

INTRODUCTION TO THE PROJECT

Project Request:

The **DENTAL CLINIC MANAGEMENT SYSTEM** has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and, in some cases, reduce the hardships faced by this existing system.

Purpose:

Dental clinic management software promotes easy data entry and usage. It includes patient's personal information, dental history, and patient history. This makes your dental practice more convenient, efficient and precise.

Objective of proposed system:

The main objective of proposed system is to manage the details of dental clinic, doctors, patients and appointments. It manages all the information about dental clinic, booking, appointment, dental clinic. It tracks all the details about the patient, test, and appointment.

The purpose of project is to build an application program to reduce the manual work for managing the dental clinic, doctors, appointments & patients.

Project Profile

Full Name	RAJKUMAR GAURANGBHAI SHAHU
Project Title	Dental Clinic Management System
Roll No.	63
University Exam No.	
Front End Tool	ASP.NET With C#
Back End Tool	SQL Server
Project Guide	Prof. Hemali Patel

Scope of Work

It may help collecting perfect management in details. In a very short time, the collecting will be obvious, simple and sensible.

It will help a person to know the management of passed year perfectly. It also helps in current all works relative to dental clinic management system. It will be also reducing the cost of collecting the management and collection procedure will go on smoothly.

The system generated types of information that can be used for various purpose:

- Utilize resources in an efficient manner by increasing their productivity.
- It satisfies the user requirement.
- Be easy to understand by the user and operator.
- Be easy to operate.
- Have a good user interface.

An Existing System

An existing system is based on manual work and all the process are done manually, so they maintain register and files for recording all to details of the system.

The existing system maintains all the records like patient informantion. They have to maintain a special register to maintain the patient details including their names, address and conctect number etc.

The aim is to automate is existing manual system by the help of computerized equiupment's fulfilling their requirements, so that their valuable data can be stored for a longer period with easy accessing and manipulation of the same.

The old manual system was suffering from a series of drawbacks. Since whole of the system was to be maintained with hands the process of keeping, maintaining and retrieving the information was very tedious and lengthy. The records were never used to be in a systematic order.

There used to be lots of difficulties in associating any particular transaction with a particular context. If any information was to be found it was required to go through the different registers, documents there would never exist anything like reports generation. One more problem was that it was very difficult to find errors while entering the records. Once the records were entered it was very difficult to update these records.

The reason behind it is that there is lot of information to be maintained and have to be kept in mind while running the business.

The phase of system analysis process deals with problems which are affecting in the current manual system. The problems are those which are affecting the manual system in its daily routine work.

The problems faced by existing system are described as below: -

- Difficulty in maintenance of records.
- Time Consuming.
- No security of data.
- Lack of efficiency and man power.
- High data redundancy.
- Data inconsistency.

Need of Propose System

- System needs store information about new entry of dental clinic.
- System needs to help the internal staff to keep information of doctor and find them as per various queries.
- To maintain quantity records. To keep the record of patient.
- System needs to update and delete the record.
- Need a search area and also needs a security system to prevent data.

Feasibility Study

After doing the project dental clinic management system, study and analyzing all the existing or required functionalities of the system the next task is to do the feasibility study for the project.

The proposed solution satisfies all the user requirements and should be flexible enough so that future changes can be easily alone based on the future upcoming requirements.

❖ **Economical Feasibility:**

This is a very important aspect to be considered while developing project. We decided the technology based on minimum possible cost factor.

All hardware and software cost has to be borne by the organization. Overall, we have estimated that the benefits the organization is going to receive from the proposed system will surely overcome the initial costs and the later on running cost for system.

❖ **Technical Feasibility:**

This included the study of function performance and constraints that may affect the ability to achieve an acceptable system. For this feasibility study, we studied complete functionality to be provided in the system as described in the system requirement specification.

❖ **Operational Feasibility:**

No doubt the proposed system is fully GUI based that is very user friendly and all inputs to be taken all self-explanatory even to a layman. Besides a proper training has been conducted to let know the essence of the system to the users so that they feel comfortable with new system. As far our study is concerned the clients are comfortable and happy as the system has cut down their loads and doing.

System Futures

- Product and Component based.
- Creating and changing issues at ease.
- Query issue list to any depth. Simple status and resolution.
- Multi-level priorities and severities. It contains better storage capacity. Accuracy in work.
- Easy and fast retrieval of information.
- Well-designed reports.
- Access of any information individually.
- Work becomes very speedy. Easy to update information.

Hardware and Software

- Minimum Hardware Specification for Developer :

Processor	Intel(R)core(TM)2 Duo CPU @2.93 GHz
RAM	2 GB
Storage	10 GB
System Type	32 - bit Operating System

- Minimum Software Specification for Developer :

Front-End Tool	ASP.Net With C#
Back-End Tool	SQL SERVER
Operating System	Window 7
Web Browser	Any Web Browser

- Minimum Hardware Specification for User :

RAM	2 GB
Storage	10 GB

- Minimum Software Specification for User :

Operating System	Window 7
Web Browser	Any Web Browser

Data Flow Diagram [DFD]

I used data flow diagram to documents the system. DFDs document a system in a hierarchical manner and the diagram in figure represents the highest level. The diagram is called a context diagram because it represents the system in the context of its environment.

DFD Elements:

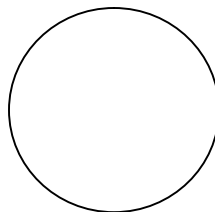
A DFD needs to be simple because a user has to go through it, understand it, and suggest correction or changes. A data flow diagram user only four elements.

- Process
- External entity
- Dataflow
- Data

Store Symbol used in DFD:

1.Process:

Here flow of data is transformed. A process represents some account of working behavior of data transformation of data from one from to another.



A circle represent a process

2.External Entity:

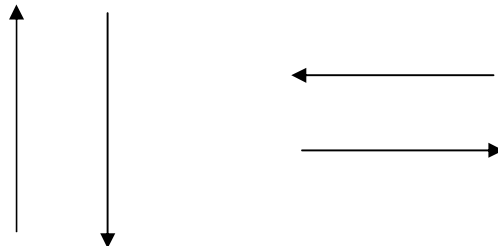
A source or destination of data which is external to the system. As the name suggest it lies outside the context of the outside the context of the system. It is represented by square.



3.DataFlow:

It is packet of data. It may be in the form of document, letter etc. A data flower presents the path of data it flows through the system. An arrow represented it.

The arrowed points in the direction in which the data moves. The name of the data flow is written slung the line..

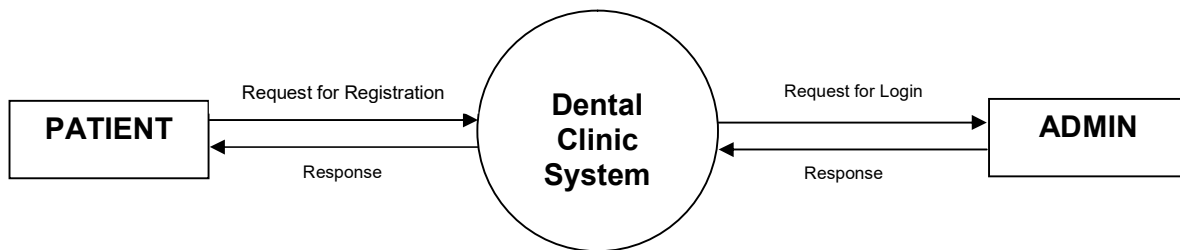


4.Data Store:

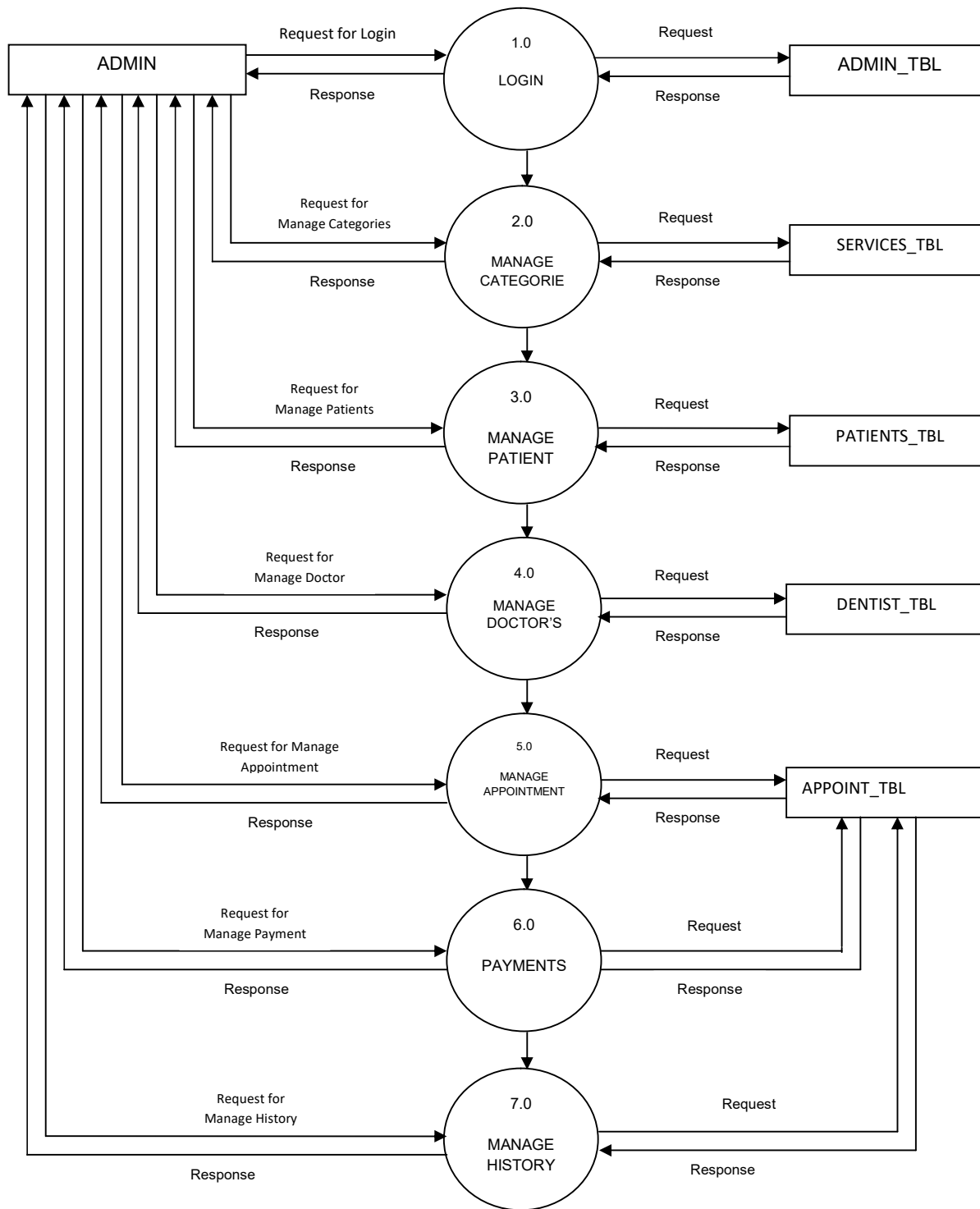
Any store but with no references to the physical method to string. It there is a logical requirement for the data to be stored. It is help in adata store. It is represented by open ended rectangle. A number and a name identify each data store like a process.



