# SYNOPSIS MAJOR PROJECT

ON

# DENTAL CLINIC MANAGEMENT SYSTEM (2020-2023 )

## SUBMITTED TO SUBMITTED BY

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**UNDER THE GUIDANCE OF**

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## PG DEPARTMENT OF COMPUTER SCIENCE CHRIST NAGAR COLLEGE

**MARANALLOOR**

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**MARANALLOOR**

## INTRODUCTION

The aim of the Dental Clinic Management System is to automate the existing manual system with the help of computer equipment and complete computer software and satisfy your needs so that your valuable data/information can be stored for a long period of time with easy access and handling. In the same, the necessary software and hardware are readily available and easy to use. The dental clinic management system described above can result in an error- free, secure, reliable, and fast management system. This can help the user to focus on other activities instead of keeping records. In this way, it will help organizations make better use of resources. The organization can maintain IT records without redundant entries. That means you don’t have to be distracted by irrelevant information and still make it to the top. The aim is to automate the existing manual system using computer equipment and comprehensive computer software to meet the needs of the business. Your valuable data/information can be stored for a long period of time with easy access and manipulation. The project describes how to manage to achieve good performance and better customer service.

## OBJECTIVE OF THE PROJECT

It can help to collect in detail perfect management. The collection will be clear, simple, and useful in no time. This will help a person to comprehensively and clearly know the direction of the past year. It also helps with all the work in progress related to the dental clinic management system. In addition, billing costs will be reduced; administration and billing process will run smoothly. Our project aims to automate business processes, that is, we tried to computerize several processes of the dental office management system. The system gives complete details of a clinic to its customer. A customer can easily find out the facilities available with any of the clinic. The system gives well-structured details to all who wish to register to this portal.

* System manages to save all the patient record accurately and computerized.
* System should able to avoid the data redundancy of patient dental information.
* System should manage to check the available date and time to make appointment between dentist and patient.
* System able to display patient dental history and treatment that had been done.
* Generate report of patient dental condition according to the treatment session and many other criteria
* Generate valuable report regarding number of patient visit for treatment at the clinic.

## EXISTING SYSTEM

In existing system some of the dental clinic has their-own web portal. That only displays the facilities of the current clinic. User cannot get details of more than one clinic information from those portals. Many of the clinics use traditional filing system to keep patient track record. This makes more difficulty to perform a fast action. Presently there is no way to get the facility of a nearest clinic to a user. User need to remember the web address of all clinics to find the facilities.

## DISADVANTAGES:

1. There is no centralized web portal for all dental clinics.
2. User need to remember the individual web address to get details.
3. Information collection based on traditional file system.
4. There is no centralized data storage.
5. Common administration not available.

## PROPOSED SYSTEM

“Dental Clinic Management System” was developed to overcome the problems of the manual practice system. This software is supported to eliminate and in some cases reduce the difficulties encountered by this legacy system. Furthermore, this system is designed for the specific needs of the company to run the operations smoothly and efficiently. The application is minimized to avoid data entry errors. It also gives an error message if invalid data is entered. There is No formal knowledge required for the user to use the dental clinic management system. So all this proves that it is easy to use. The dental clinic management system described above can result in an error-free, secure, reliable, and fast management system. This can help the user to focus on other activities instead of keeping records. Therefore, the system will help organizations make better use of their resources. Every organization, large or small, faces challenges in managing and managing information from doctors, dental clinics, exams, appointments, and appointments. Each dental clinic management system has different requirements for dental clinics. That’s how we design unique employee management systems tailored to your management needs. This is intended to support strategic planning and help ensure your organization is equipped with the right level of information and detail for your future goals. Plus, for busy executives who are always on the go, our systems are equipped with remote access capabilities so you can manage your workforce anytime, anywhere. The proposed system ultimately allows the user to better manage their resources.

## ADVANTAGES:

1. All the clinic details comes under a single domain
2. User will get the details of different clinic in single click.
3. Information stored in a centralized data base server.
4. Very easy to find the facilities of any clinic
5. Easy way to search and find good clinic.

## PROJECT DESCRIPTION

The web portal is developed using python technology. Web development is completed using the web frame work called django. Our system many have 3 users. The modules are Administrator, dental clinic and patient. Administrator is the most powerful module in the project. Clinic is the second and important module in the project. And the last one is patient.

