



DATABASE MANAGEMENT SYSTEMS

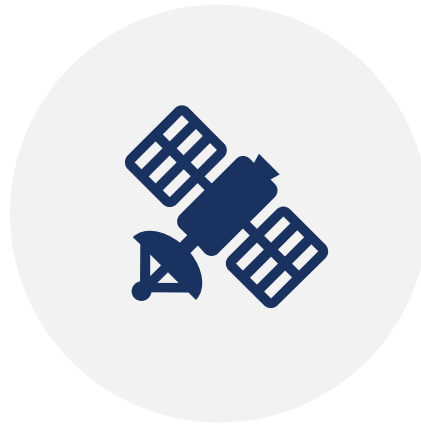
PROJECT REVIEW – 3 – TOPIC – HOSPITAL DATABASE MANAGEMENT SYSTEM

FACULTY – PROF.VELLINGIRI.J

TECH REQUIREMENTS



HTML,CSS,PHP,XAMPP



SQL DATABASE(PHP MY
ADMIN)




PATIENCE

ABSTRACT:

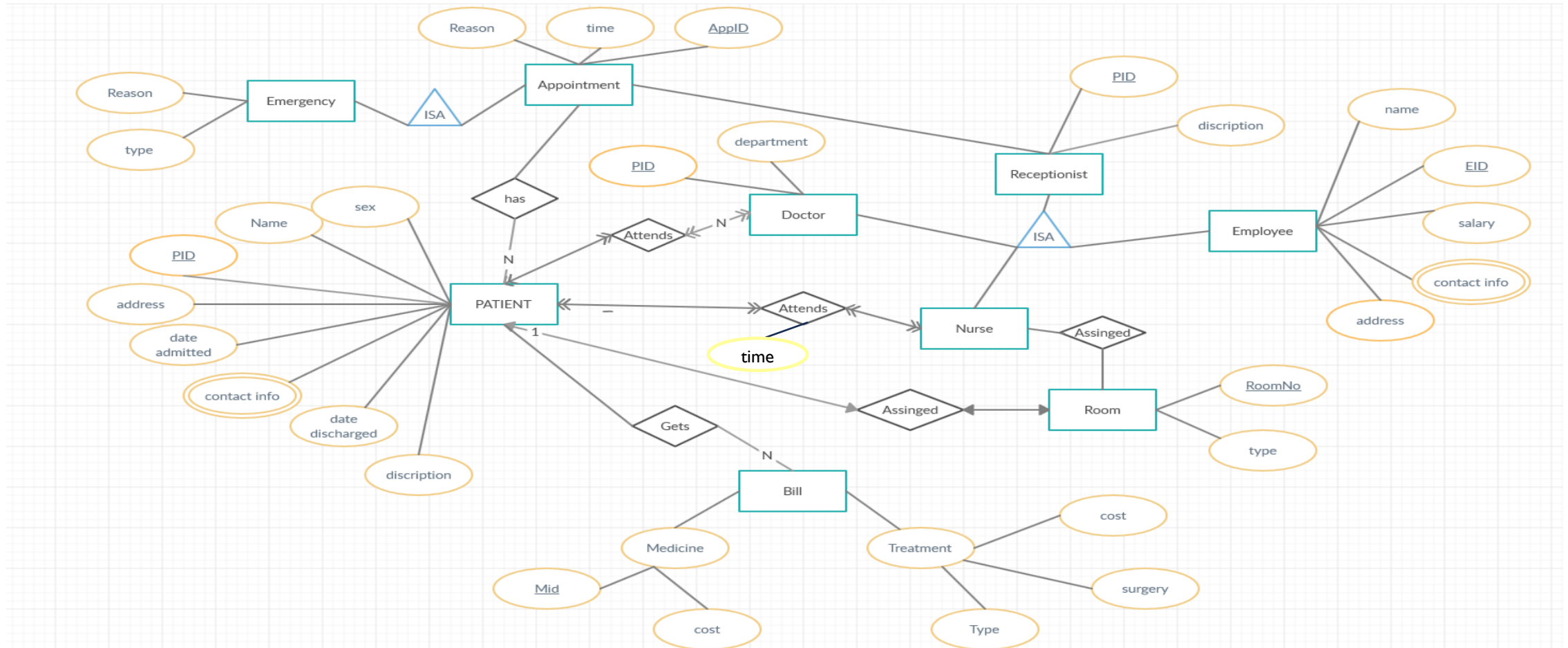
- We are going to build a hospital management system which would have everything what we generally see on a hospital website with an ease to access their portals and that book an online appointment in a very easy way.
- VIT Hospital management system is online patient management and Appointment, Scheduler application software for getting an appointment very easily over the internet. This Hospital management system application software is built upon PHP. Hospital can take the online patient appointment and patient can take doctor schedule from anywhere in the world .The main aim of our project is to provide a paperless hospital. It also aims at providing low-cost reliable automation .The system also provides excellent security of data at every level of user-system interaction. Thus we have developed an automated version of the manual system, named as "VIT Hospital Management System".

