

# ABSTRACT

The purpose of Doctor Appointment System is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

Doctor Appointment System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. That means that one need not be distracted by information that is not relevant, while being able to reach the information.

The aim is to automate its existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients.

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# **Ch 1: Introduction**

## **1.1 Introduction**

This project is a web based management system for a doctor appointment. The project objective is to deliver the online shopping application into platform.

Doctor appointment is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. This project is an attempt to provide the advantages of online shopping to customers of a real shop. It helps buying the products in the shop anywhere through internet by using an android device. Thus the customer will get the service of online shopping and home delivery from his favorite shop.

## **1.2 Objective**

The objective of the project is to make an application in android platform to purchase items in an existing shop. In order to build such an application complete web support need to be provided. A complete and efficient web application which can provide the online shopping experience is the basic objective of the project. The web application can be implemented in the form of an android application with web view.

## **1.3 Scope and Feasibility**

This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains. The system recommends a facility to accept the orders 24\*7 and a home delivery system which can make customers happy.

If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as flipchart or eBay. Since the application is available in the Smartphone it is easily accessible and always available.

## Ch 2: Software & Hardware Requirements

### 2.1 Software Requirements

Technology	Tools
Front End	HTML, CSS, JavaScript
Back End	PHP, MySQL
Framework	Bootstrap
Software	XAMPP, Visual Studio Code

### 2.2 Hardware Requirements

RAM	2GB or above.
Processor	Intel Dual Core or above.
Operating System	Windows 7 or above, Ubuntu or any Linux based system.
Hosting	Amazon AWS, Go Daddy, HostGator, Bluehostetc.
CMS	Word Press etc.
Domain	.com, .in etc.
Browser	Google Chrome, Mozilla Firefox etc.

# Ch 3: System Design

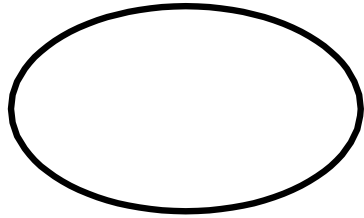
## 3.1 Data Flow Diagrams

A data flow diagram is a graphical technique that depicts the information flow and transformation that are applied as a data move from input to the output source in the system. It is used to represent any software or system at any level of abstraction. To construct data flow diagram, we used:

Arrows:



2. Circle :



3. Rectangle :



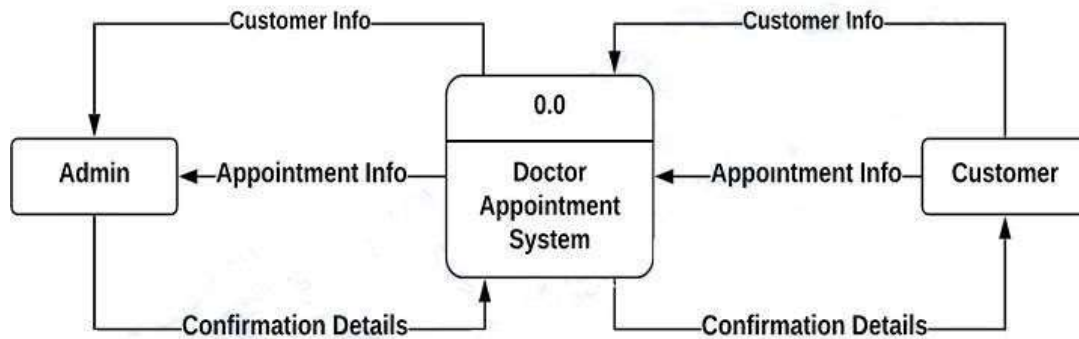
4. Open-ended boxes:



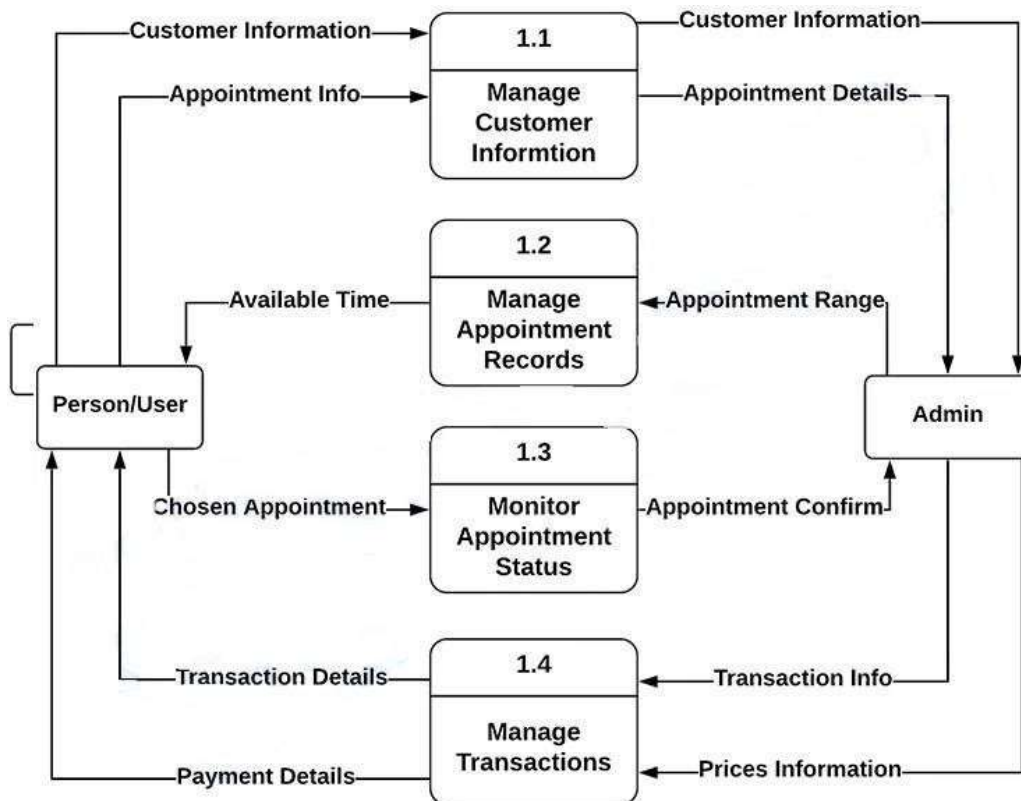
An arrow identifies data flow diagram in motion. It is a pipeline through which information flows. Circle stands for process that convert data into information. Square defines a source for destination of the system data. Open-ended boxes represent a data/store a data at rest.

1. Arrows should not cross each other.
2. Squares, circles and files must bear name.
3. Decomposed data flow must be balanced.
4. No two data flows, square or circle can have the same name.
5. Draw all data flows around the outside of the diagram.