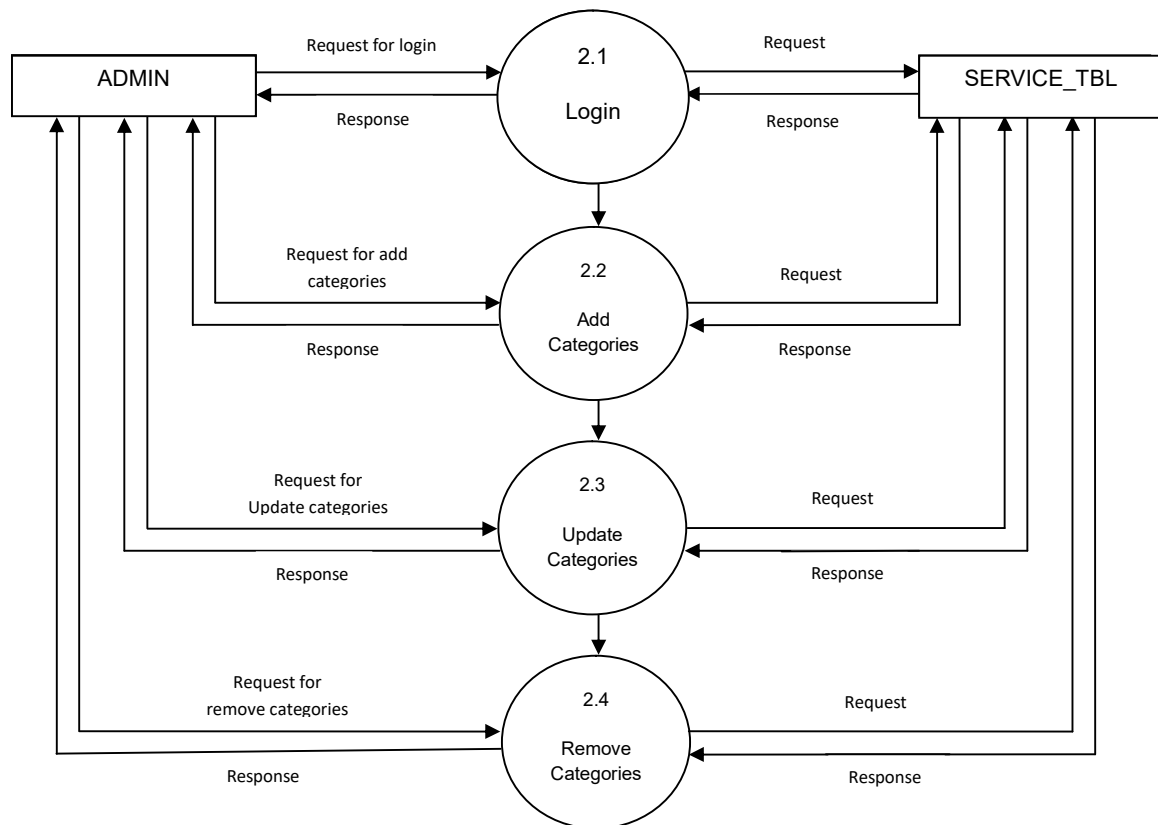
➤ **Context Level DFD :**



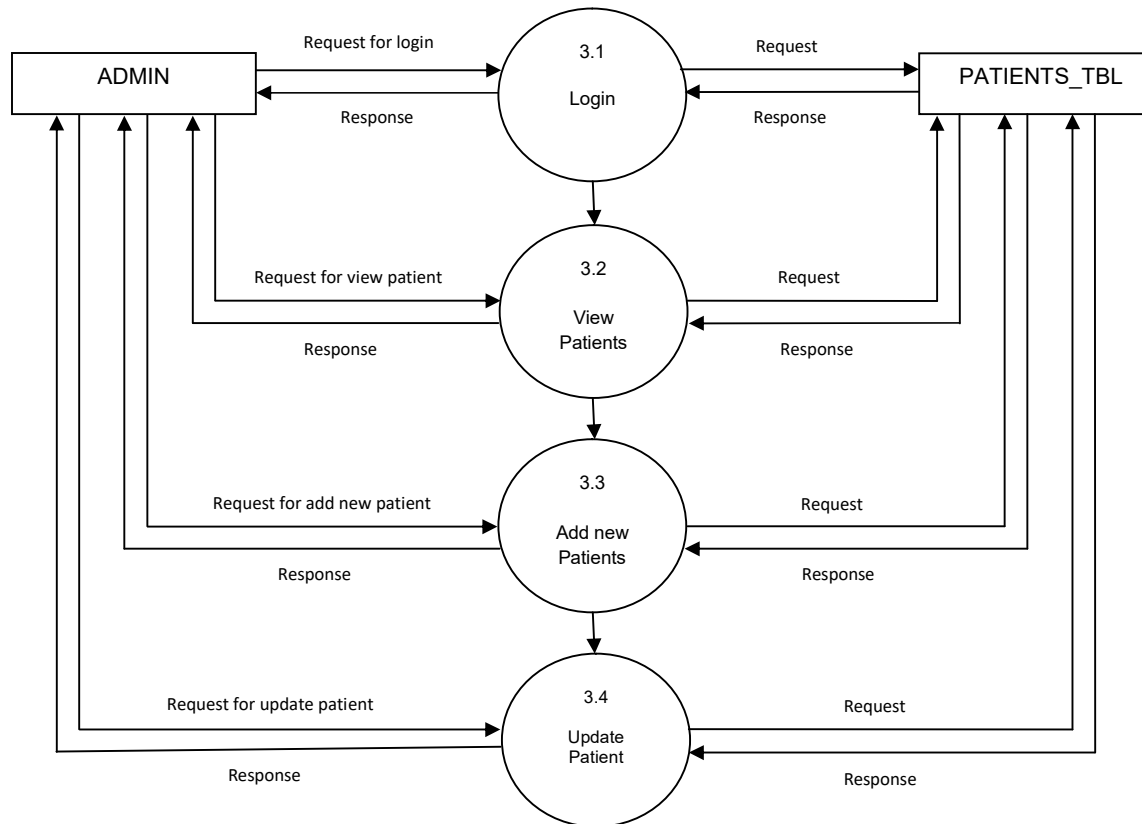
➤ Zero Level DFD For Admin side.



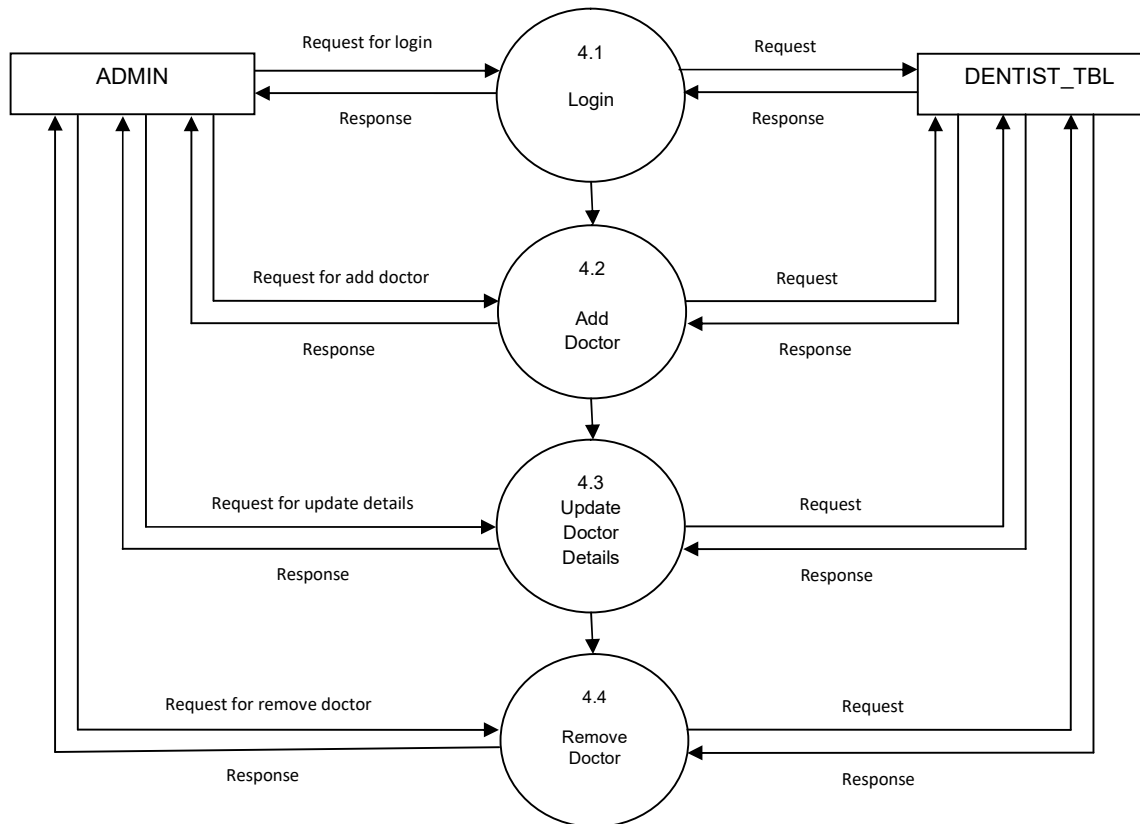
➤ **First Level DFD For Admin side (Process 2).**



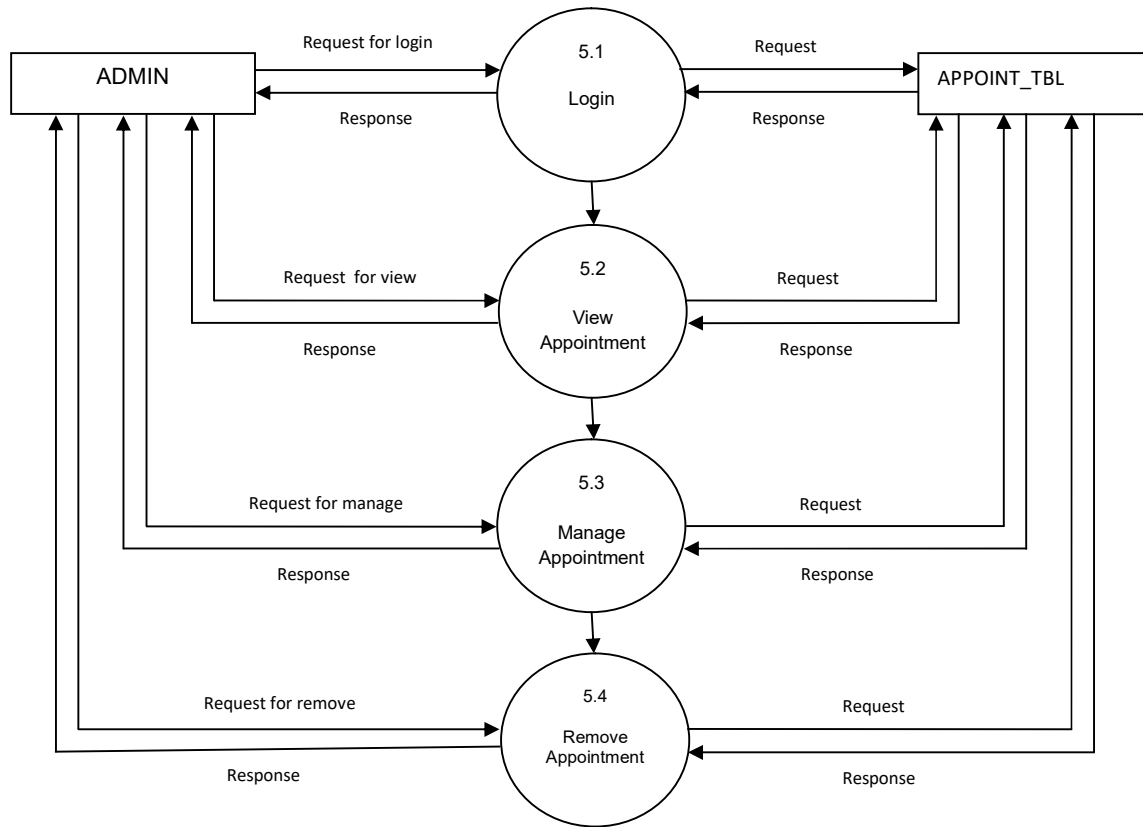
➤ **First Level DFD For Admin side (Process 3).**