## Module and Features:

1. **Administrator:**

In this module, Admin logins and mange dental clinic such as view clinic profile, view clinic reviews given by users, add new dental clinic, manage pharmacy registrations, manage user complaints, send notification messages to clinics, admin can search clinics, doctors and pharmacies by using their names.

## Functions:

* + Login: The admin can login to the system to access various provisions
  + Manage clinics: View clinic profile and reviews, And add new clinics .It must include clinic name , contact details , location ,clinic username and password
  + Manage Pharmacy: View pharmacy registration requests and approve the request for providing pharmacy to access the system or reject the request
  + Send notification : Admin can select dental clinics and send important messages or notifications
  + Manage User Complaints: View complaints posted by users
  + Search: Admin can search Clinics , pharmacies and doctors

## Clinic:

In this module, clinics can access the system by using username and password provided by Admin, clinic can manage doctors such as add new doctors and view doctors List, Add new patient. new patients also consider as new user to the system.

## Functions:

* + Login: The clinic can login to the system to access various provisions
  + Manage Doctors: View Doctors List and add new doctors.
  + Manage patients : View Patients List and view their treatment records, Add new patient and make new appointment
  + Manage Appointments: View today’s appointments
  + Manage Facilities : Add clinic facilities and view list of facilities
  + Health Tips: add health tips for patients and public users
  + Update Profile : Update about us information and view clinic reviews given by users

## Doctors:

In this module, doctors can access the system by using username and password provided by clinic, doctors can manage today’s appointments , doctors can view medical records of all his patients when needed, also update their treatment record, Doctors can interact with his patients by chatting with them

## Functions:

* + Login: The Doctor can login to the system to access various provisions
  + Manage Appointments: View todays appointments made by the patients
  + Update Treatment details : doctors can view his patients treatment records and update current treatment status
  + Chat with patients : Doctor view his patients list and interact with them by chatting , and clear patients doubts

## Patient:

In this module, Patients / users can access the system by using username and password provided by clinics or creating an account, User can make an appointment by searching the doctors, user can also search clinics and pharmacies.

## Functions:

* + Login: The patients can login to the system to access various provisions
  + Make an appointment : user can make an appointment by searching the doctor
  + Health tips : View health tips posted by clinics
  + Search clinics: user can search clinics and view clinic profile about information, Add reviews for clinics.
  + Complaints: Users can post their complaints directly to the admin.

## Pharmacies:

In this module, Pharmacies can join into the system by registering pharmacy,

after registering pharmacy account needs an approval from admin, for accessing the system. after approval pharmacies can add medicines and monitor medicine sales and stock details.

## Functions:

* + Login: The Pharmacies can login to the system.
  + Manage Medicine: pharmacies can add New medicines and view added medicines list

,sales and stock details.

## Public:

In this module, public users can view health tips and search doctors, clinic without login into the system. Public can create their account through user registration.

## TECHNOLOGIES USED

1. **Software Requirements:**

Language : Python

IDE : VS Code

Frontend : HTML,CSS, Bootstrap, JavaScript

Backend : My SQL

Web Framework : Django

Web Browser : IE/Chrome/Safari/Opera

Operating System : Windows 7 or Higher

## Hardware Requirements:

Processor : Intel Pentium C2D/AMD

RAM : 1GB / Above

Hard Disk free space : 10 GB

Display : LCD 18”, 1024x768 / Above

Media : USB /DVD

## FUTURE SCOPE

In future we can add more functionality to our portal.

* We can add medical stores, medical equipment shops to the portal. It helps a user to easily find the medicine availability.
* We can implement real time consultation with the help of camera and sound devices. It became more efficient to visit a doctor from our home. Implementation of user review system helps to fine more efficient doctor and clinic.

## CONCLUSION

Dental Management System is a system which is a first step to change the medical industry methodology of keeping the data of patients as well as the other important information. This system will help the users to manage the dental information and make sure that all important data will be able to use in the future time. The proponents conclude that the system is fully operational and dynamic, as of the sum data gathered. By that, the users strongly agree that the implementation and use of the system that offers are can perform these tasks. This condition is on the premise that it has addresses the necessary automation requirement of the clinic after the thorough system study.

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