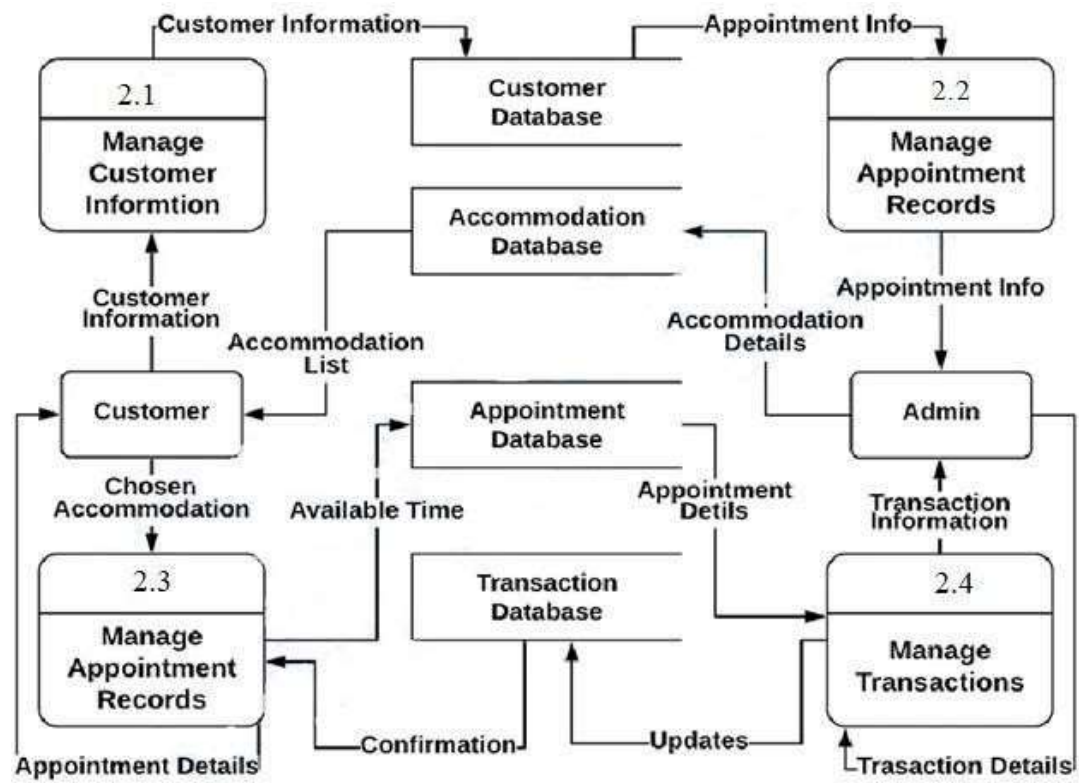
### 3.1.1 Zero Level DFD



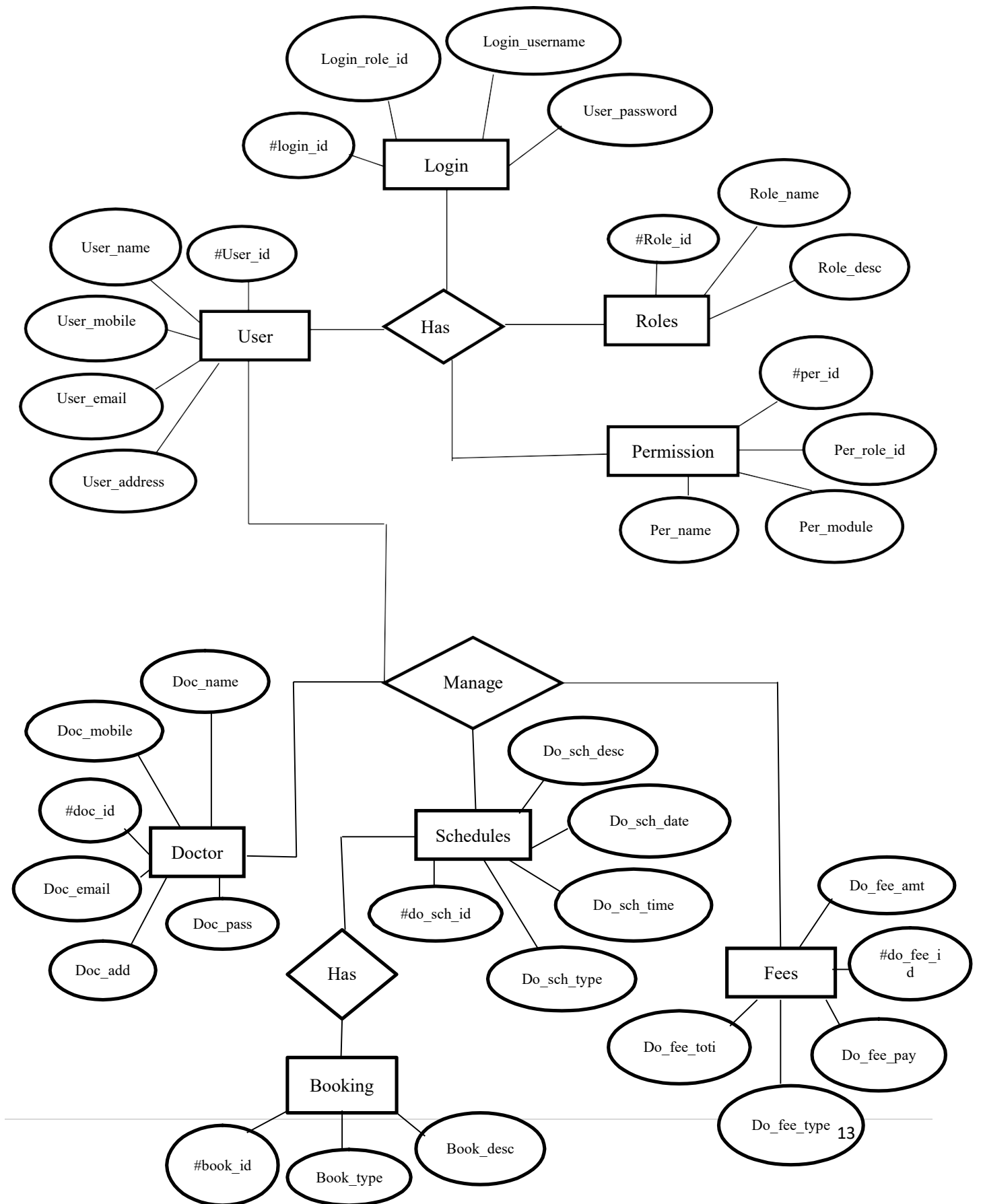
### 3.1.2 First Level DFD



### 3.1.3 Second Level DFD



### 3.3 ER Diagrams





## 3.4 Normalization

### 3.4.1 Normalization Raw Ratabase

Column name	Data type	Key constraints
Id	int(11)	NOT NULL
Specialization_name	varchar(40)	NULL
Doctor_id	Int(11)	NOT NULL
Specialization_Id	Int(11)	NOT NULL
Qualification_name	Varchar(100)	NULL
Institute_name	Varchar(100)	NULL
Procurement_year	Varchar(100)	NULL
First_name	Varchar(50)	NULL
Last_name	Varchar(50)	NULL
Professional_statement	Varchar(4000)	NULL
Practicing_from	Varchar(100)	NULL
Hospital_name	Varchar(100)	NULL
City	Varchar(100)	NULL
Country	Varchar(100)	NULL
Start_date	Varchar(100)	NULL
End_date	Varchar(100)	NULL
Day_of_the_weak	Varchar(100)	NULL
Is_available	Varchar(40)	NULL
Reason_of_unavailability	Varchar(100)	NULL
Is_review_anonymous	Varchar(40)	NULL
is_doctor_recommended	Varchar(40)	NULL
App_booking_channel_name	Varchar(40)	NULL