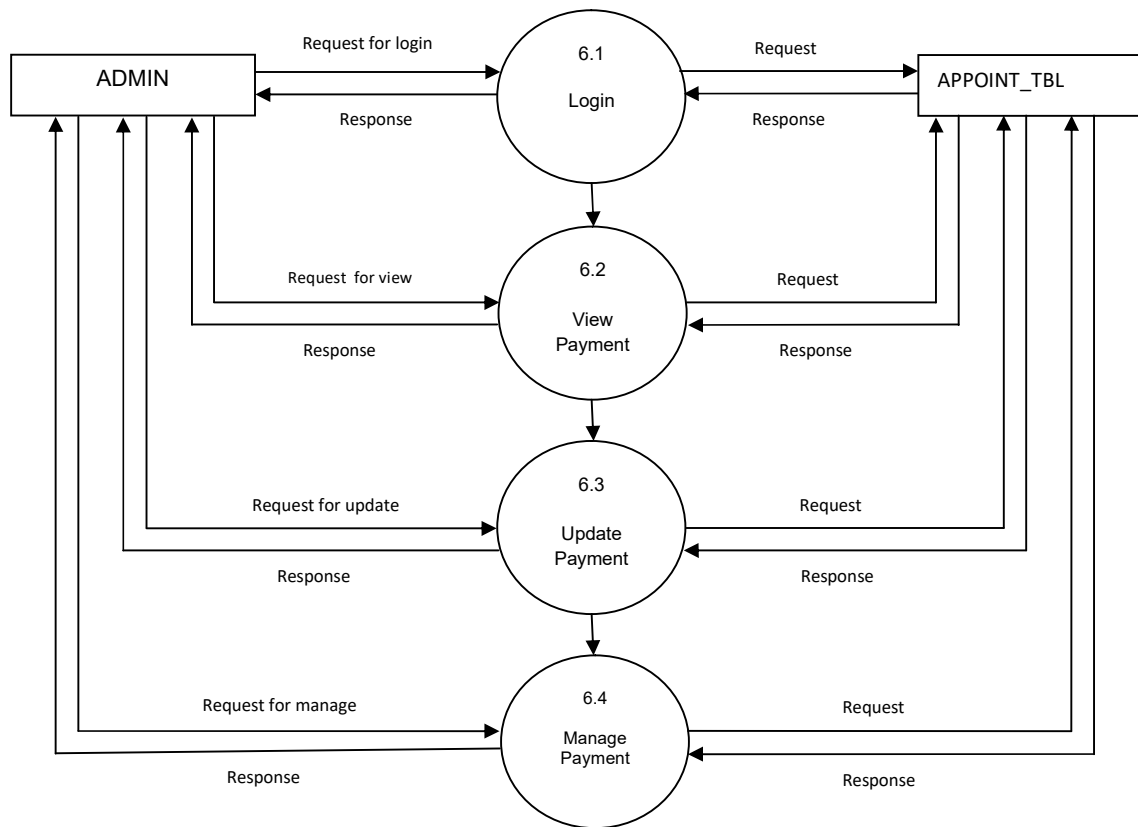
➤ **First Level DFD For Admin side (Process4).**



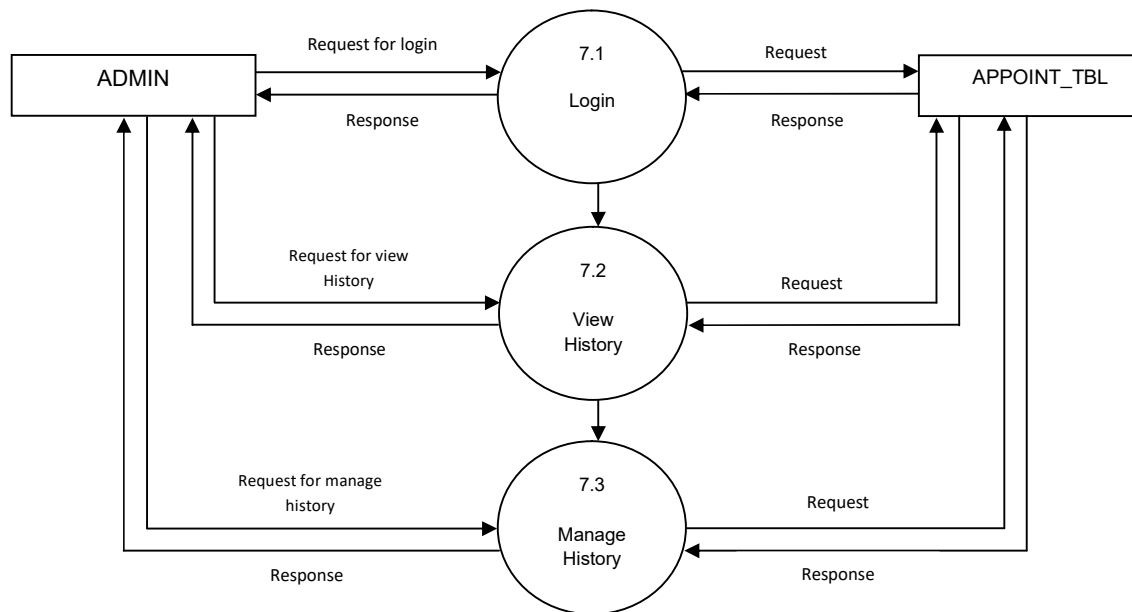
➤ **First Level DFD For Admin side (Process 5).**



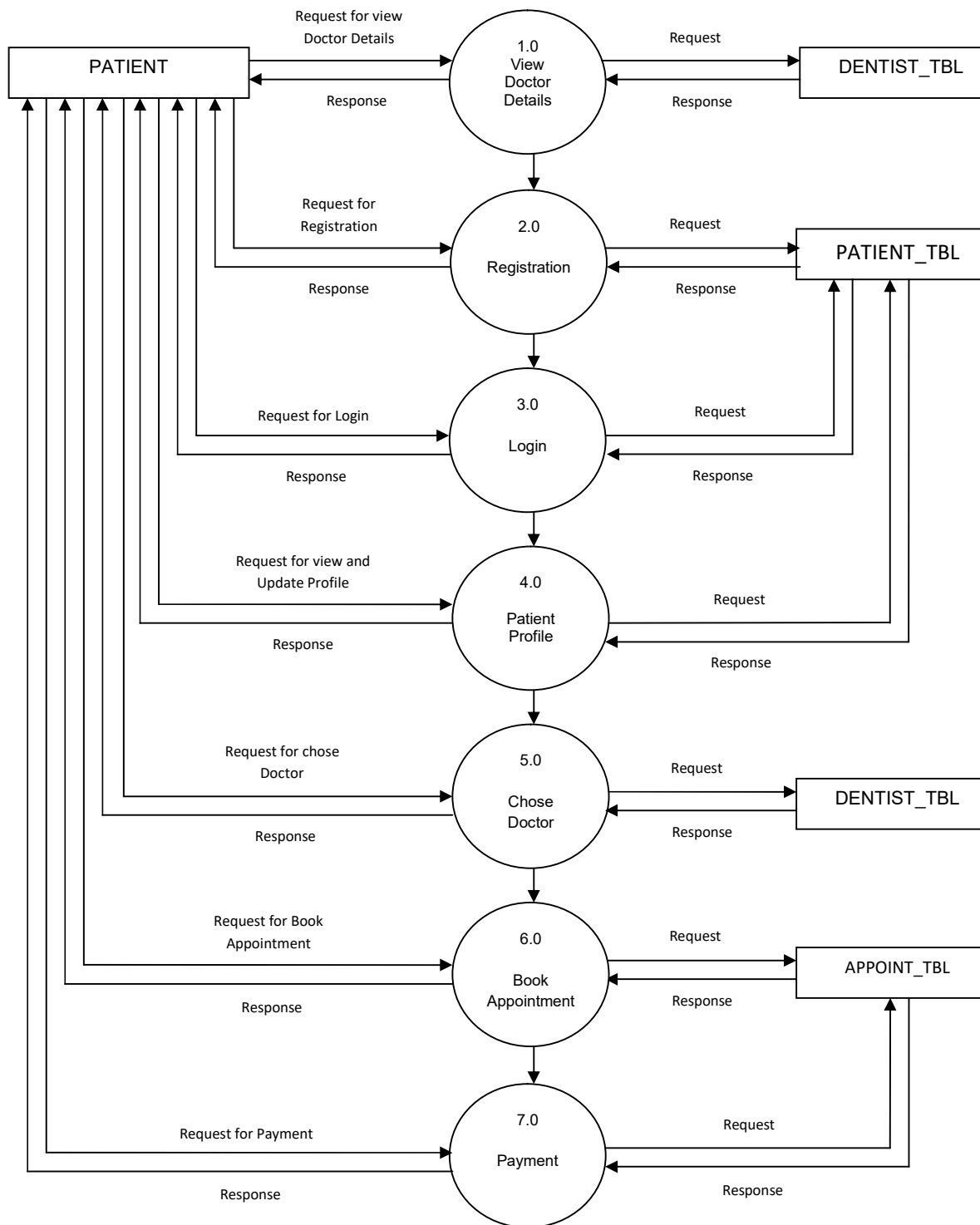
➤ **First Level DFD For Admin side (Process 6).**



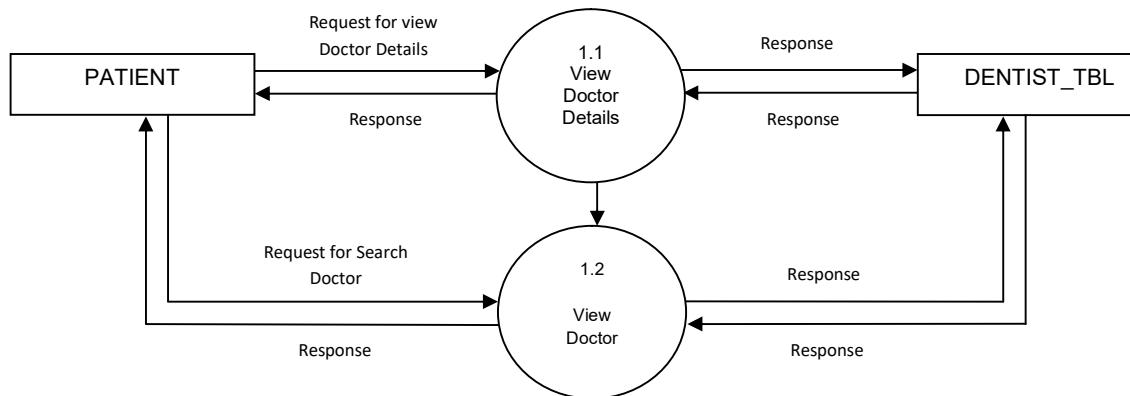
➤ **First Level DFD For Admin side (Process 7).**



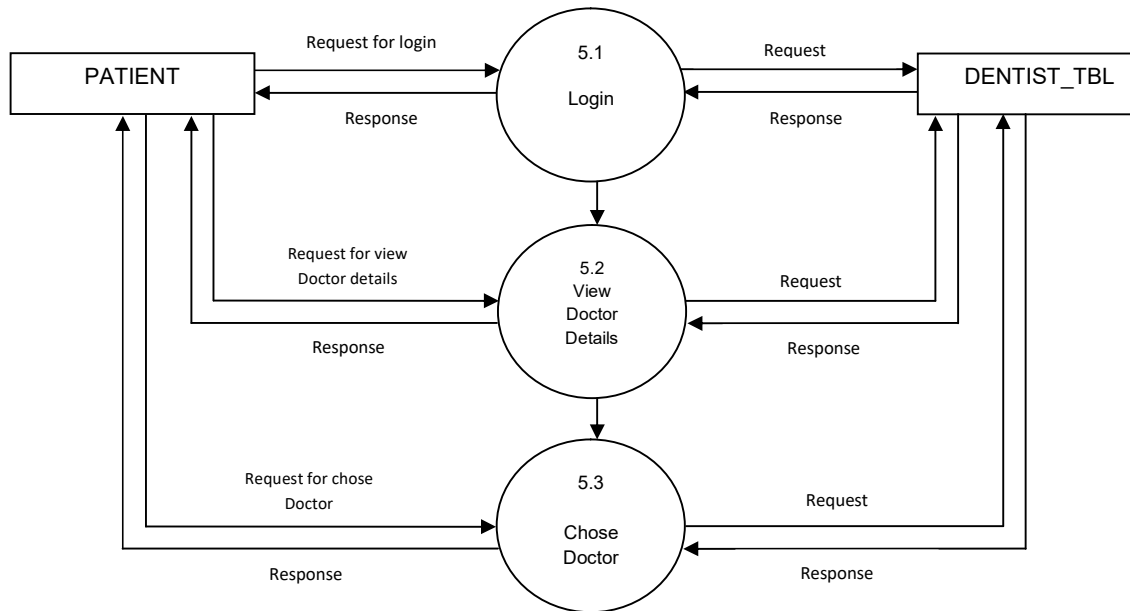
➤ Zero Level DFD For Patient Side.



