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Machine Learning Based Child Immunization System

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Introduction

Anywhere, anytime with required privileges. This work helps both parents and doctors to provide Child Immunization is one of the core infrastructure elements in building smart cities, an initiative taken up by Indian government recently. India has the highest number of child mortality in the world due to inadequate healthcare, malnutrition and poor sanitation, all of which can be prevented. We develop the ml based child immunization system to address healthcare issue, where a common platform to store and retrieve complete child medical history information. It includes mandatory vaccination schedule details of child along with the previous medical history records and also use machine learning algorithm to predicts the child health and gives specific suggestions to improve child health Reminders to provide timely vaccinations to their child are also provided to alert parents to give their child health protection. Using Web and Mobile based technology, parents and doctors get access of the child's medical reports online better quality healthcare services. Finally, the collection of data can further be analysed to find the trends and pattern of diseases and this can pave a new beginning in the field of engineering and medical research for better and quality living.

Problem Statement

Parents sometimes fail to vaccinate their children on time, which is one of the main causes. Existing vaccination system of India is incompetent and ineffective. Mismanagement and insecurity are major problems of the existing system. These deficiencies push the vaccine program to a halt and raise the number of children who are not vaccinated. As a result, there is a need for a framework that can deal with existing problems while still being able to adapt to changing times and technology. The vaccination program must be strengthened. The immunization awareness program also needs to be improved.

Objective

➢The Main Objectives of this system is to provide user friendly UI for schedule the vaccination and gives reminder to parents

➢ This system can define immunization, vaccination, immunity, antigen and antibody awareness.

➢This system will helpful for storing the child data for future analysis of the child health.

➢This system will increase the knowledge and skill among parents regarding immunization.

➢This system can predict the health report as per the child data

➢Send a message regarding routine vaccination date and location of nearest health center .

System Architecture
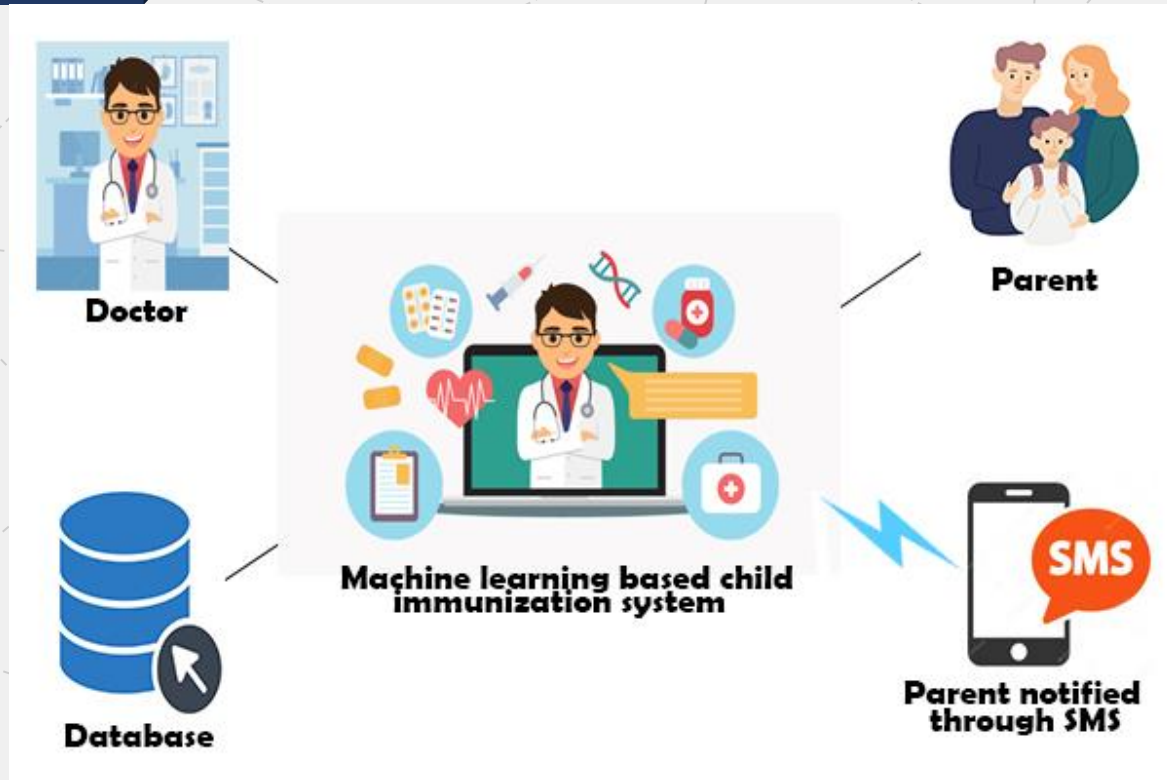
Methodology

step 1 : start .