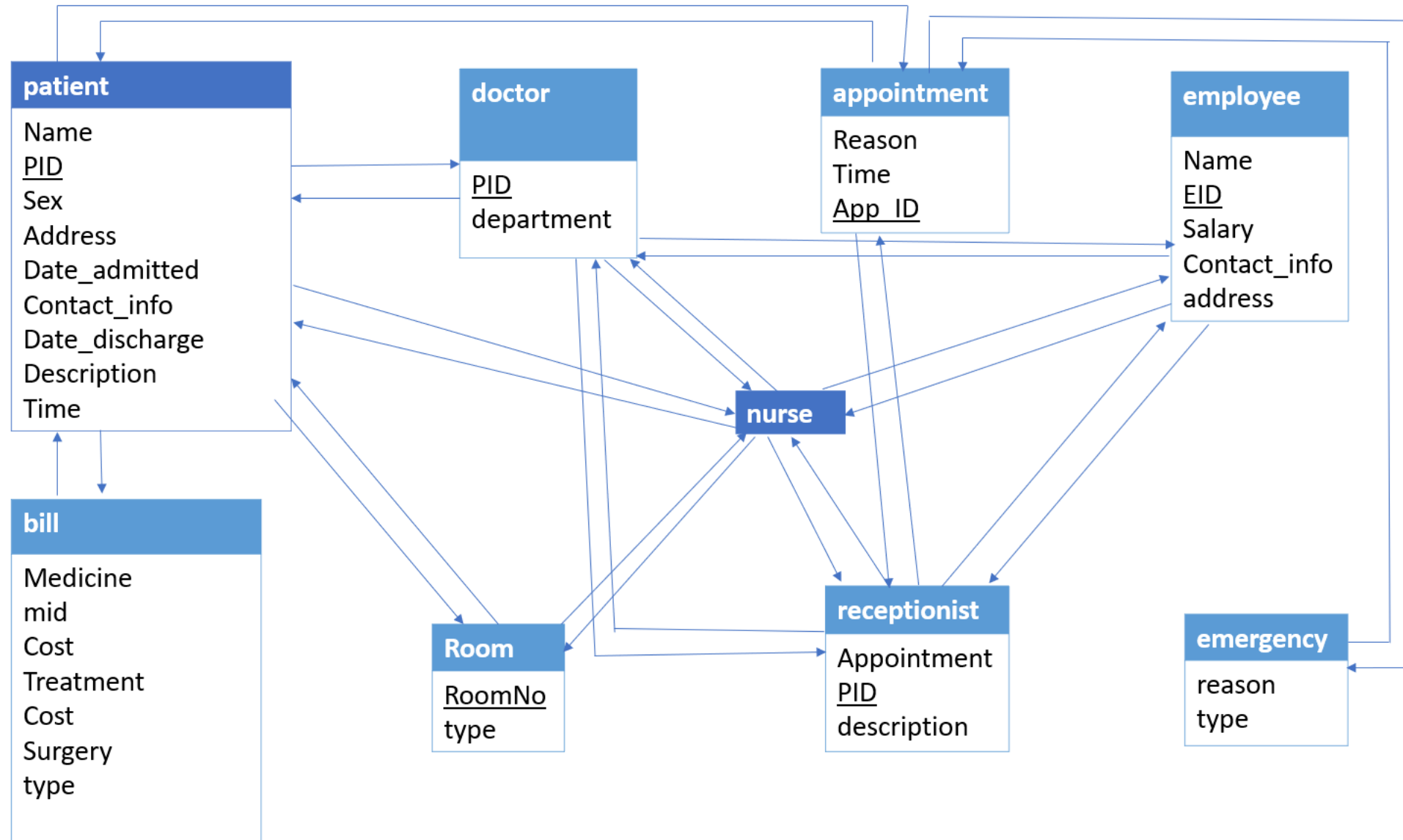
INTRODUCTION:

- The project Hospital Management system includes registration of patients, storing their details into the system, and also computerized billing in the pharmacy, and labs. The software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. It includes a search facility to know the current status of each room. User can search availability of a doctor and the details of a patient using the id.
- The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast.
- Hospital Management System is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to hospitals.