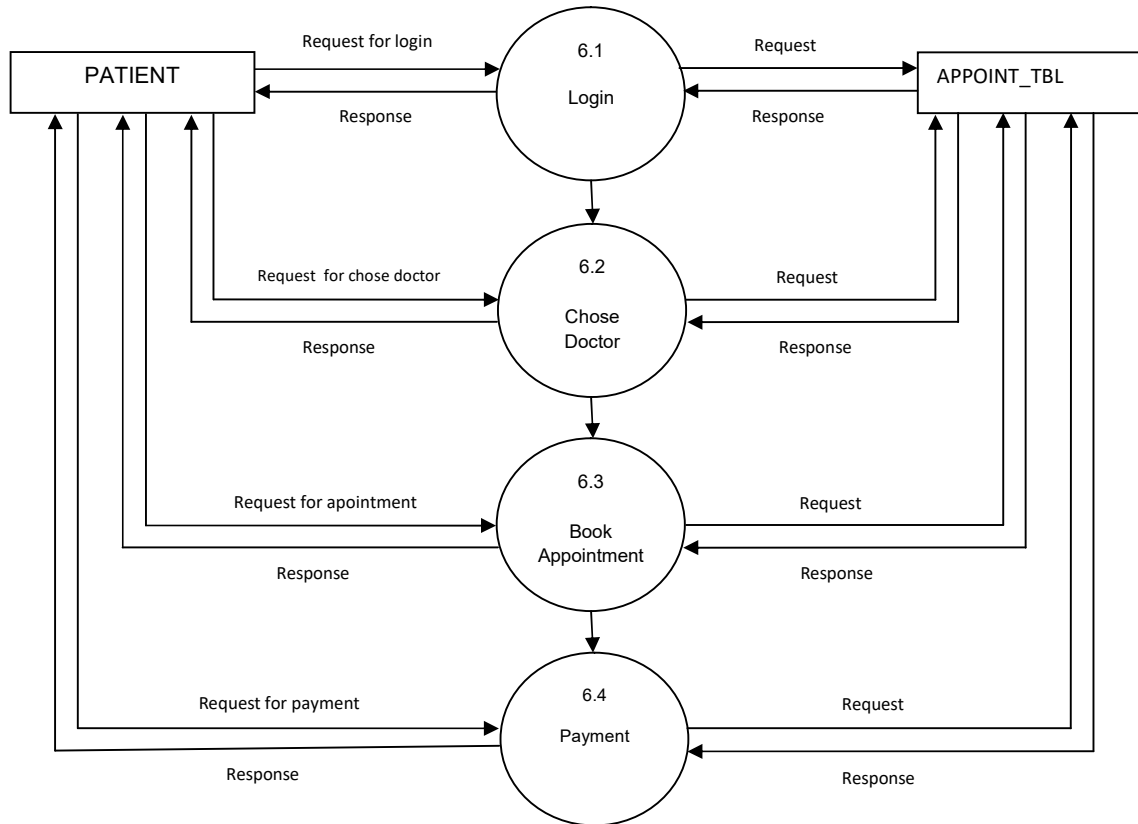
➤ **First Level DFD For Patient side (Process 1).**



➤ **First Level DFD For Patient side (Process 5).**



➤ **First Level DFD For Patient side (Process 6).**



Database Layout

▪ ADMIN_TBL :-

Field Name	Data Type	Constrain
ADMIN_ID	int	Primary Key
ADMIN_NAME	Varchar(30)	Not Null
EMAIL-ID	Varchar(30)	Check
PASSWORD	Varchar(10)	Not Null
PHONE_NO	Numeric(10)	Not Null

▪ DENTIST_TBL :-

Field Name	Data Type	Constrain
D_ID	int	Primary Key
D_NAME	varchar(20)	Not Null
DEGREE	varchar(10)	Not Null

▪ PATIENT_TBL :-

Field Name	Data Type	Constrain
P_ID	int	Not Null
P_NAME	varchar(30)	Not Null
AGE	numeric(2)	Not Null
GENDER	varchar(10)	Not Null
PHONE_NO	numeric(10)	Not Null
EMAIL_ID	varchar(30)	Primary key
PASSWORD	varchar(10)	Not Null
ADDRESS	varchar(50)	Not Null
CITY	varchar(10)	Not Null
PINCODE	numeric(6)	Not Null

▪ SERVICES_TBL :-

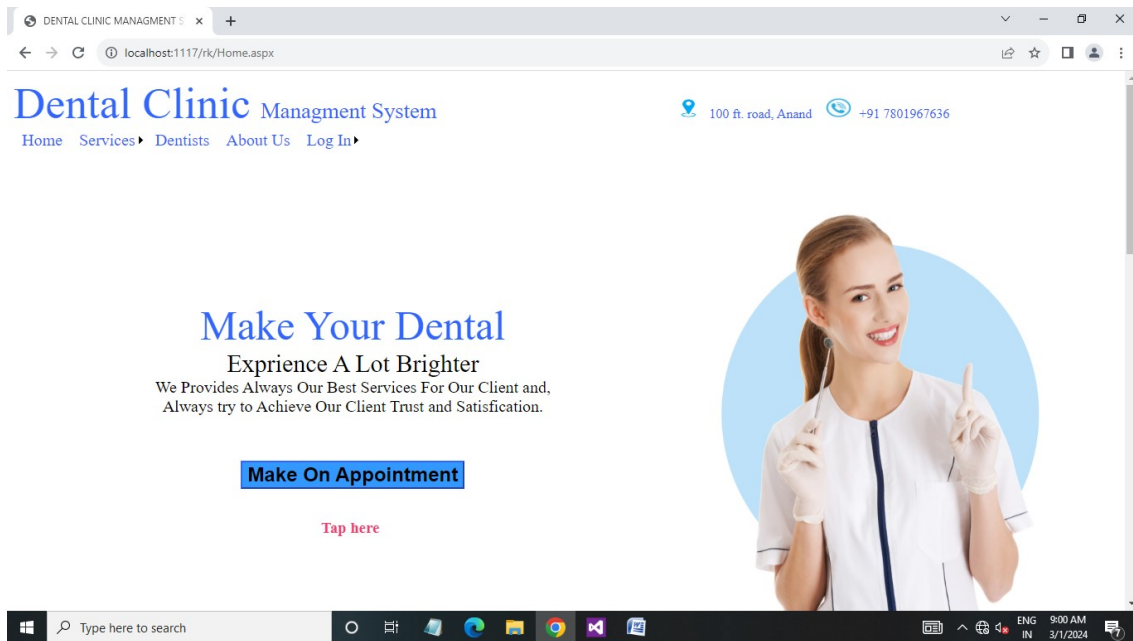
Field Name	Data Type	Constrain
ID	int	Primary Key
SERVICE_NAME	varchar(30)	Not Null

▪ APPOINT_TBL :-

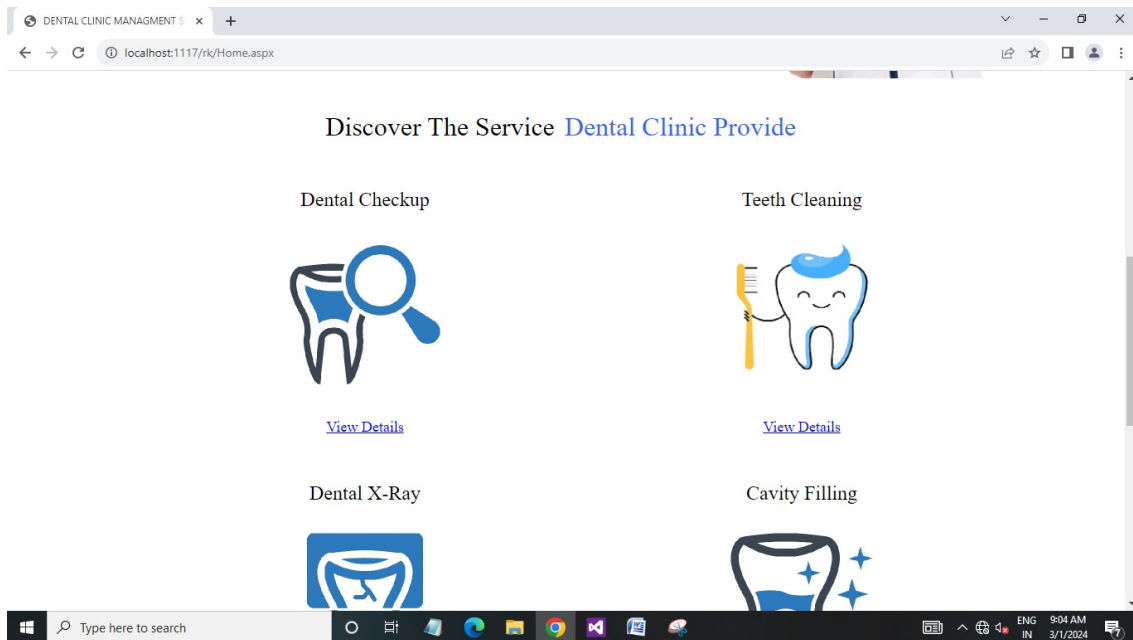
Field Name	Data Type	Constrain
A_ID	int	Primary Key
P_NAME	varchar(30)	Not Null
PHONE_NO	Numeric(10)	Not Null
EMAIL_ID	varchar(30)	Not Null
INSURANCE	varchar(10)	Not Null
D_NAME	varchar(20)	Not Null
SERVICES	varchar(20)	Not Null
A_DATE	varchar(10)	Check
A_TIME	varchar(10)	Check
CHARGE	Numeric(4)	Not Null

Webpage View

Home Page view:

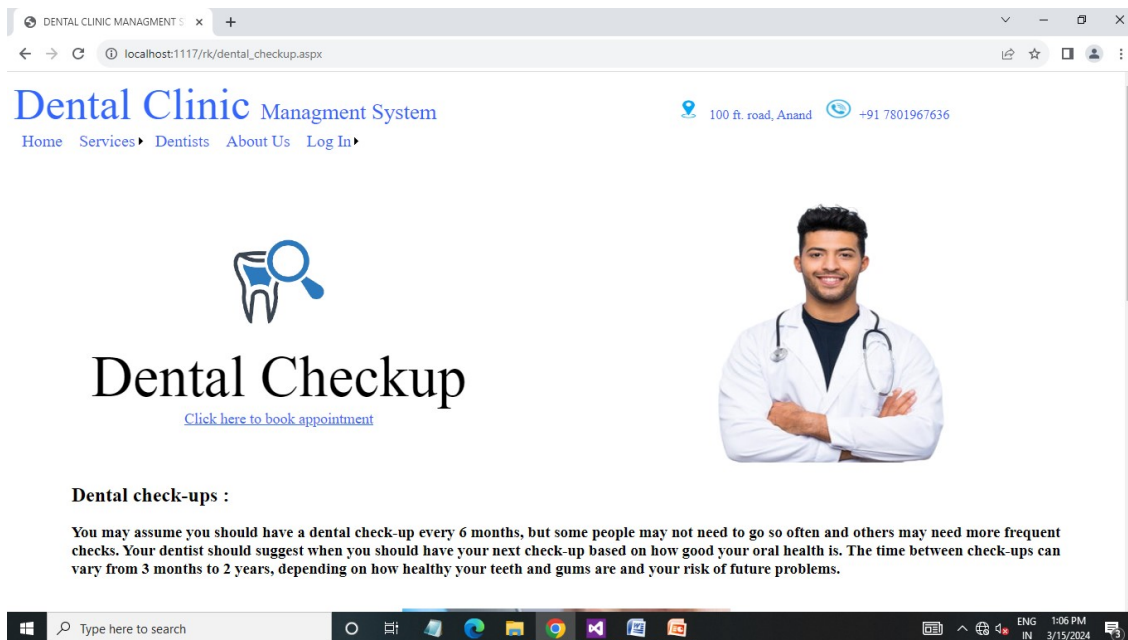


- This is home page where patient view all providing services, all dentists, about of clinic and login to book appointment.

