

ABSTRACT

Arya Vaidya Sala Kottakkal (AVS) is a century old institution engaged in the practice and propagation of Ayurveda, the ancient health care system of India. The main Ayurveda hospital is in Kottakkal and medicine supply main office is in Tirur. The different kottakkal Ayurveda Sala medical shops that are seen in different locations in Malappuram are under the main office in Tirur. The supply of medicines to all these sub-branches are provided from the main branch.

Currently all the Ayurvedic medical shops under the Tirur branch need to prepare their needed medicine list manually and they need to collect the medicines from Tirur directly. This website is developed to automate and manage all the processes taking place there. Through this system the sub-Ayurvedic medical shops can order their out-stocked medicines. The system also provides a place for inventory management for both the sub-branches and main branches. They both can print the invoices according to the purchases made. The billing facility is also embedded with this system. Here the medical shop owner do not need to collect the medicine from the main branch directly. Instead, the main branch system will allocate a delivery boy automatically to deliver the product. The medical shops will get the purchased medicines bill at the time of order placed and they need to pay the bill through online. The system supports online bill payment using the Razorpay payment gateway. For new retailers to become a part of the Kottakkal Arya Vaidya Sala there is a registration page provided by the website, they can fill the registration form and submit it. The admin(main branch office staff) will go through the details provided and they will conduct an enquiry for the approval. After the approval they can login to the website with their username and password. The website also provides additional features such as medicine stock out notification system to the medical shop keeper, route map of the shops to the delivery boy, details of all the retail ayurvedic medical shops under the main branch.

Chapter 1

INTRODUCTION

1.1 General Background

The ayurvedic treatment and medicine is one of the best and ancient health care system. Arya Vaidya Sala Kottakkal(AVS) is a century old charitable institution engaged in this practice and propagation of Ayurveda. The main ayurvedic medicine supply centre of Kottakkal Arya Vaidya Sala in Malappuram district is in Tirur. The different kottakkal Ayurveda Sala medical shops that are seen in different locations in Malappuram are under the main office in Tirur. The supply of medicines to all these sub-branches are provided from the main branch. The current situation is that, all the ayurvedic medical shops under the Tirur branch need to prepare their needed medicine list manually and they need to collect the medicines from Tirur. They want to collect it from there directly. It will increase their travel cost and lead to many problems. This website will solve all these problems with the addition of many new features. It is very useful and convenient to both the main branch and for all the sub-branches.

1.2 Objective

The main objective of our project is to build a website for the Kottakkal Ayurveda Sala for managing their medical supply system. There have 50+ sub-branches for their main ayurvedic medical shop in Tirur. The medicines to all these shops are distributed from the main branch in Tirur. Currently, the medical shops need to prepare their required medicines list and then they need to give that order list through WhatsApp or directly to the main pharmacy. After the medicines are prepared the medical shop keeper need to collect the medicines directly. It is a time consuming and inconvenient to the medical shop keeper. It also rise many problems to both of them. The website will solve all this problems. By using the website the medical shop keeper can place their orders directly to main branch and according to the order received they prepare their ordered medicines. Here the medical shop keeper is not required to collect the medicines from there directly. After the medicines are arranged from the main branch they will issue a delivery boy for delivering the product. The system also support automatic order placing when the quantity of the item goes a certain limit. The system also support inventory management. The medical shop keeper will get a free version of an inventory management system along with this website. They can print their bills through it, the billing system can be customizable according to the required shop.

The website provides a registration section for new branches to become a part of the Kottakkal Ayurveda Sala. The new members are required to fill the registration form and they need to submit it. After all procedures conducted from the authority the approval will be decided. It can also be rejected by specifying the reason. New medical shops can register directly or they can register with the recommendation from an existing shop, the recommendation registration will be considered as prior.

Chapter 2

SYSTEM ANALYSIS

2.1 Existing system

Currently the Ayurvedic medical shops are preparing their stock out medicines list by them self. The owner or the medical shop keeper need to go directly to the supply Center with prepared list in order to collect the required medicines. After taking the required medicines the bill is provided by the supply center and the medical shop owner need to pay the bill to collect the medicines.

