**
    1. <u>id</u>
    2. Title

3. FName
4. LName
5. Email
6. National
7. Country
8. Phone
9. TRoom
10. Bed
11. NRoom
12. Meal
13. Cin
14. Cout
15. stat
16. nodays

ERD of Hotel Management System

Relational Schema of Hotel Management System

hotel room
- id : int(10) unsigned
- type : varchar(15)
- bedding : varchar(10)
- place : varchar(10)
- # cusid : int(11)

hotel roombook
- id : int(10) unsigned
- Title : varchar(5)
- FName : text
- LName : text
- Email : varchar(50)
- National : varchar(30)
- Country : varchar(30)
- Phone : text
- TRoom : varchar(20)
- Bed : varchar(10)
- NRoom : varchar(2)
- Meal : varchar(15)
- cin : date
- cout : date
- stat : varchar(15)
- # nodays : int(11)

hotel newsletterlog
- id : int(10) unsigned
- title : varchar(52)
- subject : varchar(100)
- news : text

hotel contact
- id : int(10) unsigned
- fullname : varchar(100)
- # phoneno : int(10)
- email : text
- cdate : date
- approval : varchar(12)

hotel login
- id : int(10) unsigned
- usname : varchar(30)
- pass : varchar(30)

hotel payment
- # id : int(11)
- title : varchar(5)
- fname : varchar(30)
- lname : varchar(30)
- troom : varchar(30)
- tbed : varchar(30)
- # nroom : int(11)
- cin : date
- cout : date
- # ttot : double(8,2)
- # fintot : double(8,2)
- # mepr : double(8,2)
- meal : varchar(30)
- # btot : double(8,2)
- # noofdays : int(11)

SQL Queries for Creation and Data Insertion

```sql
--
-- Table structure for table `contact`
--

CREATE TABLE `contact` (
  `id` int(10) UNSIGNED NOT NULL,
  `fullname` varchar(100) DEFAULT NULL,
  `phoneno` int(10) DEFAULT NULL,
  `email` text,
  `cdate` date DEFAULT NULL,
  `approval` varchar(12) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;


-- --------------------------------------------------------


--
-- Table structure for table `login`
--

CREATE TABLE `login` (
  `id` int(10) UNSIGNED NOT NULL,
  `usname` varchar(30) DEFAULT NULL,
  `pass` varchar(30) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;


--
-- Dumping data for table `login`
--

INSERT INTO `login` (`id`, `usname`, `pass`) VALUES
(1, 'Admin', '1234'),
(2, 'Maziyar', '12345'),
(3, 'Mateen', '12345');


-- --------------------------------------------------------


--
-- Table structure for table `newsletterlog`
--
```

```sql
CREATE TABLE `newsletterlog` (
  `id` int(10) UNSIGNED NOT NULL,
  `title` varchar(52) DEFAULT NULL,
  `subject` varchar(100) DEFAULT NULL,
  `news` text
) ENGINE=InnoDB DEFAULT CHARSET=latin1;


-- --------------------------------------------------------

--
-- Table structure for table `payment`
--

CREATE TABLE `payment` (
  `id` int(11) DEFAULT NULL,
  `title` varchar(5) DEFAULT NULL,
  `fname` varchar(30) DEFAULT NULL,
  `lname` varchar(30) DEFAULT NULL,
  `troom` varchar(30) DEFAULT NULL,
  `tbed` varchar(30) DEFAULT NULL,
  `nroom` int(11) DEFAULT NULL,
  `cin` date DEFAULT NULL,
  `cout` date DEFAULT NULL,
  `ttot` double(8,2) DEFAULT NULL,
  `fintot` double(8,2) DEFAULT NULL,
  `mepr` double(8,2) DEFAULT NULL,
  `meal` varchar(30) DEFAULT NULL,
  `btot` double(8,2) DEFAULT NULL,
  `noofdays` int(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `payment`
--

INSERT INTO `payment` (`id`, `title`, `fname`, `lname`, `troom`, `tbed`, `nroom`,
`cin`, `cout`, `ttot`, `fintot`, `mepr`, `meal`, `btot`, `noofdays`) VALUES
(1, 'Mr.', 'Maziyar', 'Rehan', 'Superior Room', 'Double', 1, '2021-12-17', '2021-
12-19', 640.00, 652.80, 0.00, 'Room only', 12.80, 2);


-- --------------------------------------------------------

--
-- Table structure for table `room`
```

```sql
--

CREATE TABLE `room` (
  `id` int(10) UNSIGNED NOT NULL,
  `type` varchar(15) DEFAULT NULL,
  `bedding` varchar(10) DEFAULT NULL,
  `place` varchar(10) DEFAULT NULL,
  `cusid` int(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `room`
--

INSERT INTO `room` (`id`, `type`, `bedding`, `place`, `cusid`) VALUES
(1, 'Superior Room', 'Single', 'Free', NULL),
(2, 'Superior Room', 'Double', 'NotFree', 1),
(3, 'Superior Room', 'Triple', 'Free', NULL),
(4, 'Single Room', 'Quad', 'Free', NULL),
(5, 'Superior Room', 'Quad', 'Free', NULL),
(6, 'Deluxe Room', 'Single', 'Free', NULL),
(7, 'Deluxe Room', 'Double', 'Free', NULL),
(8, 'Deluxe Room', 'Triple', 'Free', NULL),
(9, 'Deluxe Room', 'Quad', 'Free', NULL),
(10, 'Guest House', 'Single', 'Free', NULL),
(11, 'Guest House', 'Double', 'Free', NULL),
(12, 'Guest House', 'Quad', 'Free', NULL),
(13, 'Single Room', 'Single', 'Free', NULL),
(14, 'Single Room', 'Double', 'Free', NULL),
(15, 'Single Room', 'Triple', 'Free', NULL),
(16, 'Superior Room', 'Single', 'Free', NULL);


-- --------------------------------------------------------


--
-- Table structure for table `roombook`
--

CREATE TABLE `roombook` (
  `id` int(10) UNSIGNED NOT NULL,
  `Title` varchar(5) DEFAULT NULL,
  `FName` text,
  `LName` text,
  `Email` varchar(50) DEFAULT NULL,
  `National` varchar(30) DEFAULT NULL,
```

```sql
  `Country` varchar(30) DEFAULT NULL,
  `Phone` text,
  `TRoom` varchar(20) DEFAULT NULL,
  `Bed` varchar(10) DEFAULT NULL,
  `NRoom` varchar(2) DEFAULT NULL,
  `Meal` varchar(15) DEFAULT NULL,
  `cin` date DEFAULT NULL,
  `cout` date DEFAULT NULL,
  `stat` varchar(15) DEFAULT NULL,
  `nodays` int(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;


--
-- Dumping data for table `roombook`
--

INSERT INTO `roombook` (`id`, `Title`, `FName`, `LName`, `Email`, `National`,
`Country`, `Phone`, `TRoom`, `Bed`, `NRoom`, `Meal`, `cin`, `cout`, `stat`,
`nodays`) VALUES
(1, 'Mr.', 'Maziyar', 'Rehan', 'maziyar.casper@gmail.com', 'Pakistan',
'Pakistan', '0000000000', 'Superior Room', 'Double', '1', 'Room only', '2021-12-
17', '2021-12-19', 'Conform', 2);


--
-- Indexes for dumped tables
--


--
-- Indexes for table `contact`
--
ALTER TABLE `contact`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `login`
--
ALTER TABLE `login`
  ADD PRIMARY KEY (`id`);


--
-- Indexes for table `newsletterlog`
--
ALTER TABLE `newsletterlog`
  ADD PRIMARY KEY (`id`);
```

```sql
--
-- Indexes for table `room`
--
ALTER TABLE `room`
  ADD PRIMARY KEY (`id`);


--
-- Indexes for table `roombook`
--
ALTER TABLE `roombook`
  ADD PRIMARY KEY (`id`);


--
-- AUTO_INCREMENT for dumped tables
--


--
-- AUTO_INCREMENT for table `contact`
--
ALTER TABLE `contact`
  MODIFY `id` int(10) UNSIGNED NOT NULL AUTO_INCREMENT;
--
-- AUTO_INCREMENT for table `login`
--
ALTER TABLE `login`
  MODIFY `id` int(10) UNSIGNED NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;
--
-- AUTO_INCREMENT for table `newsletterlog`
--
ALTER TABLE `newsletterlog`
  MODIFY `id` int(10) UNSIGNED NOT NULL AUTO_INCREMENT;
--
-- AUTO_INCREMENT for table `room`
--
ALTER TABLE `room`
  MODIFY `id` int(10) UNSIGNED NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=17;
--
-- AUTO_INCREMENT for table `roombook`
--
ALTER TABLE `roombook`
  MODIFY `id` int(10) UNSIGNED NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;
```