### 3.4.2 Normalisation level 1 (1NF)

#### Specification

id	int(11)	NOT NULL
Specification_name	varchar(100)	NULL

#### Doctor Specification

id	int(11)	NOT NULL
Doctor_id	int(11)	NOT NULL
Specification_id	int(11)	NOT NULL

#### Qualification

id	int(11)	NOT NULL
Doctor_id	int(11)	NULL
Qualification_name	varchar(100)	NULL
Institute_name	varchar(100)	NULL
Procurement_year	Varchar(100)	NULL

#### Doctor

id	int(11)	NULL
First_name	varchar(50)	NULL
Last_name	varchar(50)	NULL
Professional_statement	varchar(4000)	NULL
Practicing_from	varchar(100)	NNULL

## Hospital affiliation

id	int(11)	NULL
Doctor_id	Int(11)	NULL
Hospital_name	varchar(100)	NULL
City	varchar(100)	NULL
Country	varchar(100)	NULL
Start_date	varchar(100)	NULL
End_date	varchar(100)	NULL

### 3.4.3 Normalisation level 2 (2NF)

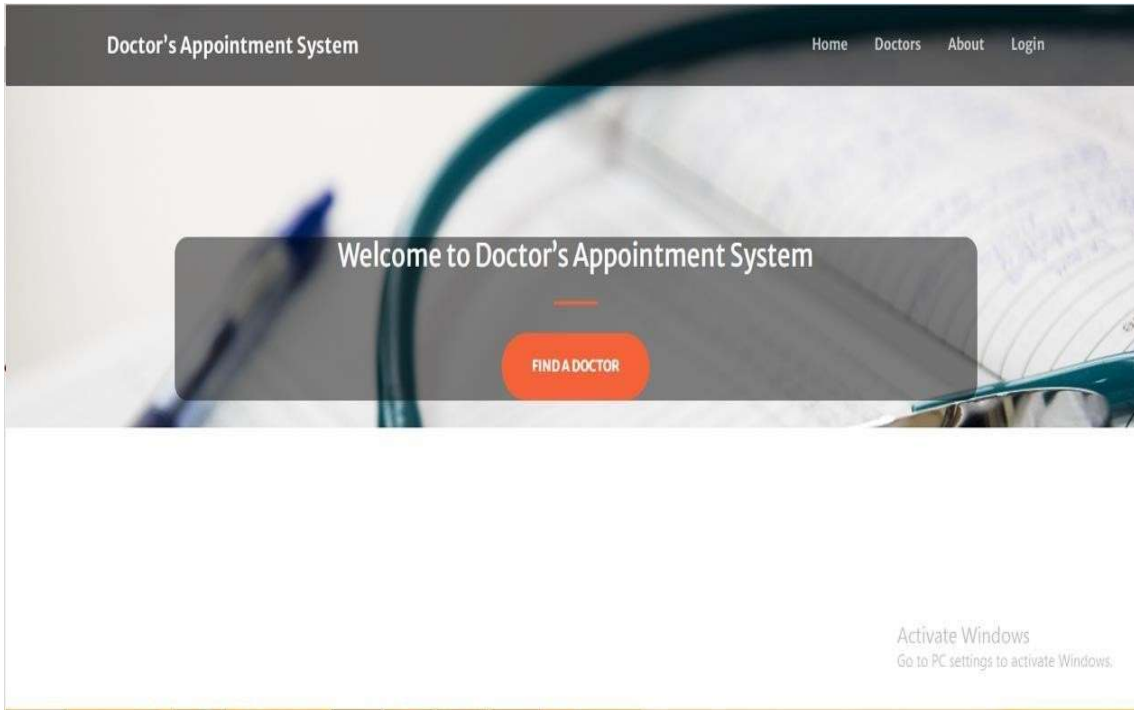
#### Client Review

id	int(11)	NOT NULL
User_account_id	int(11)	NOT NULL
Doctor_id	int(11)	NOT NULL
Is_review_anonymous	char(50)	NULL
Wait_time_rating	int(11)	NULL
Bedside_manner_rating	int(11)	NULL
Overall_rating	int(11)	NULL

#### Client Account

id	int(11)	NOT NULL
First_name	Varchar2(100)	NULL
Last_name	Varchar2(100)	NULL
Contact_number	int(11)	NULL
email	Varchar2(100)	NULL

## Chapter 4: Screenshots



## Medical Specialties

Pediatrics  
FIND DOCTOR



Activate Windows  
Go to PC settings to activate Windows.