step 2 : Doctors can register on system.

step 3 : Parents register their child with their own mobile number.

step 4 : doctors, parents and Admin can be able to login into the system.

step 5 : Admin can manage the users and uploads all the blogs regarding vaccinations.

step 6 : parents can gets appointment from the doctors by using the system.

step 7 : Then doctors accepts the appointment and schedule baby's vaccination.

step 8 : both doctors and parents can be able to track the vaccination report.

step 9 : System can be predicts the baby's health as per the data of vaccinations.

step 10 : system automatically send the SMS to their parents for remainder.

step 11 : User Logout.

Project Planning

PHASE 1 :

- Finding Project Topic
- Finding Existing system and disadvantages
- Collecting Information about the project topic

PHASE 2 :

- Literature Survey
- Synopsis
- Analysis of future scope and objective

PHASE 3 :

i)Requirement Gathering

- software requirement
- hardware requirement

ii)Design, Algorithm, Architecture
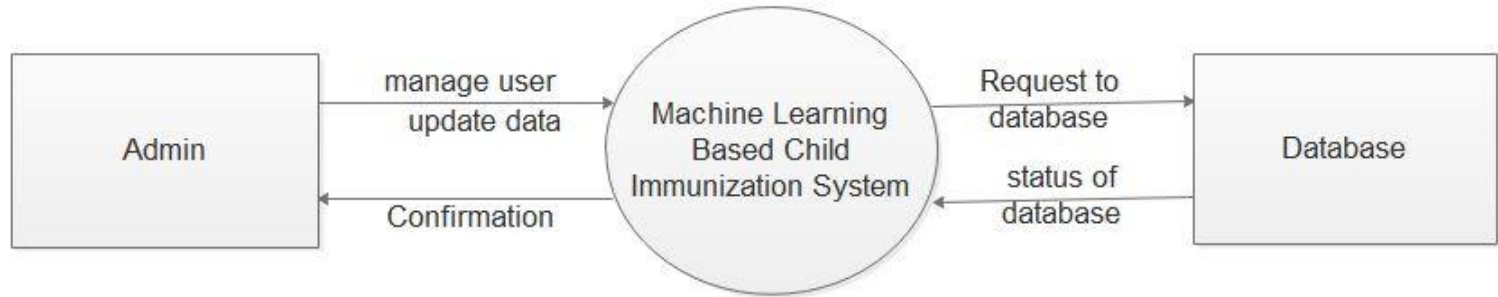
iii)Report