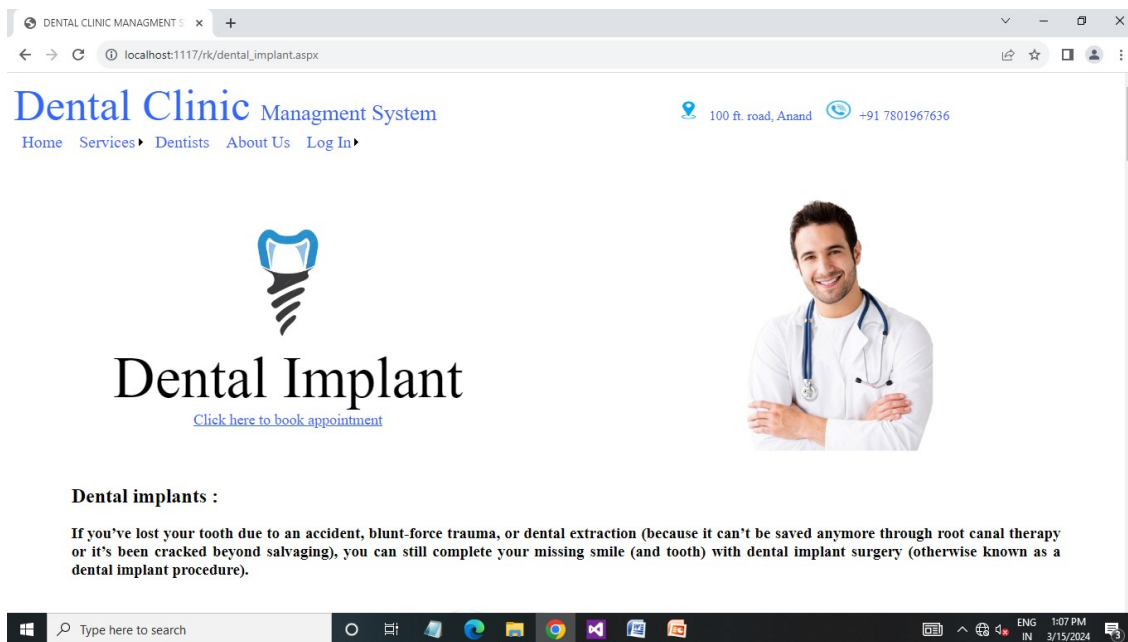


- In this page patient view all providing services and read all details about services.

Services pages :

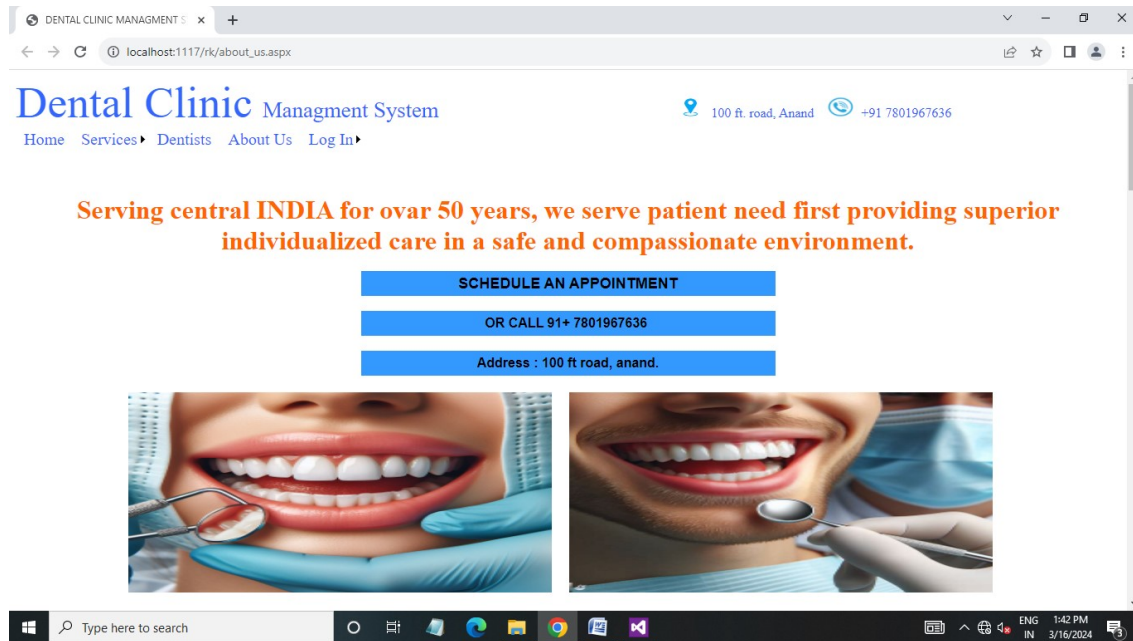


➤ In this page patient view and read all details of particular service.



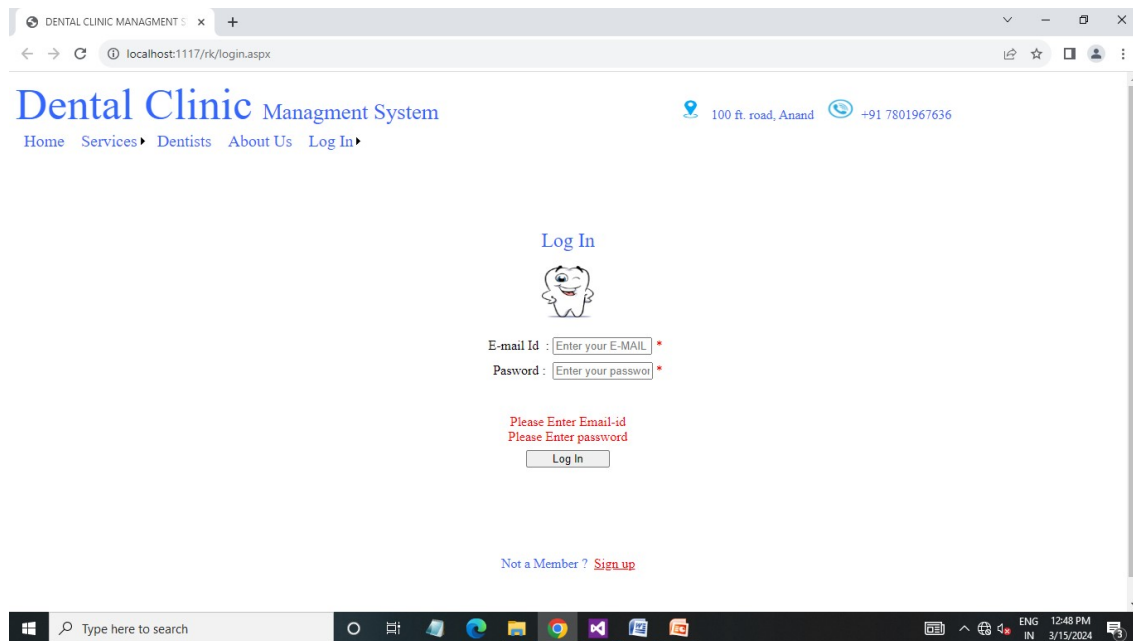
➤ In this page patient view and read all details of particular service.

About us Page :



- In this page patient view all details about of dental clinic.

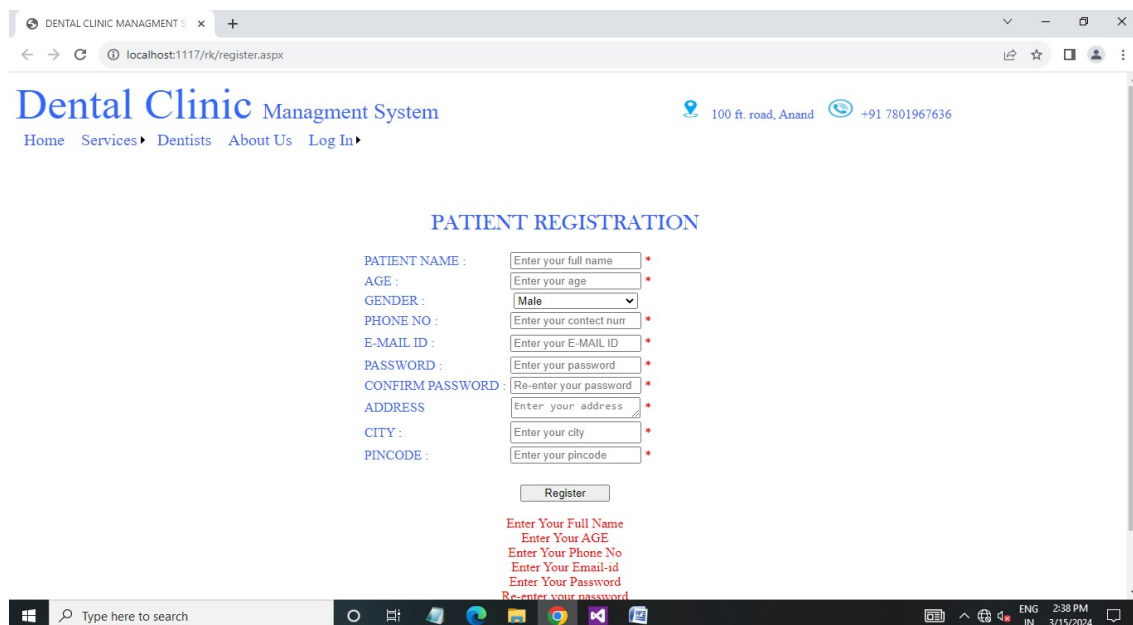
Login Page :



The screenshot shows a web browser window with the URL `localhost:1117/rk/login.aspx`. The page header includes the site name "Dental Clinic Managment System" (note the typo), navigation links (Home, Services, Dentists, About Us, Log In), and contact information (100 ft. road, Anand, +91 7801967636). The main content area is titled "Log In" and features a cartoon tooth character. Below the character are two input fields: "E-mail Id : [Enter your E-MAIL]" and "Password : [Enter your password]". Red error messages are displayed below the fields: "Please Enter Email-id" and "Please Enter password". A "Log In" button is positioned below the messages. At the bottom of the form area, there is a link: "Not a Member ? [Sign up](#)". The Windows taskbar at the bottom shows the search bar and various application icons.

- This is login page and to patient login required proper valid email-id and password.

Registration Page :



The screenshot shows a web browser window with the URL `localhost:1117/rk/register.aspx`. The page header is identical to the login page. The main content area is titled "PATIENT REGISTRATION". It contains a series of input fields with labels on the left: "PATIENT NAME :", "AGE :", "GENDER :", "PHONE NO :", "E-MAIL ID :", "PASSWORD :", "CONFIRM PASSWORD :", "ADDRESS", "CITY :", and "PINCODE :". Each field has a corresponding input box with placeholder text (e.g., "Enter your full name", "Enter your age", "Male" for gender, "Enter your connect num", "Enter your E-MAIL ID", "Enter your password", "Re-enter your password", "Enter your address", "Enter your city", "Enter your pincode"). Red error messages are displayed below the fields: "Enter Your Full Name", "Enter Your AGE", "Enter Your Phone No", "Enter Your Email-id", and "Re-enter your password". A "Register" button is located below the input fields. The Windows taskbar at the bottom shows the search bar and various application icons.

- This is registration page and to patient registration required proper all valid data.
- When patient insert a wrong data when data not inserted.

