



VAXIMATE

Child Vaccination Management for Healthier Families (CVSM)

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Abstract: In today's Generation Vaccination is a crucial responsibility for parents, necessitating a systematic approach to ensure timely administration. According to NFHS-5, 2019-21, the country's full immunization coverage stands at 76.1 percent. To address this need, our project focuses on developing a vaccination website. This platform serves multiple functions Parent registration, booking hospitals in located areas, managing child vaccination schedules, keeping child records, send reminder messages through SMS. The child can be registered by the parent, booking a hospital for vaccination.

Keywords: Vaccination, Immunization, Reminder (SMS), Records.

I. INTRODUCTION

The Child Vaccination Management System revolutionizes how we handle vaccination records and schedules for children. By integrating modern technologies like Python, CVMS simplifies the vaccination process, ensuring timely administration and enhancing healthcare delivery. It provides caregivers easy access to their child's records and timely reminders, empowering them to stay informed and proactive. Healthcare providers benefit from streamlined record management and reporting, CVMS contributes to better vaccination coverage, reduced diseases, and healthier communities, making it a crucial tool in global public health efforts.

II. LITERATURE VIEW

N. Hannah Harvey R. Described The vaccination for children. Children as their responsibility to receive all vaccines on time from their parents. Parents forget about their children's vaccinations due to their busy schedules. Parents have vaccination appointments wherever they go, it is easy to take vaccines for children [1].

D. Bentley W. Since the web is assuming a major part of our lives, web-based immunization organizer site. Websites are not uniquely made for inoculation organizers however there are existing sites that have immunization organizers. [2].

Carolyn R. A. Ahlers-Schmidt K. He Invented Vaccination's Parent Planner and Reminder The vaccination website planner is being developed for parents' responsibilities. What's more, this online organizer is being made explicitly for youngsters' immunizations as it were. This children's Vaccination Planner includes different features like a vaccination calendar and a text message reminder through (SMS).[3].

S. Ambler W. Designed framework, the current web-based system only uses a database to store data; however, Google Backup is a standout feature that safeguards the database-stored data. In conclusion, children's Vaccination Planner will undoubtedly be of great assistance to all parents and should be used by all parents. First of which is that, as we all know, parents of multiple children frequently forget important dates, such as when their children should receive vaccinations [4].

In Earlier days there is no vaccination website tracking planner applications. Now website application can remind us when our children should receive vaccinations. M. Irshad B., The current projects do not have an online backup cloud, which would make it easier for users to access. Database that can only be accessed by administrators [5].



III. IMPLEMENTATION MODULES

The project contains mainly 3 modules Parent, Hospital, Admin

Parent:

- Register
- Login
- Logout
- View Profile
- Change Password
- Manage Child Data
- Book Appointment
- View Appointments

Hospital:

- Register
- Login
- Logout
- View Appointments
 - Update Status
 - Approve
 - Reject
 - Pending

Admin:

- Login
- Logout
- Admin View Hospital
 - Accept
 - Reject
- Admin view Child
- Admin View Appointment
- Export/Save Data (Excel Sheet)

IV. VACCINATION SCHEDULE

AGE	VACCINATION SCHEDULE
At Birth	Oral polio vaccine (OPV) Dose 1, Bacillus Calmette-Guerin (BCG) Dose 1, Hepatitis B (HB 1).
6 Weeks	DTaP (Diphtheria, Tetanus and Pertussis) Dose 1, Rotavirus Dose 1, Hib (Haemophilus influenza type B vaccine) Dose 1, Hep B (Hepatitis B Vaccine) Dose 2, IPV (Injectable Polio Vaccine) Dose 1, PCV (Pneumococcal conjugate vaccine) Dose 1.
10 Weeks	DTaP (Diphtheria, Tetanus and Pertussis) Dose 2, Rotavirus Dose 2, Hib (Haemophilus influenza type B vaccine) Dose 2, IPV (Injectable Polio Vaccine) Dose 2, PCV (Pneumococcal conjugate vaccine) Dose 2.
14 Weeks	Rotavirus Dose 3, Hib (Haemophilus influenza type B vaccine) Dose 3, IPV (Injectable Polio Vaccine) Dose 3,



	PCV (Pneumococcal conjugate vaccine) Dose 3.
9 Months	OPV (Oral Polio Vaccine) Dose 3 MMR (Measles, Mumps, and Rubella vaccine) Dose 1
16-24 Months	Inactivated Polio Vaccine (IPV B1) Hepatitis A (Hep A2) Haemophilus influenzae Type B
4-6 Years	Varicella 1 PCV Booster 1
10-16 Years	Td

V. DATABASE

1. User Authentication and Management: The database stores data such as usernames, passwords, email addresses, and contact numbers. This data is crucial for user authentication during login and registration processes. By storing user details in the database, the application can verify user credentials and manage user accounts effectively.

2. Child and Management: Parents can add child data, including names, dates of birth (DOB), and ages. By storing child data in the database, the application enables parents to add, update, and delete records related to their children. This functionality allows parents to see the update.

3. Appointments Booking: The database stores information about appointments, including the child associated with each appointment, the appointment date, time, and status. By managing appointment data in the database, the application facilitates the booking, scheduling, and tracking of appointments. This functionality enables parents to book appointments for their children and receive reminders about upcoming appointments.

4. Hospital Management: For administrative purposes, the application manages information about hospitals, including their names, email addresses, passwords, addresses, and status (e.g., pending, approved, rejected). Storing hospital data in the database allows the application to register new hospitals, verify their credentials, and track the status of their applications. This functionality streamlines the process of hospital registration and approval within the application.

5. Admin Management: Admin functionality is integral to the application's management and oversight. Admins have the authority to manage hospital registrations, reviewing and approving applications as needed. Additionally, they oversee the appointment system, monitoring bookings and ensuring smooth scheduling processes. Admins typically access where admin can view stored data, such as appointment status and hospital details, enabling them to make informed decisions. This role may also involve exporting data for analysis and generating reports to track trends and performance metrics. Overall, admin functionality ensures the efficient operation of the application and facilitates effective communication between parents, hospitals, and healthcare providers.

VI. ACKNOWLEDGMENT

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VII. CONCLUSION

The web application is designed to facilitate child healthcare management. Key features include user authentication, allowing parents to register, log in, and manage their children's information. Additionally, the application enables appointment booking and tracking, allowing parents to schedule appointments for their children. The system also includes administrative functions for hospital registration, approval, and management. Overall, the project aims to comprehensive solution for parents to efficiently manage their children's healthcare needs while offering administrative tools for hospital oversight and coordination.

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