

USER PROJECT REVIEW
APELO DENTAL CLINIC SYSTEM
(ADENICSY)

APELO DENTAL CLINIC
APELO BUILDING 8271, DR. ARCADIO SANTOS AVE.,
PARANAQUE CITY, 1700

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1. PROJECT SUMMARY

Apelo Dental Clinic is the client of the group Progmaticks in their project-based learning in Asia Pacific College. The clinic is located along the main road of Paranaque City and has accumulated many patients since their establishment in 2001. Their mission is to provide quality service with affordable prices, so no one is deprived of good oral health care and their vision is to continuously upgrade to deliver highest dental care in safe environment for life-long. The clinic currently has 7 dental chairs and the number of dentists that work each day varies depending on the schedule managed by the owner's secretary (front desk staff in other paper). The dentists work continuously throughout the day to serve patients ranging to 1:15 dentist to patient ratio. Thus, implementing an appointment system that is prone to unproductivity due to late arrival, limited number of patients and other factors will be detrimental to sales and other aspects of the business.

The objectives of the project as presented during the course Introduction to System and Design (SNTSDEV) – which is a pre-requisite of SSYADD, SCSPROJ, PROJMAN and the current course SOFTDEV are:

1. To significantly improve the average waiting time of the patient.
2. Provide a search function that will show the information of a certain patient.
3. Make queueing number online so that patients can get the number through their mobile phones and see the current number in the clinic as it updates.
4. Make the inventory online where the owner can see the supplies at critical level.

Hence, it can be acknowledged that the group have proposed the appointment system for clinic visitation during the said term, but the owner is dissatisfied with the proposed solution as they have tried implementing different ways of appointment system before.

During SSYADD1, the adviser let the class to do “Design Thinking” again, during this term the group came up with the idea of implementing a Virtual Number (*term is queueing number on other documents and in the following pages*) – which is a digital form of the number card that is the current way of the clinic's queueing implementation. While the current number that is being served in the clinic can be seen by the patient wherever they are as it updates over time so they can estimate their arrival by themselves.



Figure 1: Numbered card of the clinic that is used as the basis of queueing throughout the day.

During the proposal of this idea, the owner of the clinic who is the main stakeholder of the project named Dr. Denroe Apelo agreed with the said feature instead of the appointment system.

This will still reduce the waiting time of the patient in the clinic, which is one of the main objectives of the project.

The scope of this project included phases from identifying the client's problem, prototyping testing of prototype and deployment of the project to the client's side. On the other hand, transitioning and support from the developer will be further discussed between the client and the group. Project success will be defined when the software is implemented and achieves the objectives mentioned. Thus, it should garner positive feedback from the patients, dentists, owner, and the clinic's staff.

2. PROPOSED PROJECT DELIVERABLES (PLANNED VS ACTUAL)

The development of the software is still ongoing. Thus, this section will provide the list of the feature and its brief description as agreed by the group and the client:

Planned:

Feature	Brief Description
Account Management for Patient and Employee	This will include different login options, account recovery security of the user.
Queueing Management:	(Patient's Side) <ul style="list-style-type: none"> • Getting Virtual Number • Seeing the Current Number and available dentists • Push Notification to alert patient when they are near the Current Number (Staff and Owner) <ul style="list-style-type: none"> • Updating the Current Number • Updating the Dentist Schedule
Clinic Visitation	The main reason for this feature is to avoid patients who get number for consecutive days but don't attend to it.
Search Function for Payment and Medical Records	To easily retrieve patient's file and records in a tablet.
Medical Records Management Inputting of different files from another device	This will include handling of different patient information, it's CRUD (Create, Read, Update, Delete) operation, user access level, inputting different files from other device like Xray and pictures of teeth and teeth model of the patient
Payment Records Management	This will include the updating of payment and the necessary information like the one who input the record and which data should be available to the customer's end.
Dashboard	This will provide descriptive summary of the data and some insight that will help the owner in better decision-making for the clinic.

Actual:

Feature	Specific Features Implemented
Account Management for Patient and Employee	This includes different login options for admin, patient staff and dentists. Hence, prerequisites like admin creating employee credentials and patient registration are done. Updating profile information was implemented as well.
Queueing Management:	<p>(Patient's Side)</p> <ul style="list-style-type: none">• Getting queueing number• Seeing the current number being served and refreshing it.• Seeing a confirmation in the home screen about their queueing number.• Seeing available dentists on the current day.• Status of the patient• Canceling the queueing number <p>(Staff and Owner)</p> <ul style="list-style-type: none">• Updating the current number.• Updating the status of the patient with timestamp of the update.• Adding dentist schedule for a day.• Removing a dentist schedule for a day.
Search Function for Payment and Dental Records	Dentist and staff can see the personal information for verifying patient's identity.
Dental Records Management	Add dentist's note to view what procedure has been done. View and upload pictures and Xray files. Add payment details of what procedure has been done
Payment Records Management	Updating the payment record input by the dentist. Adding new payment record.
Dashboard	Viewing number of registered patients for a certain period.
Inventory Management	<p>(Staff)</p> <ul style="list-style-type: none">• Add or edit the items in the inventory. <p>(Admin)</p> <ul style="list-style-type: none">• Add or edit the items in the inventory.• View item who are at the critical level.• View item that are recently modified.

3. RECOMMENDATIONS

During the project development for ADENICSY, there were various lessons learned and understanding of new concepts, it brings us to the recommendations of the following which are relevant in the continuation of the project.

Recommendation #1:

Reiteration on the project must be done consistently and feedback from the user is important to improve the system and maintenance wouldn't be as often as possible reducing the cost. It's important to note that the system was developed by students which had their first time in developing a system, hence, there could be some unknown vulnerabilities and better practices that can be implemented.

Recommendation #2:

Finishing other features in the project and going through several testing to furnish and assess the quality of other features is important before hosting and buying a domain. Features such as:

- ***Tracking clinic visitation of the patient and getting their feedback throughout the day*** – the team found this important as they realized during the design thinking in project where problems and solutions were being tackled that getting this information would improve the clinic's performance better. It is also included here the tracking how much was the average waiting time of patient during the moment they arrived, and their procedure was finished.
- ***Payment Management*** – although this feature has been implemented, this needs to be tested rigorously and improved as it deals with important aspects of the business.

Other features such as employee performance and salary could also be added for entirety of the system in providing aid to the operations of the clinic. However, these are not significant before implementing the system as the main concern for the clinic is to improve queueing and dental records management.

Reviewed by the Project Sponsor:



Dr. Denroe Apelo
Apelo Dental Clinic's Owner

Nov. 6, 2023
Date: _____