Registration Page :

DENTAL CLINIC MANAGEMENT x +

localhost:1117/rk/register.aspx

Dental Clinic Managment System

Home Services ▸ Dentists About Us Log In ▸

100 ft. road, Anand +91 7801967636

PATIENT REGISTRATION

PATIENT NAME :

AGE :

GENDER :

PHONE NO :

E-MAIL ID :

PASSWORD :

CONFIRM PASSWORD :

ADDRESS :

CITY :

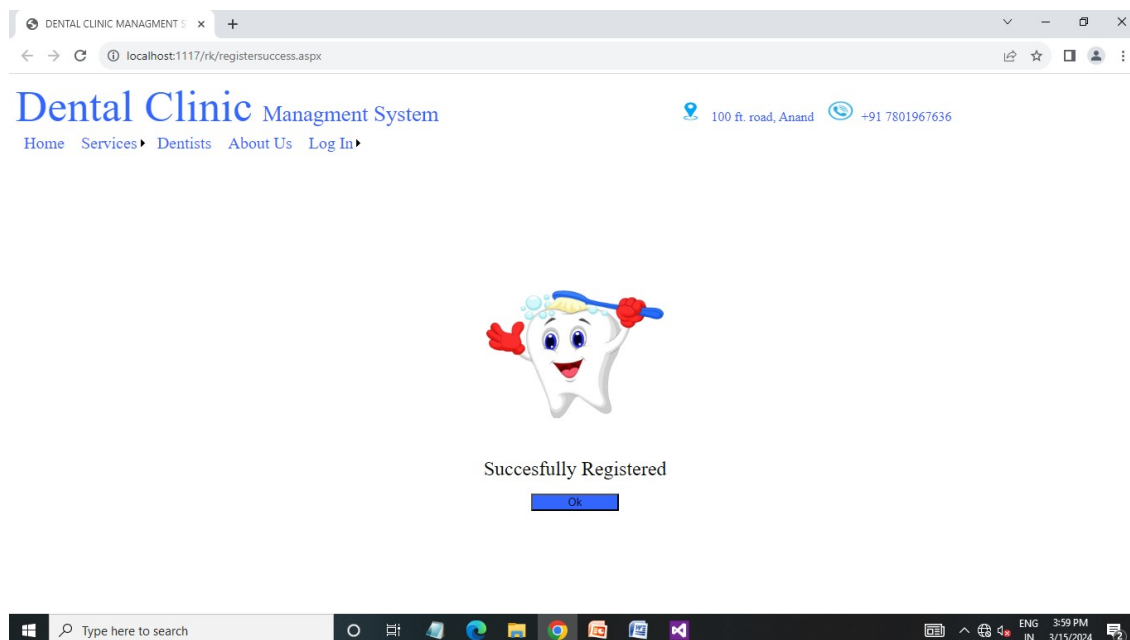
PINCODE :

Type here to search

ENG 3:39 PM IN 3/15/2024

➤ This is example of fulfil proper data to registration.

Registration success Page :



➤ This is registration success page.

Registration Page :

DENTAL CLINIC MANAGMENT S x +

localhost:1117/rk/login.aspx

Dental Clinic Managment System

Home Services Dentists About Us Log In

100 ft. road, Anand +91 7801967636

Log In

E-mail Id : rajkumar@gmail.co

Pasword :

Log In

Not a Member ? [Sign up](#)

Type here to search

ENG 12:48 PM 3/15/2024

- This is login page and to patient login required proper valid email-id and password.

Login success Page :

DENTAL CLINIC MANAGMENT S x +

localhost:1117/rk/login_success.aspx

Dental Clinic Managment System

Home Services Dentists About Us Log In

100 ft. road, Anand +91 7801967636

Login Success.

OK

Type here to search

ENG 3:40 PM 3/15/2024

- This is log-in success page.

Book appointment page :

DENTAL CLINIC MANAGEMENT SYSTEM

100 ft. road, Anand +91 7801967636

[Log out](#)

Appointment Form

Plese fill out this form to make an appointment.

Name :

Phone :

E-Mail :

Do you have a health insurance ?
☐ Yes ☐ No

Select your dentist to meet for appointment ?

What type of service are you looking for ?

Select date :
 * Select your date

Select Time :
 * Select your time

Appointment Book Charge :

- This is book appointment page and to patient registration required proper all valid data.
- When patient insert a wrong data when data not inserted.

DENTAL CLINIC MANAGEMENT SYSTEM

100 ft. road, Anand +91 7801967636

[Log out](#)

Appointment Form

Plese fill out this form to make an appointment.

Name :

Phone :

E-Mail :

Do you have a health insurance ?
☒ Yes ☐ No

Select your dentist to meet for appointment ?

What type of service are you looking for ?

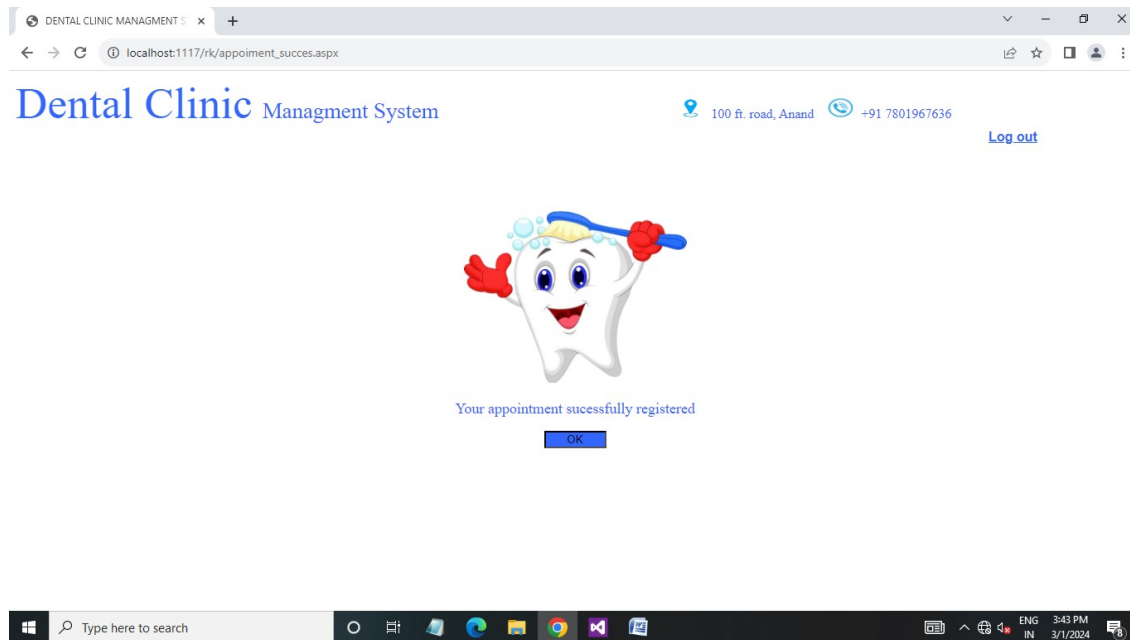
Select date :

Select Time :

Appointment Book Charge :

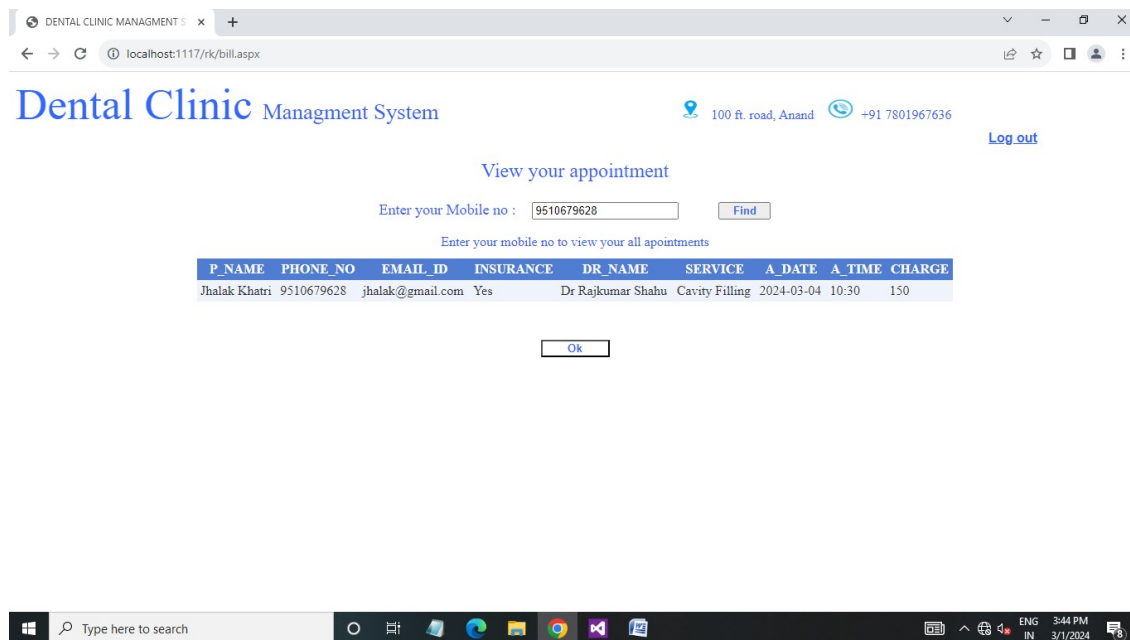
- This is example of fulfil proper data to book appointment.

Appointment success page :



- This is appointment success page.

View booked appointment page :



- In this page patient view own all booked appointment when patient insert own mobile number.
-

Admin login page :

DENTAL CLINIC MANAGEMENT

localhost:1117/rk/adminlogin.aspx

Dental Clinic Management System

Home Services Dentists About Us Log In

100 ft. road, Anand +91 7801967636

Admin

E-mail Id : Enter E-mail-ID *

Password : Enter Password *

Log In

Enter Your Email-Id
Enter Your Password

- This is admin login page and to admin login required proper valid email-id and password.