localhost/doctors\_appointment/index.php?page=doctors&sid=1

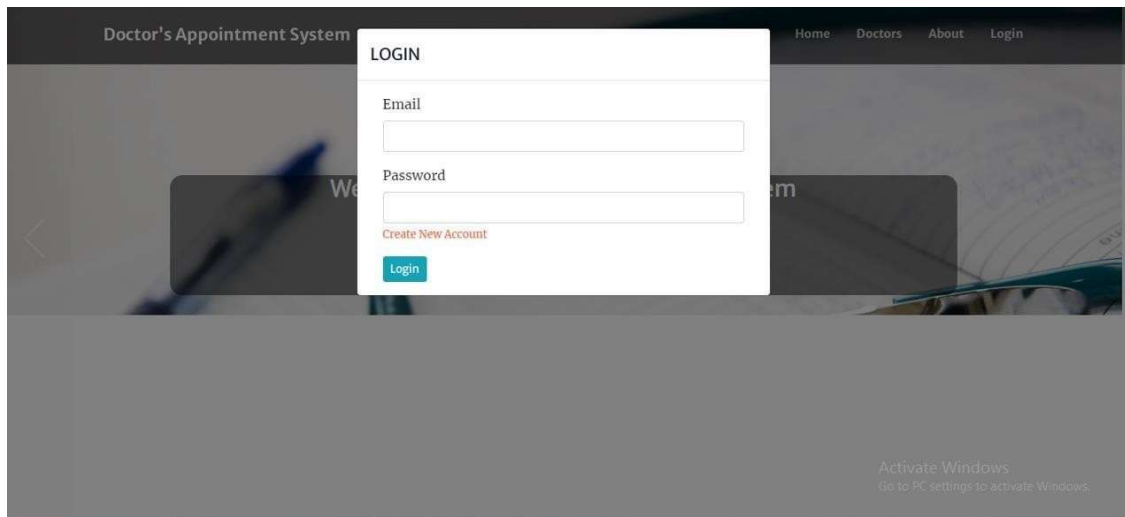
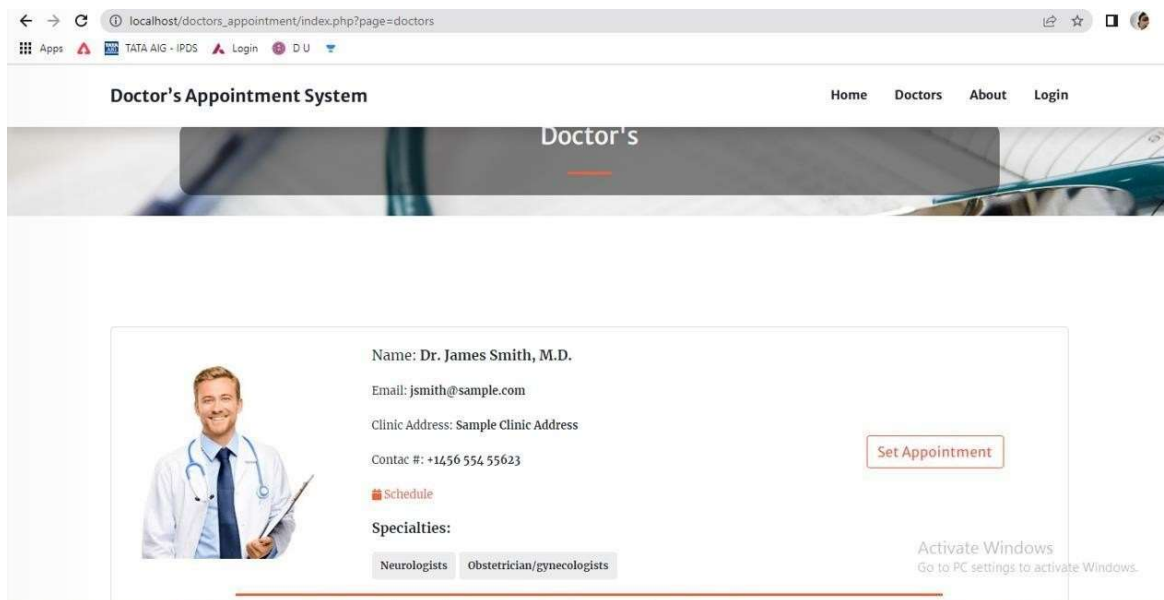
Obstetrician/gynecologists  
FIND DOCTOR



### Contact us

Activate Windows  
Go to PC settings to activate Windows.

localhost/doctors\_appointment/index.php?page=doctors&sid=5



Doctor's Appointment System

Home Doctors About Login

### Create an Account

Name

Contact

Address

Email

Password

Create

Activate Windows  
Go to PC settings to activate Windows.