- 
- Hospital Management System is designed for multispeciality hospitals, to cover a wide range of hospital administration and management processes. It is an integrated end-to-end Hospital Management System that provides relevant information across the hospital to support effective decision making for patient care, hospital administration and critical financial accounting, in a seamless flow.
 - Hospital Management System is a software product suite designed to improve the quality and management of hospital management in the areas of clinical process analysis and activity-based costing. Hospital Management System enables you to develop your organization and improve its effectiveness and quality of work. Managing the key processes efficiently is critical to the success of the hospital helps you manage your processes

ER DIAGRAM AND RELATIONAL SCHEMA





CREATION OF RELATIONAL TABLES:

Screenshot of the phpMyAdmin interface showing the database structure for the 'vithospitalmanagementsystem' database.

The interface displays the following tables and their details:

Table	Action	Rows	Type	Collation	Size	Overhead
admin	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	32.0 KiB	-
appointment	★ Browse Structure Search Insert Empty Drop	69	InnoDB	latin1_swedish_ci	16.0 KiB	-
billing	★ Browse Structure Search Insert Empty Drop	35	InnoDB	latin1_swedish_ci	16.0 KiB	-
billing_records	★ Browse Structure Search Insert Empty Drop	205	InnoDB	latin1_swedish_ci	16.0 KiB	-
department	★ Browse Structure Search Insert Empty Drop	16	InnoDB	latin1_swedish_ci	16.0 KiB	-
doctor	★ Browse Structure Search Insert Empty Drop	15	InnoDB	latin1_swedish_ci	16.0 KiB	-
doctor_timings	★ Browse Structure Search Insert Empty Drop	15	InnoDB	latin1_swedish_ci	16.0 KiB	-
medicine	★ Browse Structure Search Insert Empty Drop	6	InnoDB	latin1_swedish_ci	16.0 KiB	-
orders	★ Browse Structure Search Insert Empty Drop	38	InnoDB	latin1_swedish_ci	16.0 KiB	-
patient	★ Browse Structure Search Insert Empty Drop	24	InnoDB	latin1_swedish_ci	32.0 KiB	-
payment	★ Browse Structure Search Insert Empty Drop	45	InnoDB	latin1_swedish_ci	16.0 KiB	-
prescription	★ Browse Structure Search Insert Empty Drop	84	InnoDB	latin1_swedish_ci	16.0 KiB	-
prescription_records	★ Browse Structure Search Insert Empty Drop	117	InnoDB	latin1_swedish_ci	16.0 KiB	-
room	★ Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	16.0 KiB	-
service_type	★ Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	16.0 KiB	-
treatment	★ Browse Structure Search Insert Empty Drop	7	InnoDB	latin1_swedish_ci	16.0 KiB	-
treatment_records	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16.0 KiB	-
user	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16.0 KiB	-
18 tables	Sum	689	InnoDB	utf8mb4_general_ci	320.0 KiB	0 B

The interface also shows a sidebar with the database structure tree, a top navigation bar with various tools (Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, Events, Triggers, Tracking, More), and a bottom status bar with the current database and table information.