Advanced SQL Queries

```sql
CREATE TRIGGER `insertLog`
AFTER INSERT
ON `login`
FOR EACH ROW
INSERT INTO LOGS VALUES (null,NEW.id, 'Inserted',NOW())



CREATE TRIGGER `paymentLog`
AFTER INSERT
 ON `payment`
FOR EACH ROW
INSERT INTO logs VALUES (null,NEW.id,'Payment Added',NOW());

CREATE TRIGGER `Room-del-log`
AFTER UPDATE
ON `room`
FOR EACH ROW
INSERT INTO logs VALUES(null,NEW.id,'ROOM Updated',NOW());


CREATE TRIGGER `Romlog`
 AFTER INSERT
 ON `room`
FOR EACH ROW INSERT INTO logs VALUES(null,NEW.id,'ROOM Added' ,NOW());


CREATE TRIGGER `Roombookupdatedlog`
AFTER UPDATE
ON `roombook`
FOR EACH ROW INSERT INTO logs VALUES (null,NEW.id,'ROOMBOOK UPDATED',NOW());


CREATE TRIGGER `roomdel`
BEFORE DELETE
ON `room`
FOR EACH ROW
INSERT INTO logs VALUES(null,id,'ROOM DELETED',NOW());


CREATE TRIGGER `Roombook-Insert`
```

```sql
AFTER INSERT
ON `roombook`
FOR EACH ROW INSERT INTO logs VALUES(null,NEW.id,'ROOM ADDED',NOW())


CREATE TRIGGER `Roombook-del-log`
BEFORE INSERT
ON `roombook`
FOR EACH ROW
INSERT INTO logs VALUES(null,NEW.id,'ROOMBook Deleted',NOW())
```