Doctor's Appointment System

Welcome Raj ranjan Vats

### Set Appointment with Dr. James Smith, M.D.

Date

Time

Request Close

Specialties:

Neurologists Obstetrician/gynecologists

Activate Windows  
Go to PC settings to activate Windows.



phpMyAdmin

Recent Favorites

New

- doctors\_appointment\_db
  - New
    - appointment\_list
    - doctors\_list
    - doctors\_schedule
    - medical\_specialty
    - patient\_list
    - system\_settings
    - users
  - eb\_lms
  - event
  - information\_schema
  - mysql
  - onlineshop
  - performance\_schema
  - pharmacy\_db
  - phpmyadmin
  - project
  - test

Server: 127.0.0.1 » Database: doctors\_appointment\_db » Table: users

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

Extra options

		id	doctor_id	name	address	contact	username	password	type
<input type="checkbox"/>	Edit Copy Delete	1	0	Administrator			admin	admin123	1
<input type="checkbox"/>	Edit Copy Delete	7	0	George Wilson	Sample Only	+18456-5455-55	gwilson@sample.com	d40242fb23c45206fadee4e2418f274f	3
<input type="checkbox"/>	Edit Copy Delete	9	2	DR James Smith, M.D.	Sample Clinic Address	+1456 554 55623	jsmith@sample.com	jsmith123	2
<input type="checkbox"/>	Edit Copy Delete	10	3	DR Claire Blake, M.D.	Sample Only	+5465 555 623	cblake@sample.com	blake123	2
<input type="checkbox"/>	Edit Copy Delete	11	0	Raj ranjan Vats	NEW BARIDIH , ZONE NO 6B, NEAR RADHA SWAMI SATSANG	9304244351	ranjanraj1308@gmail.com	e807f1fcf82d132f9bb018ca6738a19f	3

Check all With selected: Edit Copy Delete Export

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Console

Activate Windows  
Go to PC settings to activate Windows.

phpMyAdmin

Recent Favorites

New

- doctors\_appointment\_db
  - New
    - appointment\_list
    - doctors\_list
    - doctors\_schedule
    - medical\_specialty
    - patient\_list
    - system\_settings
    - users
  - eb\_lms
  - event
  - information\_schema
  - mysql
  - onlineshop
  - performance\_schema
  - pharmacy\_db
  - phpmyadmin
  - project
  - test

Server: 127.0.0.1 » Database: doctors\_appointment\_db » Table: doctors\_schedule

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

Extra options

		id	doctor_id	day	time_from	time_to
<input type="checkbox"/>	Edit Copy Delete	3	2	Monday	10:00:00	17:00:00
<input type="checkbox"/>	Edit Copy Delete	4	2	Wednesday	10:00:00	17:00:00
<input type="checkbox"/>	Edit Copy Delete	5	3	Monday	10:00:00	15:00:00
<input type="checkbox"/>	Edit Copy Delete	6	3	Tuesday	10:00:00	15:00:00
<input type="checkbox"/>	Edit Copy Delete	7	3	Wednesday	10:00:00	15:00:00
<input type="checkbox"/>	Edit Copy Delete	8	3	Thursday	10:00:00	15:00:00
<input type="checkbox"/>	Edit Copy Delete	9	3	Friday	10:00:00	15:00:00

Check all With selected: Edit Copy Delete Export

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Console

Activate Windows  
Go to PC settings to activate Windows.

phpMyAdmin

Server: 127.0.0.1 » Database: doctors\_appointment\_db » Table: doctors\_schedule

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

Extra options

				id	doctor_id	day	time_from	time_to
<input type="checkbox"/>	Edit	Copy	Delete	3	2	Monday	10:00:00	17:00:00
<input type="checkbox"/>	Edit	Copy	Delete	4	2	Wednesday	10:00:00	17:00:00
<input type="checkbox"/>	Edit	Copy	Delete	5	3	Monday	10:00:00	15:00:00
<input type="checkbox"/>	Edit	Copy	Delete	6	3	Tuesday	10:00:00	15:00:00
<input type="checkbox"/>	Edit	Copy	Delete	7	3	Wednesday	10:00:00	15:00:00
<input type="checkbox"/>	Edit	Copy	Delete	8	3	Thursday	10:00:00	15:00:00
<input type="checkbox"/>	Edit	Copy	Delete	9	3	Friday	10:00:00	15:00:00

☐ Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Activate Windows  
Go to PC settings to activate Windows.

phpMyAdmin

Server: 127.0.0.1 » Database: doctors\_appointment\_db » Table: medical\_specialty

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds)

SELECT \* FROM `medical\_specialty`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

				id	name	img_path
<input type="checkbox"/>	Edit	Copy	Delete	1	Pediatrics	1600909800_estetoscópio-dos-instrumentos-médicos-à...
<input type="checkbox"/>	Edit	Copy	Delete	3	Cardiology	1600910100_human-heart-illustration-png-clip-art p...
<input type="checkbox"/>	Edit	Copy	Delete	4	Orthopaedics	1600910640_human-anatomy-orthopedic-vector-1686768...
<input type="checkbox"/>	Edit	Copy	Delete	5	Obstetrician/gynecologists	1600910880_127-1272273_doctors-logo-black-and-whit...
<input type="checkbox"/>	Edit	Copy	Delete	6	Neurologists	1600910940_127-1272273_doctors-logo-black-and-whit...