DENTAL CLINIC MANAGEMENT

localhost:1117/rk/adminlogin.aspx

Dental Clinic Management System

Home Services Dentists About Us Log In

100 ft. road, Anand +91 7801967636

Admin

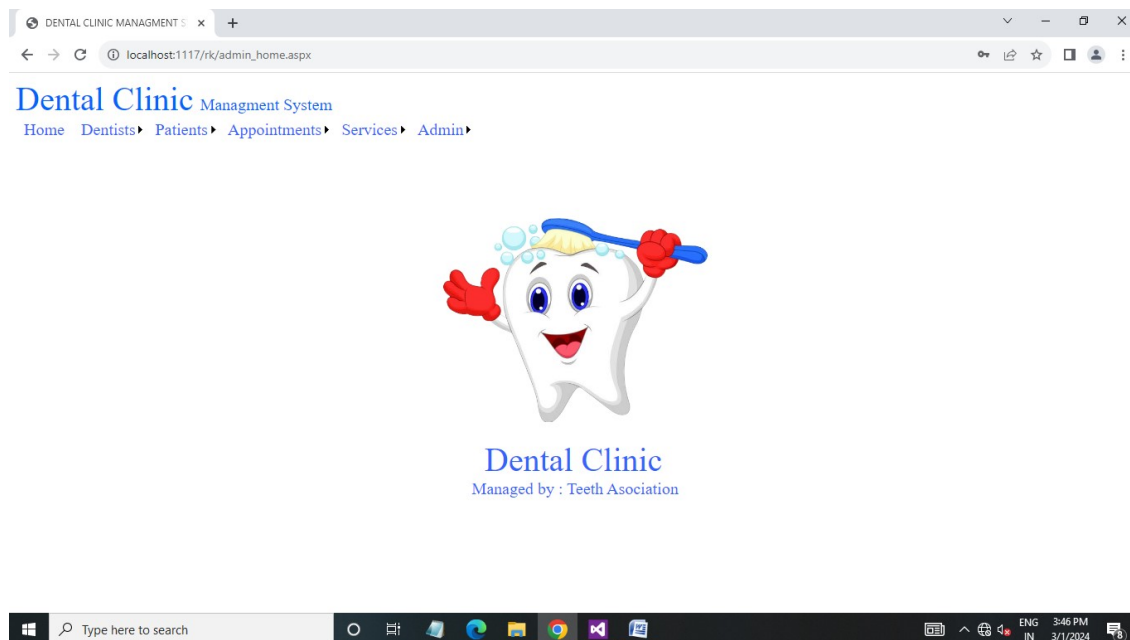
E-mail Id : admin@gmail.com

Password : *****

Log In

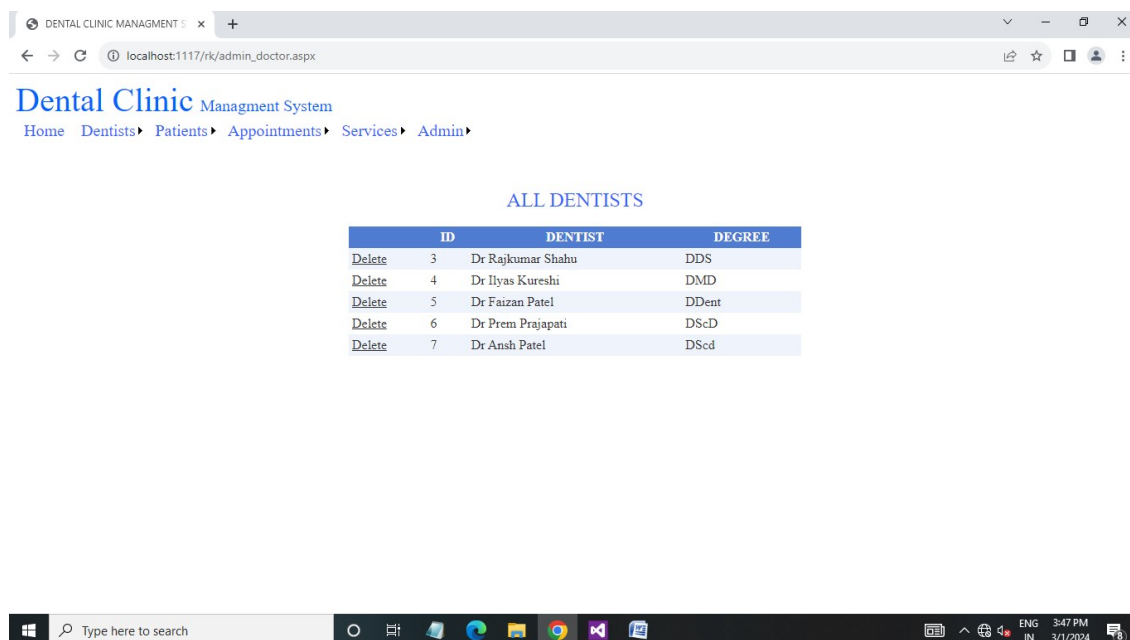
- This is example of fulfil proper data to login.

Admin home page :



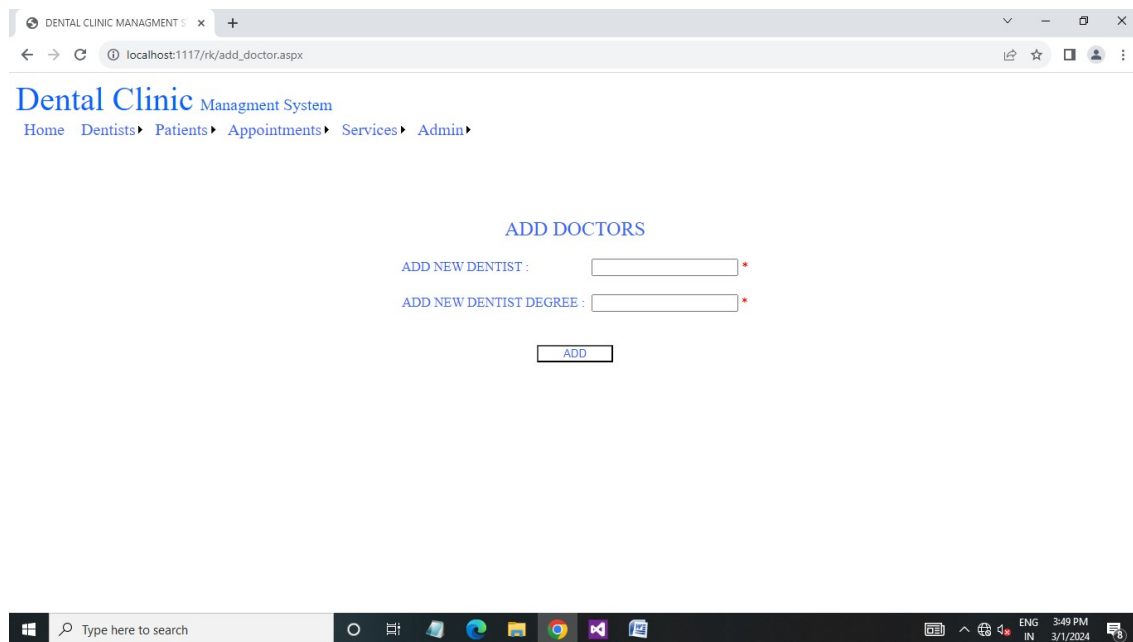
- This is admin home page.

Admin side dentist list page :



- In this page admin view all clinic dentist and admin also delete dentist.

Admin side add dentist page :



DENTAL CLINIC MANAGEMENT x +

localhost:1117/rk/add_doctor.aspx

Dental Clinic Management System

Home Dentists Patients Appointments Services Admin

ADD DOCTORS

ADD NEW DENTIST : *

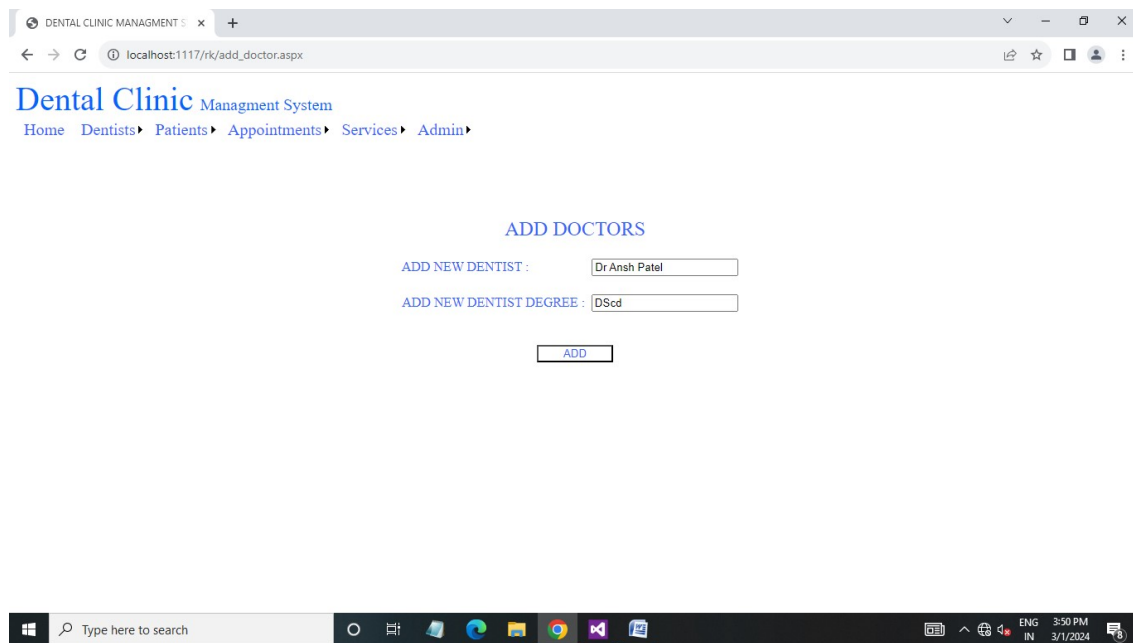
ADD NEW DENTIST DEGREE : *

ADD

Type here to search

3:49 PM 3/1/2024

➤ In this page admin add new dentist.



DENTAL CLINIC MANAGEMENT x +

localhost:1117/rk/add_doctor.aspx

Dental Clinic Management System

Home Dentists Patients Appointments Services Admin

ADD DOCTORS

ADD NEW DENTIST : *

ADD NEW DENTIST DEGREE : *

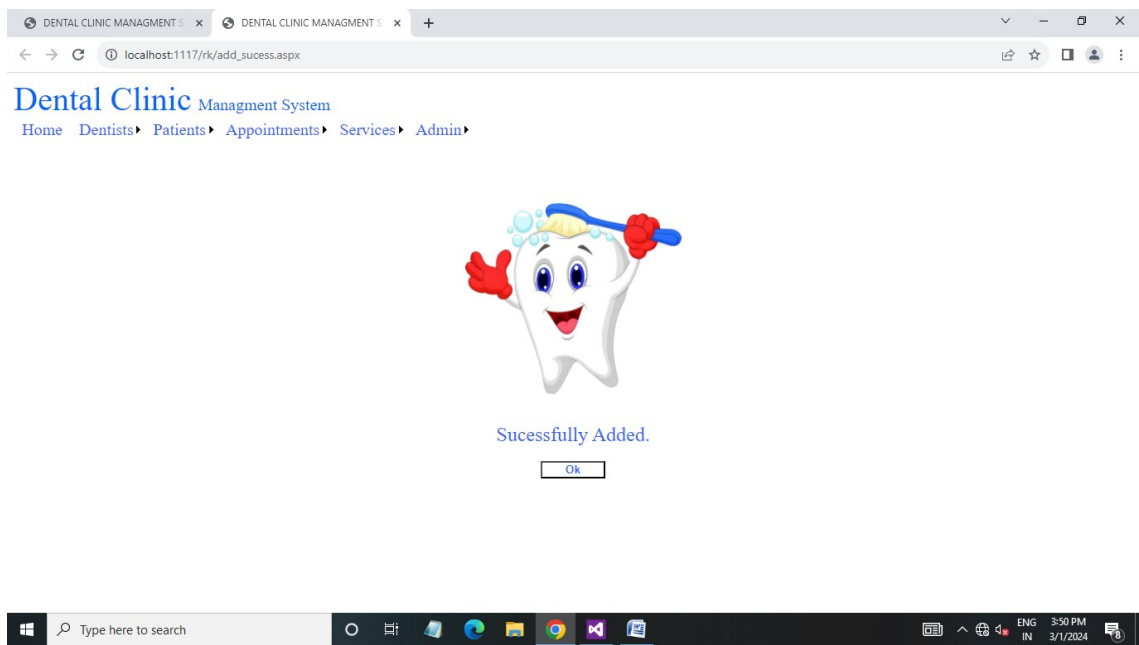
ADD

Type here to search

3:50 PM 3/1/2024

➤ This is example of fulfil proper data to add dentist.

Admin side dentist successful added page:



➤ This is dentist added success page .

Admin side all patient list page :

DENTAL CLINIC MANAGEMENT x +

localhost:1117/rk/admin_patients.aspx

Dental Clinic Management System

Home Dentists Patients Appointments Services Admin

All Patients Records

	P_ID	P_NAME	AGE	GENDER	PHONE_NO	EMAIL_ID	PASSWORD	ADDRESS	CITY	PINCODE
Edit	35	Ayush joshi	20	Male	9313352365	ayush@gmail.com	ayush	59 shreeji soc.	Bharuch	392001
Edit	29	Faizan Patel	20	Male	7283914869	faizan@gmail.com	faizan123	Ekta hotel samarkha chikdi	Anand	388001
Edit	34	Gaurang shahu	20	Male	8780731039	gaurang@gmail.com	659933	cp clg near	Anand	388001
Edit	28	Ilyas Kureshi	21	Male	8799406221	ilyas@gmail.com	ilyas123	Nutan nagar, Anand	Anand	388001
Edit	30	Jhalak Khatri	20	Male	9510679628	jhalak@gmail.com	jhalak123	ABS tower	Kheda	387411
Edit	27	Rajkumar Shahu	21	Male	7801967636	rajkumar@gmail.com	659933	Prabhukrupa soc. Anand	Anand	388001
Edit	36	Yash rana	22	Male	6353701409	yash@gmail.com	YASH123	Krishna jivan soc	Nadiyad	387001

- In this page admin view all patient list and admin also edit details.