The possible communication for any enquiry is through phone call. Communication through phone call is not a convenient way because due to increased number of sub-branches, some of them are not possible to contact at right time because of the heavy traffic. The main supply Center is currently using an offline basic inventory management system for managing their stocks. Currently they are using the Excel for managing their inventory. As we all know Excel can be only capable of managing basic inventory management for small businesses. Similarly in the case of the sub-branch medical shops, if they need any inventory management system for their use they need to acquire it themselves. At currently

the registration process for new medical shops to become part of the Kottakkal Arya Vaidya Sala is through offline paper forms. The registration is through paper registration forms. the medical shops need to fill the registration form and need to submit it along with required documents in the main branch. The staff in the main branch will verify all the documents in a ordered way. There will be a inspection from the main branch as a part of the approval process. If the medical shops meet all their listed criteria they will be approved for further move and if not it will be rejected with valid reason mentioned. This all processes are very time consuming ones and all these works are done through offline.

2.2 Proposed system

The proposed system is designed to overcome all the disadvantages of the existing system along with the addition of new features. The website provides space for the medical shops to order their required medicines online. This order can be generated automatically when the stock of particular medicine reaches below a certain limit. The website also provide an inventory management system for both the main supply Center and the sub medical shops is also provided with a inventory management system. A separate registration portal for new medical shops is given for becoming a part of the Kottakkal Arya Vaidya Sala (AVS). The website also offers many more features.

Here, by using this website the medical shops can give their required medicine list to the main supply Center. According to the lists received the system will automatically generate the bill for the corresponding medical shops. The medical shops need to pay the bills online for further process. The system offers an online payment method for paying the bill online in a secure way. Here for enabling the online payment the Razorpay payment gateway is used. The retail medical shops can use their debit card, credit card, net banking system for completing the payment. After paying the bill amount the medical shops

can save it as pdf or can print their receipt. After the bill is payed by the medical shops it will be notified in the main supply center, they will arrange all the required medicines and assign a delivery boy for delivering the product. The order for the required medicines can be generated automatically when ever the quantity of the medicines fall under a certain limit. The automatic stock out medicine list preparation is working with the help of the inventory manager. The website offers a inventory management system for both the main Center and for the medical shops. It will helps them to manage their medicine stocks. For new Ayurvedic medical shops to become a part of the Kottakkal Arya Vaidya Sala a online registration portal is embedded with the website. The medical shops can fill the required details and submit it with required documents in the pdf format. When the medical shops submit their registration form it will be displayed in the main center. The staff in the main office will check the details and there will be an inspection from the main branch. If the medical shop meet all the required criteria it will be approved, otherwise rejected with a valid reason mentioned. The medical shops will notify in the system whether they are approved or not. The registration can be done in two ways, first one is the direct registration and second one is the recommendation basis registration. The recommendation basis registration means registration based on recommendation from an existing Kottakkal ayurvedic medical shop, which is already a part of the system with minimum 3 years in this field. After the approval they can login to the website with their username and password. The recommendation registration will be considered as prior.

By developing this website it offers all the works including medicine ordering, inventory managing, new retailer registration into online and convenient way. It will overcome all the disadvantages of the current system with proving additional features such as medicine stock out notification system to the medical shop keeper, route map of the shops to the delivery boy, details of all the retail ayurvedic medical shops under the main branch.

2.3 Module Description

There are mainly three modules in this project. They are:-

- Medical shops(User) Module
- Medicine supply center(Admin) Module
- Delivery boy(User) Module

1. Medical shops(User) Module:

The different ayurvedic medical shops under the Kottakkal Arya Vaidya Sala(AVS) is one of the users in this website. The medical shops can login to the website with given username and password at the time of registration. If they are not registered shops they can register using the registration page in the website. After the approval process is completed they can login to the system with the username and password provided. The medical shops can give the required list of medicines through online or the system will automatically provide the list to the supply center when the stock of medicine reaches down. The system will send an notification message to the medical shop keeper when the quantity of any medicines reach below a certain limit. They will also get a notification when the supply center issues bill for their purchase and for the amount they paid. The medical shops can use the inventory management system in the website for managing their stocks. It is free for all registered users they dont need to pay any additional money for that. The medical shops can print their bills for customers from the website. The billing system will print the bill with the medical shops details.