☐ Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Activate Windows  
Go to PC settings to activate Windows.

localhost/phpmyadmin/index.php?route=/sql&pos=0&db=doctors\_appointment...

# Chapter 5: Implementation and Testing

## 5.1 Implementation

This activity includes programming, testing and integration of modules into a progressively more complete system. Implementation is the process of collect all the required parts and assembles them into a major product.

## 5.2 Testing

### 5.2.1 Test Generation

This activity generates a set of test data, which can be used to test the new system before accepting it. In the test generation phase, all the parts are come which are to be tested to ensure that system does not produce any error. If there are some errors then we remove them and further it goes for accepting.

### 5.2.2 Software Testing

Software testing is a critical element of software quality assurance and moments the ultimate reviews of specification, design and coding. Testing presents an interesting anomaly for the software engineer.

Testing objectives include:

1. Testing is a process of executing a program with the intent of finding an error.
2. A good test case is one that has probability of finding an as yet undiscovered error.
3. A successful test is one that uncovers an undiscovered error.

Testing Principles:

1. All tests should be traceable to end user requirements.
2. Test should be planned long before testing begins.
3. Testing should begin on a small scale and progress towards testing in large.
4. Exhaustive testing is not possible.
5. To be most effective testing should be conducted by an independent third.

## 5.3 Code

### about.php

```
<!-- Masthead-->
<header class="masthead">
  <div class="container h-100">
    <div class="row h-100 align-items-center justify-content-center text-center">
      <div class="col-lg-10 align-self-end mb-4" style="background: #0000002e;">
        <h1 class="text-uppercase text-white font-weight-bold">About Us</h1>
        <hr class="divider my-4" />
      </div>
    </div>
  </div>
</header>

<section class="page-section">
  <div class="container">
    <?php echo html_entity_decode($_SESSION['setting_about_content']) ?>

  </div>
</section>
```

### doctor.php

```
<!-- Masthead-->
<header class="masthead">
  <div class="container h-100">
    <div class="row h-100 align-items-center justify-content-center text-center">
      <div class="col-lg-10 align-self-end mb-4" style="background: #0000002e;">
        <h1 class="text-uppercase text-white font-weight-bold">About Us</h1>
        <hr class="divider my-4" />
      </div>
    </div>
  </div>
</header>

<section class="page-section">
  <div class="container">
    <?php echo html_entity_decode($_SESSION['setting_about_content']) ?>

  </div>
</section>
```

## home.php

```
<?php
include 'admin/db_connect.php';
?>
<style>
#portfolio .img-fluid{
    width:100%
}
</style>
<header class="masthead">
    <div class="container h-100">
        <div class="row h-100 align-items-center justify-content-center text-center">
            <div class="col-lg-10 align-self-end mb-4 page-title">
                <h3 class="text-white">Welcome to <?php echo $_SESSION['setting_name'];
?></h3>
                <hr class="divider my-4" />
                <a class="btn btn-primary btn-xl js-scroll-trigger"
href="index.php?page=doctors">Find a Doctor</a>
            </div>
        </div>
    </div>
</header>
<section class="page-section" id="menu">

</section>
<div id="portfolio" class="container">
    <div class="container-fluid p-0">
        <div class="row">
            <div class="col-lg-12 text-center">
                <h2 class="mb-4">Medical Specialties</h2>
                <hr class="divider">
            </div>
        </div>
        <div class="row no-gutters">
            <?php
                $cats = $conn->query("SELECT * FROM medical_specialty order by id asc");
                while($row=$cats->fetch_assoc()):
            ?>
            <div class="col-lg-4 col-sm-6">
                <a class="portfolio-box" href="index.php?page=doctors&sid=<?php echo
$row['id'] ?>">
                    
```

```

        <div class="portfolio-box-caption">
            <div class="project-name"><?php echo $row['name'] ?></div>
            <div class="project-category text-white">Find Doctor</div>
        </div>
    </a>
</div>
<?php endwhile; ?>

</div>
</div>
</div>
<script>

    $('view_prod').click(function(){
        uni_modal_right('Product','view_prod.php?id='+$(this).attr('data-id'))
    })
</script>

```

### set\_appointment.php

```

<?php
include ('admin/db_connect.php')
?>
<style>
    #uni_modal .modal-footer{
        display: none
    }
</style>
<div class="container-fluid">
    <div class="col-lg-12">
        <div id="msg"></div>
        <form action="" id="manage-appointment">
            <input type="hidden" name="doctor_id" value="<?php echo
$_GET['id'] ?>">
            <div class="form-group">
                <label for="" class="control-label">Date</label>
                <input type="date" value="" name="date" class="form-control"
required>
            </div>
            <div class="form-group">
                <label for="" class="control-label">Time</label>
                <input type="time" value="" name="time" class="form-
control" required>
            </div>
            <hr>
            <div class="col-md-12 text-center">