VIT Hospital Management System

localhost / 127.0.0.1 / vithospital

localhost/phpmyadmin/sql.php?db=vithospitalmanagementsystem&table=patient&pos=0

phpMyAdmin

Recent

Favorites

information_schema

mysql

performance_schema

phpmyadmin

test

test1

vithospitalmanagementsystem

New

admin

appointment

billing

billing_records

department

doctor

doctor_timings

medicine

orders

patient

payment

prescription

prescription_records

room

service_type

treatment

treatment_records

user

Server: 127.0.0.1 » Database: vithospitalmanagementsystem » Table: patient

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

+ Options

patientid

patientname

admissiondate

admissiontime

address

mobilen

city

pincode

loginid

password

bloodgroup

gender

do

<input type="checkbox"/>				7	Mangala	2016-02-10	12:00:00	Chennai	98732230	belthangady	542752	m14	123456789	B+	FEMALE	199
<input type="checkbox"/>				9	manoj	2016-01-14	12:30:00	mahadevi temple bc road	8785674625	Banglore	564892	15	123456789	O+	MALE	199
<input type="checkbox"/>				22	kavitha	2016-03-18	01:21:00	kuvempu nagar	8756332456	Banglore	577234	0	shricharanalva97	B+	FEMALE	20
<input type="checkbox"/>				23	paramesh	2016-03-02	05:07:00	Janakal	9449443117	Hosadurga	577527	13	123456789	B+	MALE	199
<input type="checkbox"/>				36	thanuja K B	2016-03-07	01:30:00	chitradurga	9449678831	hosdurga	577527	12	123456789	AB+	FEMALE	199
<input type="checkbox"/>				40	mahesh	2016-03-17	13:00:00	vijyapura	951234785	Banglore	547147	16	123456789	AB+	MALE	199
<input type="checkbox"/>				41	Raj kiran	0000-00-00	00:00:00	34rd floor	78978978979	Manglaore	53535	0	123456789		Male	20
<input type="checkbox"/>				42	ydytyfu	0000-00-00	00:00:00	chg	76767574	utdff	35353	0	sytrfyhfyj		Male	199
<input type="checkbox"/>				43	Mahesh prasad	2016-03-09	00:00:00	3rd floor, city light	07789654123	Mangalore	53535	0	123456789		Male	200
<input type="checkbox"/>				44	Raj guru	2016-03-19	08:17:55	5th floor, city light building	889665477	Mumbai	35353	0	123456789		Male	200
<input type="checkbox"/>				45	Pter king	2016-03-19	08:50:46	skhouse, vinagar	07789654123	puttur	575001	0	123456789	A+	MALE	200
<input type="checkbox"/>				46	jeevan	2016-03-19	08:53:44	4th cross, ml road	7894561230	Bangalore	456789	0	123123123	A-	MALE	20
<input type="checkbox"/>				47	jeevan	2016-03-19	08:55:15	4th cross, ml road	7894561230	Bangalore	456789	0	556677123	A-	MALE	20
<input type="checkbox"/>				48	Prakash	2016-03-25	09:59:36	3rd floor, city light buildin	8874563210	Mangalore	584556	0	123456789	A+	MALE	20
<input type="checkbox"/>				50	shri	2018-01-26	13:28:33	Bangalore	8553507260	Mangalore	53535	0	shricharan		Male	20
<input type="checkbox"/>				51	aravind	0000-00-00	00:00:00	Mangalore	8764654654	Mangalore	66567	0	123456789	A+	MALE	20

Console

DBMS PROJECT....docx

ER DIAGRAM F.PNG

Show all

23:13

05-09-2020

File

Edit

Selection

View

Go

Run

Terminal

Help

EXPLORER

OPEN EDITORS

ONLINE-HOSPITAL-MANAGEMENT-SYSTE...

backup

vithospitalmanagementsystem.sql

chartjs

chartjsdia

images

js

layout

styles

forms.css

homepage.css

index.html

layout.css

navi.css

tables.css

index.html

PHPMailer-master

treatmentfiles

aboutus.php

admin.php

adminaccount.php

adminchangepassword.php

adminlogin.php

adminprofile.php

ajaxmedicine.php

appointment.php

appointmentapproval.php

appointmentdetail.php

billing.php

contactus.php

dbconnection.php

OUTLINE

NPM SCRIPTS

vithospitalmanagementsystem.sql

dbconnection.php

backup

vithospitalmanagementsystem.sql

49

--

50

-- Table structure for table `appointment`

51

--

52

53

CREATE TABLE `appointment` (

54

`appointmentid` int(10) NOT NULL,

55

`appointmenttype` varchar(25) NOT NULL,

56

`patientid` int(10) NOT NULL,

57

`roomid` int(10) NOT NULL,

58

`departmentid` int(10) NOT NULL,

59

`appointmentdate` date NOT NULL,

60

`appointmenttime` time NOT NULL,

61

`doctorid` int(10) NOT NULL,

62

`status` varchar(10) NOT NULL,

63

`app_reason` text NOT NULL

64

) ENGINE=InnoDB DEFAULT CHARSET=latin1;

65

66

--

67

-- Dumping data for table `appointment`

68

--

69

70

INSERT INTO `appointment` (`appointmentid`, `appointmenttype`, `patientid`, `roomid`,

`departmentid`, `appointmentdate`, `appointmenttime`, `doctorid`, `status`, `app_reason`)

VALUES

71

(44, 'Online', 22, 15, 13, '2016-03-09', '14:03:00', 41, 'Approved', ''),

72

(48, 'Online', 22, 0, 0, '2016-03-25', '17:46:00', 0, 'Approved', ''),

73

(50, 'Offline', 7, 0, 0, '2016-03-26', '16:05:00', 0, 'Approved', '')

Ln 45, Col 70

Spaces: 2

UTF-8

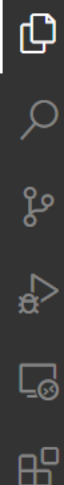
LF

SQL

Go Live

17:46

30-10-2020



EXPLORER

OPEN EDITORS

ONLINE-HOSPITAL-MANAGEMENT-SYSTEM...
 backup
 vithospitalmanagementsystem.sql
 chartjs
 chartjsdia
 images
 js
 layout
 styles
 # forms.css
 # homepage.css
 # index.html
 # layout.css
 # navi.css
 # tables.css
 # index.html
 PHPMailer-master
 treatmentfiles
 aboutus.php
 admin.php
 adminaccount.php
 adminchangepassword.php
 adminlogin.php
 adminprofile.php
 ajaxmedicine.php
 appointment.php
 appointmentapproval.php
 appointmentdetail.php
 billing.php
 contactus.php
 dbconnection.php