Admin side find patient page :

DENTAL CLINIC MANAGEMENT x +

localhost:1117/rk/admin_patients_search.aspx

Dental Clinic Management System

Home Dentists Patients Appointments Services Admin

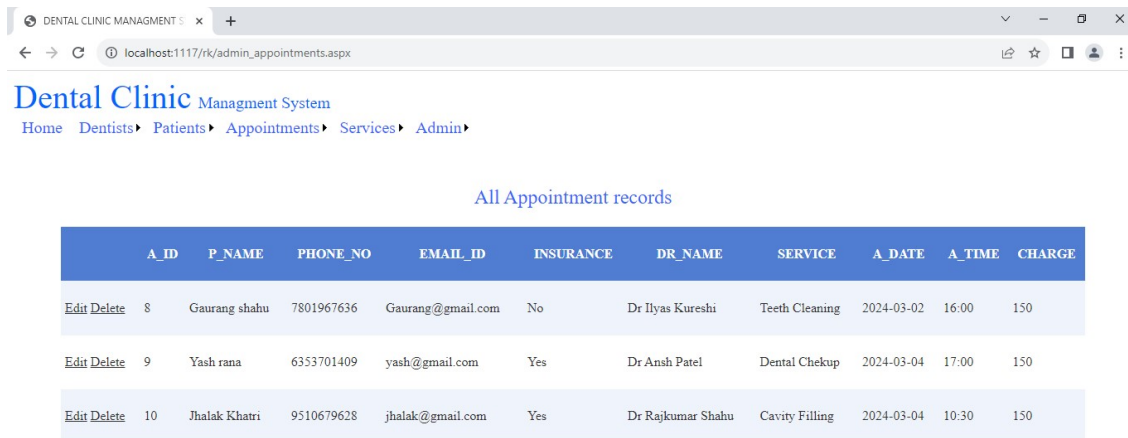
Find Patient

Search :

P_ID	AGE	P_NAME	PHONE_NO	GENDER	EMAIL_ID	PINCODE	CITY	PASSWORD	ADDRESS
27	21	Rajkumar Shahu	7801967636	Male	rajkumar@gmail.com	388001	Anand	659933	Prabhukrupa soc. Anand

- In this page admin view patient details when admin insert patient mobile number.

Admin side all appointment list page :



	A_ID	P_NAME	PHONE_NO	EMAIL_ID	INSURANCE	DR_NAME	SERVICE	A_DATE	A_TIME	CHARGE
Edit Delete	8	Gaurang shahu	7801967636	Gaurang@gmail.com	No	Dr Ilyas Kureshi	Teeth Cleaning	2024-03-02	16:00	150
Edit Delete	9	Yash rana	6353701409	yash@gmail.com	Yes	Dr Ansh Patel	Dental Chekup	2024-03-04	17:00	150
Edit Delete	10	Jhalak Khatri	9510679628	jhalak@gmail.com	Yes	Dr Rajkumar Shahu	Cavity Filling	2024-03-04	10:30	150

- In this page admin view all appointment list and admin also edit details and delete appointment data.

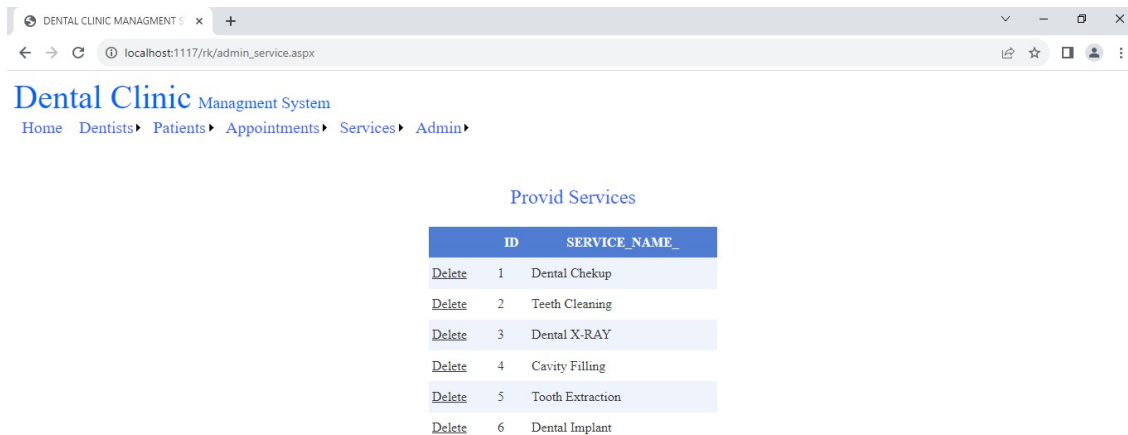
Admin side find appointment page :



A_ID	P_NAME	PHONE_NO	EMAIL_ID	INSURANCE	DR_NAME	SERVICE	A_DATE	A_TIME	CHARGE
8	Gaurang shahu	7801967636	Gaurang@gmail.com	No	Dr Ilyas Kureshi	Teeth Cleaning	2024-03-02	16:00	150

- In this page admin view all booked appointment when admin insert patient mobile number.

Admin side services list page :

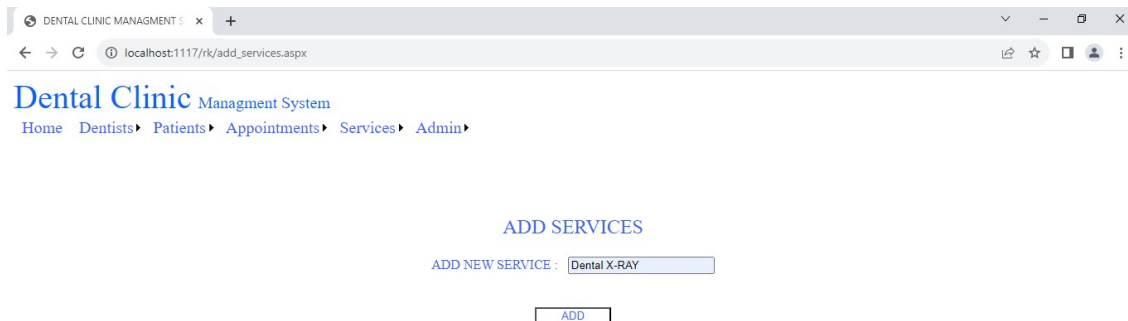


The screenshot shows a web browser window with the title 'DENTAL CLINIC MANAGEMENT' and the URL 'localhost:1117/rk/admin_service.aspx'. The page header includes the 'Dental Clinic Management System' logo and a navigation menu with links: Home, Dentists, Patients, Appointments, Services, and Admin. The main content area is titled 'Provid Services' and contains a table with the following data:

	ID	SERVICE_NAME
Delete	1	Dental Chekup
Delete	2	Teeth Cleaning
Delete	3	Dental X-RAY
Delete	4	Cavity Filling
Delete	5	Tooth Extraction
Delete	6	Dental Implant

- In this page admin view all provided services and admin also delete services.

Admin side service add page :

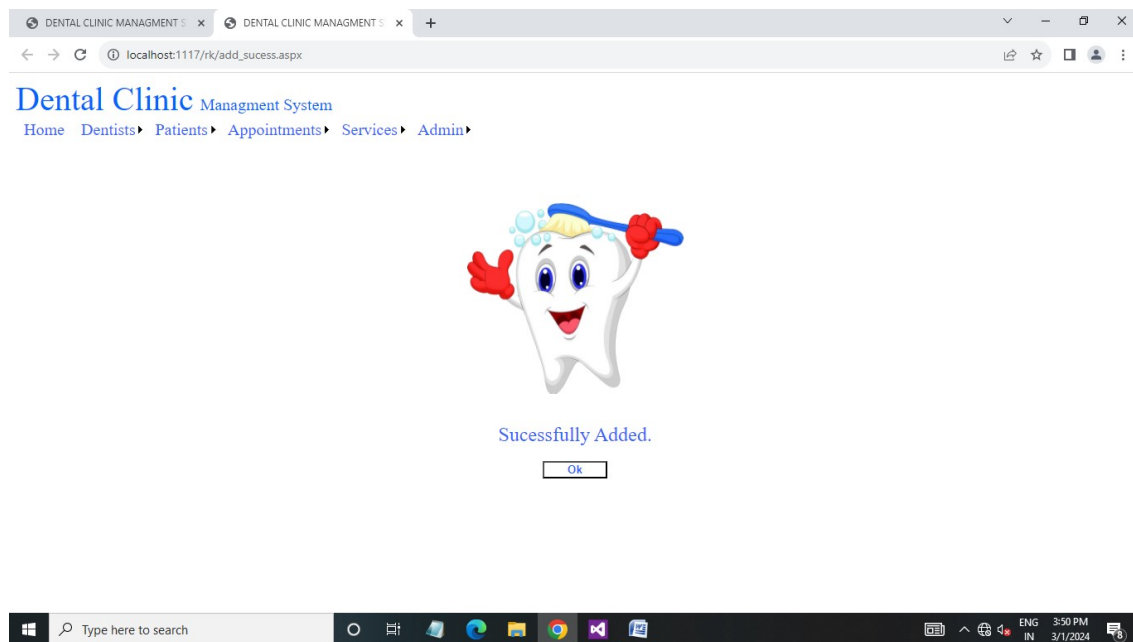


The screenshot shows a web browser window with the title 'DENTAL CLINIC MANAGEMENT' and the URL 'localhost:1117/rk/add_services.aspx'. The page header includes the 'Dental Clinic Management System' logo and a navigation menu with links: Home, Dentists, Patients, Appointments, Services, and Admin. The main content area is titled 'ADD SERVICES' and contains a form with the following elements:

ADD NEW SERVICE :

- In this page admin add new services.

Admin side service successful added page :



➤ This is service added success page .

Admin side admin list page :

The screenshot shows a web browser window with the URL `localhost:1117/rk/admin_admins.aspx`. The page title is "Dental Clinic Management System". The navigation menu includes Home, Dentists, Patients, Appointments, Services, and Admin. The main content area is titled "All Admins" and displays a table with the following data:

ADMIN_ID	ADMIN_NAME	EMAIL_ID	PASSWORD	PHONE_NO
1	Rajkumar G Shahu	admin@gmail.com	admin123	7801967636
2	ilyas kureshi	admin2@gmail.com	admin123	7801967637

The Windows taskbar at the bottom shows the search bar, task view, and several open applications including Chrome, VS Code, and File Explorer. The system clock indicates 3:53 PM on 3/1/2024.

➤ In this page admin view all admins.

Admin side add admin page :

The screenshot shows a web browser window with the URL `localhost:1117/rk/admin_registration.aspx`. The page title is "Dental Clinic Management System". The navigation menu includes Home, Dentists, Patients, Appointments, Services, and Admin. The main content area is titled "ADMIN REGISTRATION" and contains a form with the following fields:

- ADMIN NAME :
- PHONE NO :
- E-MAIL ID :
- PASSWORD :
- CONFIRM PASSWORD :

Below the form is a blue "Register" button. The Windows taskbar at the bottom shows the search bar, task view, and several open applications including Chrome, VS Code, and File Explorer. The system clock indicates 3:53 PM on 3/1/2024.

➤ In this page admin add new admin.

Limitation

Excel export has not been developed for dental clinic, doctor duo to some critically.

The transaction are executed in offline mode, hence online data for patient, text capture is not possible.

Offline reports of dental clinic, appointment, patient cannot be generated due to execution.

The user is provided help at each step for his convenience in working with the software punctuality of time was also major constraint thus it was not possible to make the software full proof and dynamic.

Proposed enhancement

The developed system is client server application it can be ported on the web in the later stages of development.

The dental clinic system currently runs on the windows platform only. In the future enhancement the system can be ported on the other platforms.

Conclusion

Our project is only a humble venture to satisfy the needs to manager their project work. The objective of software planning i9s to provide a frame work that enables the manager to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.



**Clean Teeth, Strong Teeth
Thank You**

Created by : Mr. Rajkumar G Shahu