```

```

4">Request</button>
<button class="btn btn-secondary btn-sm col-md-4 "
type="button" data-dismiss="modal" id="">Close</button>
</div>
</form>
</div>
</div>
<script>
    $('#manage-appointment').submit(function(e){
        e.preventDefault()
        start_load()
        $.ajax({
            url:'admin/ajax.php?action=set_appointment',
            method:'POST',
            data:$(this).serialize(),
            success:function(resp){
                resp = JSON.parse(resp)
                if(resp.status == 1){
                    alert_toast("Request submitted successfully");
                    end_load();
                    $('#modal').modal("hide");
                }else{
                    $('#msg').html('<div class="alert alert-
danger">'+resp.msg+'</div>')
                    end_load();
                }
            }
        })
    })
</script>

```

## signup.php

```

<?php session_start() ?>
<div class="container-fluid">
    <form action="" id="signup-frm">
        <div class="form-group">
            <label for="" class="control-label">Name</label>
            <input type="text" name="name" required="" class="form-control">
        </div>
        <div class="form-group">
            <label for="" class="control-label">Contact</label>
            <input type="text" name="contact" required="" class="form-control">
        </div>
        <div class="form-group">

```

```

        <label for="" class="control-label">Address</label>
        <textarea cols="30" rows="3" name="address" required=""
class="form-control"></textarea>
    </div>
    <div class="form-group">
        <label for="" class="control-label">Email</label>
        <input type="email" name="email" required="" class="form-control">
    </div>
    <div class="form-group">
        <label for="" class="control-label">Password</label>
        <input type="password" name="password" required="" class="form-
control">
    </div>
    <button class="button btn btn-info btn-sm">Create</button>
</form>
</div>

<style>
    #uni_modal .modal-footer{
        display:none;
    }
</style>
<script>
    $('#signup-frm').submit(function(e){
        e.preventDefault()
        $('#signup-frm button[type="submit"]').attr('disabled',true).html('Saving...');
        if($(this).find('.alert-danger').length > 0 )
            $(this).find('.alert-danger').remove();
        $.ajax({
            url:'admin/ajax.php?action=signup',
            method:'POST',
            data:$(this).serialize(),
            error:err=>{
                console.log(err)
            },
            success:function(resp){
                if(resp == 1){
                    location.reload();
                }else{
                    $('#signup-frm').prepend('<div class="alert alert-
danger">Email already exist.</div>')
                    $('#signup-frm
button[type="submit"]').removeAttr('disabled').html('Create');
                }
            }
        })
    })

```



```
</script>
```

## view\_doctor\_schedule.php

```
<style>
    #uni_modal .modal-footer{
        display: none;
    }
</style>
<?php
    include'admin/db_connect.php';
    $qry = $conn->query("SELECT * FROM doctors_schedule where
doctor_id=".$_GET['id']);
?>
<div class="container-fluid">
    <div class="col-lg-12">
        <div class="row">
            <table class="table table-striped table-bordered">
                <thead>
                    <tr>
                        <th class="text-center">Day</th>
                        <th class="text-center">Schedule</th>
                    </tr>
                </thead>
                <tbody>
                    <?php while($row=$qry->fetch_assoc()): ?>
                        <tr>
                            <th class="text-center"><?php echo $row['day']
?></th>
                            <th class="text-center"><?php echo date("h:i
A",strtotime($row['time_from'])) - ' - '.date("h:i A",strtotime($row['time_to'])) ?></th>
                        </tr>
                    <?php endwhile; ?>
                </tbody>
            </table>
        </div>
        <hr>
        <div class="row">
            <button class="btn btn-secondary btn-sm col-md-4 offset-md-4 "
type="button" data-dismiss="modal" id="">Close</button>
        </div>
    </div>
</div>
<script>
    $('#edit').click(function(){
        uni_modal("Edit "+$('#uni_modal .modal-
title').html(),'manage_doctor_schedule.php?did=<?php echo $_GET['id'] ?>','mid-large');
    })</script>
```

## Chapter 6: Conclusion

### 6.1 Future Scope

The project entitled **Doctor Appointment system** was completed successfully. The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application and an android application for purchasing items from a shop.

This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using html & css, usage of responsive templates, designing of android applications, and management of database using MySQL. The entire system is secured. Also the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project.

This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications. There is a scope for further development in our project to a great extent. A number of features can be added to this system in future like providing moderator more control over products so that each moderator can maintain their own products. Another feature we wished to implement was providing classes for customers so that different offers can be given to each class. System may keep track of history of purchases of each customer and provide suggestions based on their history. These features could have been implemented unless the time did not limit us.