OUTLINE

NPM SCRIPTS

vithospitalmanagementsystem.sql X dbconnection.php

backup > vithospitalmanagementsystem.sql

```
145  
146 CREATE TABLE `billing` (  
147   `billingid` int(10) NOT NULL,  
148   `patientid` int(10) NOT NULL,  
149   `appointmentid` int(10) NOT NULL,  
150   `billingdate` date NOT NULL,  
151   `billingtime` time NOT NULL,  
152   `discount` float(10,2) NOT NULL,  
153   `taxamount` float(10,2) NOT NULL,  
154   `discountreason` text NOT NULL,  
155   `discharge_time` time NOT NULL,  
156   `discharge_date` date NOT NULL  
157 ) ENGINE=InnoDB DEFAULT CHARSET=latin1;  
158  
159 --  
160 -- Dumping data for table `billing`  
161 --  
162  
163 INSERT INTO `billing` (`billingid`, `patientid`, `appointmentid`, `billingdate`,  
  `billingtime`, `discount`, `taxamount`, `discountreason`, `discharge_time`, `discharge_date`)  
VALUES  
164 (5, 47, 94, '2016-03-23', '10:12:38', 0.00, 0.00, '', '00:00:00', '0000-00-00'),  
165 (6, 7, 78, '2016-03-23', '08:21:22', 0.00, 0.00, '', '00:00:00', '0000-00-00'),  
166 (7, 7, 95, '2016-03-23', '08:54:33', 0.00, 0.00, '', '00:00:00', '0000-00-00'),  
167 (8, 45, 96, '2016-03-23', '08:56:38', 0.00, 0.00, '', '00:00:00', '0000-00-00'),  
168 (9, 22, 61, '2016-03-23', '09:57:39', 0.00, 0.00, '0', '0', '0', '09:48:21', '2016-03-27'),  
169 (10, 48, 97, '2016-03-25', '10:06:57', 1370.00, 0.00, 'Test discount reason', 'test bal amt',
```

NORMALIZE THE TABLES:

* NORMALIZE THE TABLES

We will be taking 5 tables, :- admin, appointment, doctor, billing, user.

admin: dependencies.

$A \rightarrow BCDE$

$C \rightarrow BD$

$B \rightarrow D$ $\therefore C.K. = \underline{A}$

\therefore LHS proper subset of C.K. or RHS are not all key attributes.

\therefore It's in 2NF.

For 3rd NF:

cb - $C \rightarrow B$

bd - $B \rightarrow D$

ac - $A \rightarrow CE$

\therefore 3 diff. tables.

LHS is C.K. & RHS non-key attributes.

appointment

$A \rightarrow BCDEF$

$C \rightarrow DEF$

$B \rightarrow C$

$D \rightarrow EF$

$C.K. = \underline{A}$

\therefore LHS proper subset of C.K. or RHS are not all key attributes.

\therefore It's in 2NF.

Converting to 3NF

$C \rightarrow D$

$B \rightarrow C$

$D \rightarrow FE$

$A \rightarrow B$

\therefore LHS are super key

RHS are non-key attributes.

\therefore It's 3NF.

doctor:

$A \rightarrow BCDE$

$C \rightarrow DEF$

$D \rightarrow F$

$F \rightarrow E$

$C.K. = \underline{A}$

LHS is a proper subset of C.K. & no partial dependency

\therefore In 2NF

$C \rightarrow D$

$D \rightarrow F$

$F \rightarrow E$

$A \rightarrow CB$

LHS are super key

RHS - non-key attributes.

\therefore In 3NF

Billing

$A \rightarrow BCD$

$CD \rightarrow E$

$C.K. = \underline{A}$

\therefore LHS subset of C.K. & no P.D.

\therefore In 2NF

$cd \rightarrow e$

$A \rightarrow DCB$

\therefore Now LHS is a C.K.

RHS - non-key attributes.

\therefore In 3NF

user:

$A \rightarrow BCDE$

$C.K. = \underline{A}$

$CD \rightarrow E$

\therefore LHS is a proper subset of C.K.

\therefore It's in 2NF.