2. Medicine supply center(Admin) Module:

The medicine supply center of kottakkal Arya Vaidya Sala is the admin of the website. When the medical shops order for their stock our medicines it will be notified in the admin panel. The supply center will arrange the required medicines and assign a delivery boy for the delivering of the medicines. The system will automatically assigns the available delivery boy at the moment, it is not needed to done manually. The supply center can view the requested order list after the medical shops has completed their payment. The payment details can also be available to the supply office. The website provide a inventory management system for managing the medicine stocks in the supply office. The supply office staff can view the newly registered medical shops details and after all the approval procedures are completed the staff will give approve to the medical shops if they meet all the approval requirements, if not rejected with a valid reason mentioned. The supply center can view the details about all the sub medical centers working under them.

3. Delivery boy(User) Module:

The another user of the system is the delivery boy. The delivery boy access the system through his mobile phone using the android application developed. This module has only some limited functions. When an order is placed by the medical shops it will be assigned to a available delivery boy for the medicine delivery. The delivery boy will get a notification when work is assigned and the assigned work details can be viewed in the website after login with the username and password. After delivering the medicine to proper medical store the delivery boy need to update it in the site. The delivery boy can view the road map to the medical shop in the website.

2.4 Feasibility Study

2.4.1 Operational Feasibility

Projects are beneficial only if they can be turned into information system that will meet the organizations operating requirements. There was no difficulty in, implementing the system and the proposed system is so effective, user friendly and functionally reliable. MEDCART the website is beneficial for participants as it can be accessed from any where. This website can be accessed from any device like computer, smartphone with internet connection . Any of the user with less knowledge of internet can use this portal.

2.4.2 Technical Feasibility

Technical Feasibility study deals with the hardware as well as software requirements. The scope was whether the work for the project is done with the current and existing software technology has to be examined in the feasibility study. The proposed system only requires Microsoft Visual Studio platform which is freemium software. The website can also be easily upgraded to the higher level with less effort and maintenance. This website can be easily used with their smartphone anywhere with internet connections. This portal is user friendly. Hence the proposed System is technically feasible.

2.4.3 Economic Feasibility

Economic feasibility determines whether the proposed system is capable of generating financial gains for an organization. It involves cost incurred on the software development team, estimated cost of hardware and cost of performing feasibility study and so on, thus system was developed with the available resources. Since cost input for the system is almost nil the output of the system is always a profit. This website doesn't cost any charge from the user who is accessing it. It is totally free to use for users. Since the website

can be accessed from any device with internet connection there is no need for a dedicated hardware. In the development side there will be small cost for developing this website and for hosting it on internet. Hence it is economically feasible.

2.5 System Environment

2.5.1 Developer Requirements

2.5.1.1 Hardware Requirement

- Processor: Intel Core i5 and Above or equalant processors.
- RAM: 8GB.
- Storage: 128GB SSD and 500GB Hard Disk.

2.5.1.2 Software Requirement

- Operating System: Windows
- Front end: PHP
- Back end: MYSQL
- IDE: Visual Studio Code

2.5.2 User Requirement

- Any device like computer,laptop or smartphone with an internet connection.
- Any web browser installed on the device.

2.6 Actors and Their Roles

2.6.1 Medical shops(User)

- Medical shop register
- Medical shop login
- Add required medicines to cart
- Place the order
- Bill payment
- Inventory management
- View the current stock
- View sold medicine details
- View the previously ordered medicines list
- Print the bill for customer
- View status of newly registered shops
- View all notifications

2.6.2 Medicine supply center(Admin)

- Admin login
- View the order details
- View the payment details
- Approve the order and arrange medicines
- Delivery boy assign
- View the order progress
- View the details of all delivery boy

- View the details of all medical shops
- Inventory management
- View the current stock
- View sold medicine details
- View all notifications
- Medical shops approval process

2.6.3 Delivery boy(User)

- Delivery boy login
- View assigned work details
- View road map
- Update assigned work status
- View previous work details