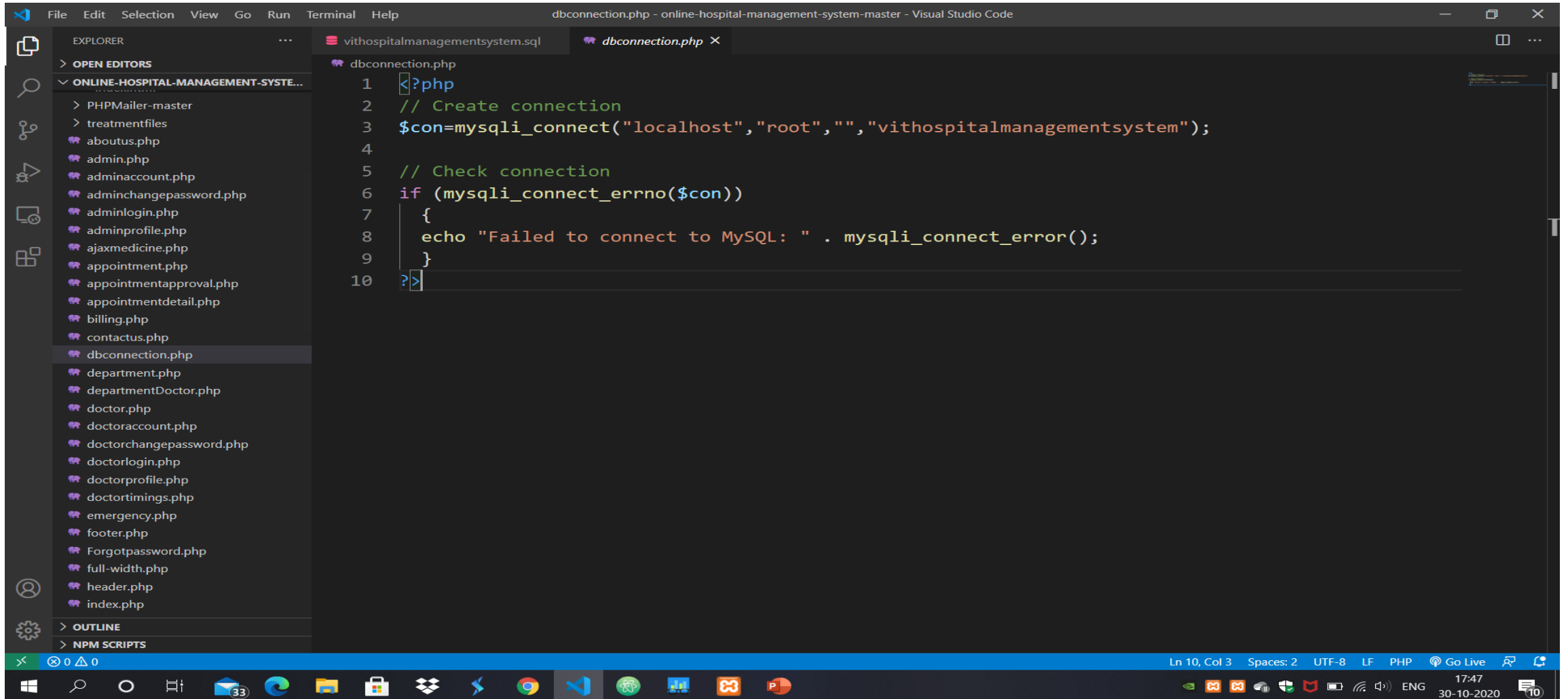
$CD \rightarrow E$

$A \rightarrow DCB$

\therefore LHS is a C.K.
RHS - non-key attributes

\therefore In 3NF

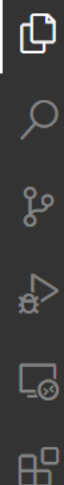
DB CONNECTION:



The screenshot shows the Visual Studio Code interface with a project named 'online-hospital-management-system-master'. The Explorer sidebar on the left lists various PHP files, with 'dbconnection.php' selected. The main editor displays the code for 'dbconnection.php', which includes a MySQL connection and a connection check function. The status bar at the bottom indicates the current cursor position is at line 10, column 3.

```
1 <?php
2 // Create connection
3 $con=mysqli_connect("localhost","root","","vithospitalmanagementsystem");
4
5 // Check connection
6 if (mysqli_connect_errno($con))
7 {
8     echo "Failed to connect to MySQL: " . mysqli_connect_error();
9 }
10 ?>
```

Ln 10, Col 3 Spaces: 2 UTF-8 LF PHP Go Live 17:47 30-10-2020



EXPLORER	...
> OPEN EDITORS	
▼ ONLINE-HOSPITAL-MANAGEMENT-SYSTEM-master	
> PHPMailer-master	
> treatmentfiles	
aboutus.php	
admin.php	
adminaccount.php	
adminchangepassword.php	
adminlogin.php	
adminprofile.php	
ajaxmedicine.php	
appointment.php	
appointmentapproval.php	
appointmentdetail.php	
billing.php	
contactus.php	
dbconnection.php	
department.php	
departmentDoctor.php	
doctor.php	
doctoraccount.php	
doctorchangepassword.php	
doctorlogin.php	
doctorprofile.php	
doctortimings.php	
emergency.php	
footer.php	
Forgotpassword.php	
full-width.php	
header.php	
index.php	
> OUTLINE	
> NPM SCRIPTS	

vithospitalmanagementsystem.sql

appointment.php ×

appointment.php

```
8 {
9     $sql ="UPDATE appointment SET patientid='$_POST[select4]',departmentid='$_POST
[select5]',appointmentdate='$_POST[appointmentdate]',appointmenttime='$_POST[time]
',doctorid='$_POST[select6]',status='$_POST[select]' WHERE appointmentid='$_GET
[editid]';
10     if($qsql = mysqli_query($con,$sql))
11     {
12         echo "<script>alert('appointment record updated successfully...');</script>";
13     }
14     else
15     {
16         echo mysqli_error($con);
17     }
18 }
19 else
20 {
21     $sql ="UPDATE patient SET status='Active' WHERE patientid='$_POST[select4]';
22     $qsql=mysqli_query($con,$sql);
23
24     $sql ="INSERT INTO appointment(patientid, departmentid, appointmentdate,
appointmenttime, doctorid, status, app_reason) values('$_POST[select4]','$_POST
[select5]','$_POST[appointmentdate]','$_POST[time]','$_POST[select6]','$_POST
[select]','$_POST[appreason]')";
25     if($qsql = mysqli_query($con,$sql))
26     {
27
```

EXPLORER

> OPEN EDITORS

ONLINE-HOSPITAL-MANAGEMENT-SYSTEM

- backup
- vithospitalmanagementsystem.sql
- chartjs
 - js
 - data.php
 - graph.html
- chartjsdia
- images
- js
- layout
- styles
 - forms.css
 - homepage.css
 - index.html
 - layout.css
 - navi.css
 - tables.css
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- adminchangepassword.php
- adminlogin.php
- adminprofile.php
- ajaxmedicine.php
- appointment.php
- appointmentapproval.php
- appointmentdetail.php

OUTLINE

NPM SCRIPTS

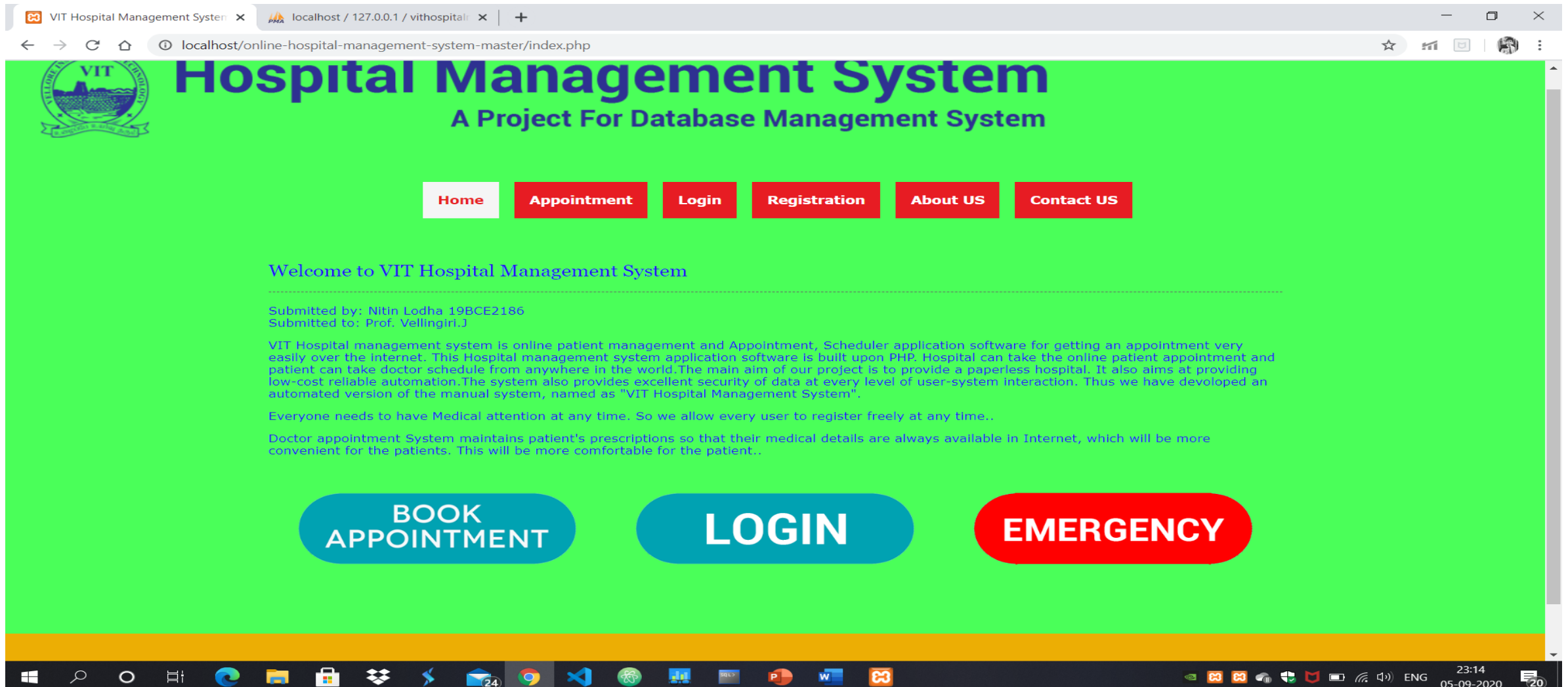
vithospitalmanagementsystem.sql

data.php

chartjs > data.php

```
1 <?php
2 //setting header to json
3 header('Content-Type: application/json');
4
5 //database
6 define('DB_HOST', '127.0.0.1');
7 define('DB_USERNAME', 'root');
8 define('DB_PASSWORD', '');
9 define('DB_NAME', 'vithospitalmanagementsystem');
10
11 //get connection
12 $mysqli = new mysqli(DB_HOST, DB_USERNAME, DB_PASSWORD, DB_NAME);
13
14 if(!$mysqli){
15     die("Connection failed: " . $mysqli->error);
16 }
17
18 //query to get data from the table
19 $query = sprintf("SELECT id, city, patientnodia, patientnofev,
20 patientnocanc, patientnodeng, patientnosurg, patientnodiarr,
21 patientnopox, patientnotumo, patientnoaller, patientnochest FROM chart order by id");
22
23 //execute query
24 $result = $mysqli->query($query);
25
26
27 //loop through the returned data
```


MANIPULATION AT FRONT END:



The screenshot shows a web browser window with the address bar displaying "localhost/online-hospital-management-system-master/index.php". The page has a green header with the VIT logo on the left and the title "Hospital Management System" in large blue font, followed by the subtitle "A Project For Database Management System" in smaller blue font. Below the header is a navigation bar with six red buttons: "Home", "Appointment", "Login", "Registration", "About US", and "Contact US". The main content area has a light green background and contains the following text:

Welcome to VIT Hospital Management System

Submitted by: Nitin Lodha 19BCE2186
Submitted to: Prof. Vellingiri.J

VIT Hospital management system is online patient management and Appointment, Scheduler application software for getting an appointment very easily over the Internet. This Hospital management system application software is built upon PHP. Hospital can take the online patient appointment and patient can take doctor schedule from anywhere in the world. The main aim of our project is to provide a paperless hospital. It also aims at providing low-cost reliable automation. The system also provides excellent security of data at every level of user-system interaction. Thus we have developed an automated version of the manual system, named as "VIT Hospital Management System".

Everyone needs to have Medical attention at any time. So we allow every user to register freely at any time..

Doctor appointment System maintains patient's prescriptions so that their medical details are always available in Internet, which will be more convenient for the patients. This will be more comfortable for the patient..

At the bottom of the page, there are three large, rounded buttons: "BOOK APPOINTMENT" (blue), "LOGIN" (teal), and "EMERGENCY" (red). The Windows taskbar is visible at the bottom of the screen, showing the time as 23:14 on 05-09-2020.

Add New Appointment

Patient Name	<input type="text"/>
Address	<input type="text"/>
City	<input type="text"/>
Mobile Number	<input type="text"/>
Login-ID	<input type="text"/>
Password	<input type="password"/>
Gender	<input type="text" value="Select"/>
DOB	<input type="text" value="dd-mm-yyyy"/>
Enter Appointment Date	<input type="text" value="dd-mm-yyyy"/>
Enter Appointment Time	<input type="text" value="--:--"/>
Department	<input type="text" value="Select department"/>
Doctors	<input type="text" value="Select doctor"/>
Appointment reason	<input type="text"/>
<input type="button" value="Submit"/>	

REFERENCES:

1. C. J. Date, A. Kannan and S. Swamynathan, *An Introduction to Database Systems*, Pearson Education, Eighth Edition, 2009.
2. Abraham Silberschatz, Henry F. Korth and S. Sudarshan, *Database System Concepts*, McGraw-Hill Education (Asia), Fifth Edition, 2006.
3. Shio Kumar Singh, *Database Systems Concepts, Designs and Application*, Pearson Education, Second Edition, 2011.
4. Peter Rob and Carlos Coronel, *Database Systems Design, Implementation and Management*, Thomson Learning-Course Technology, Seventh Edition, 2007.



THANK YOU

NITIN LODHA I9BCE2186

SHAINA AGARWAL I9BCE2214

SAKETH JULURI I9BCE2493

NIKHIL SAJU I9BCE0655