Project Design
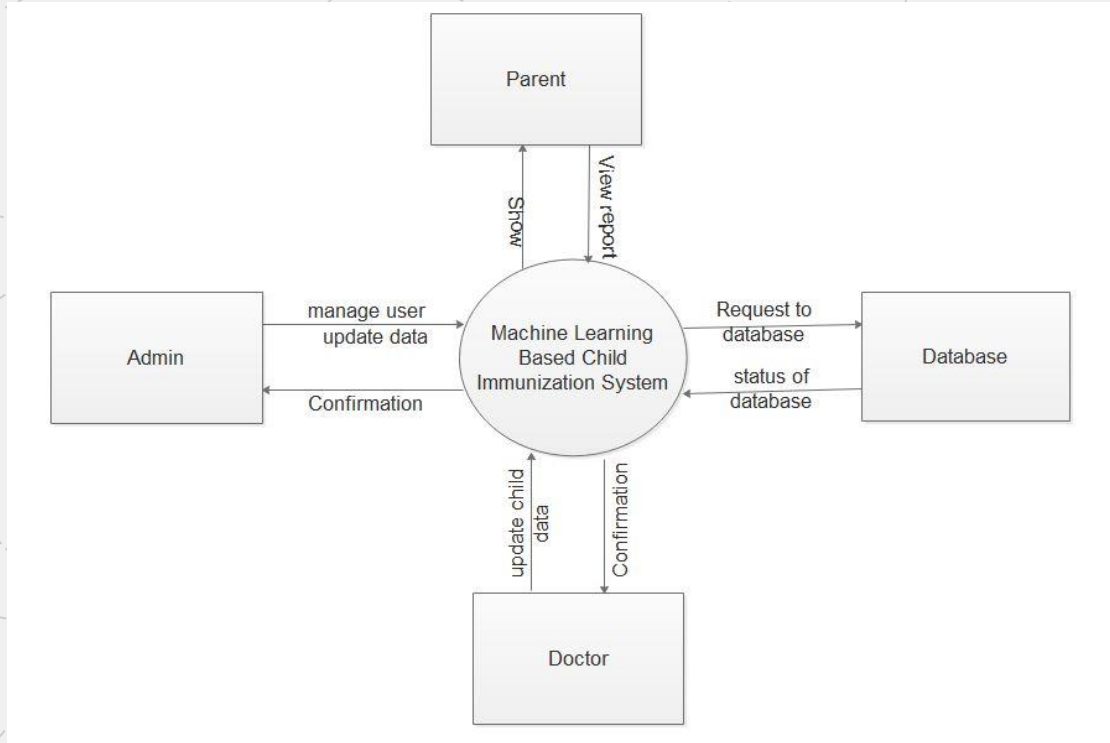
DFD Level 0

FIG : DFD Level 0
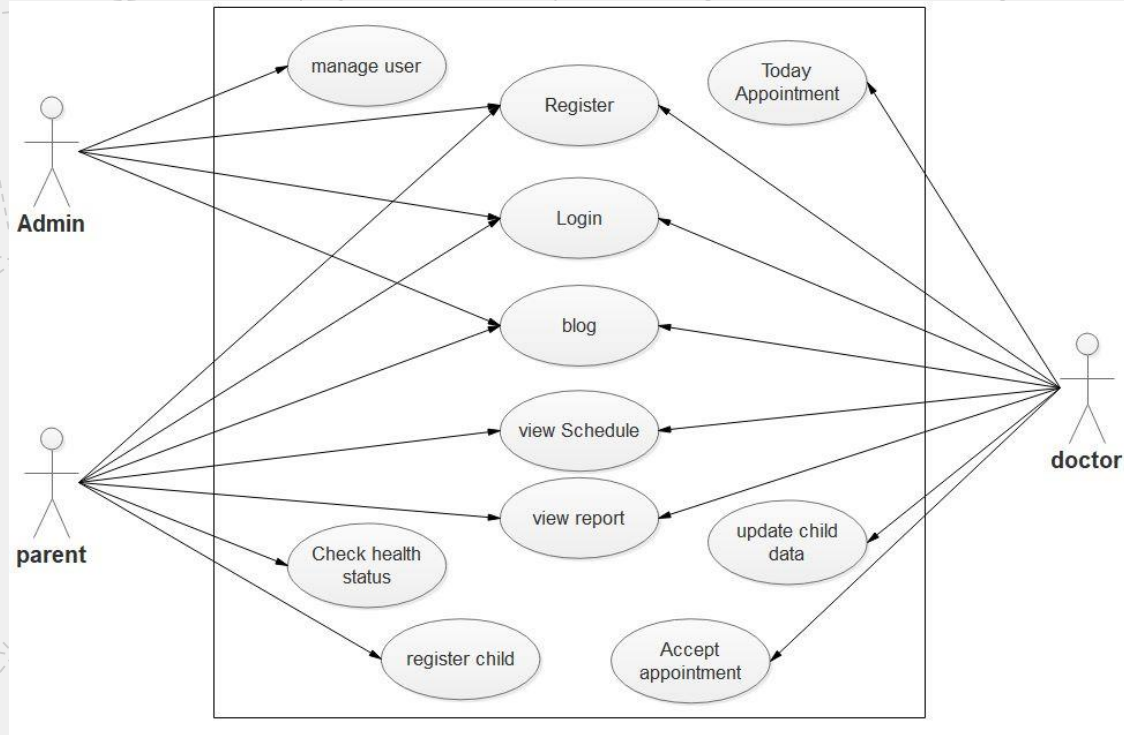
DFD Level 1
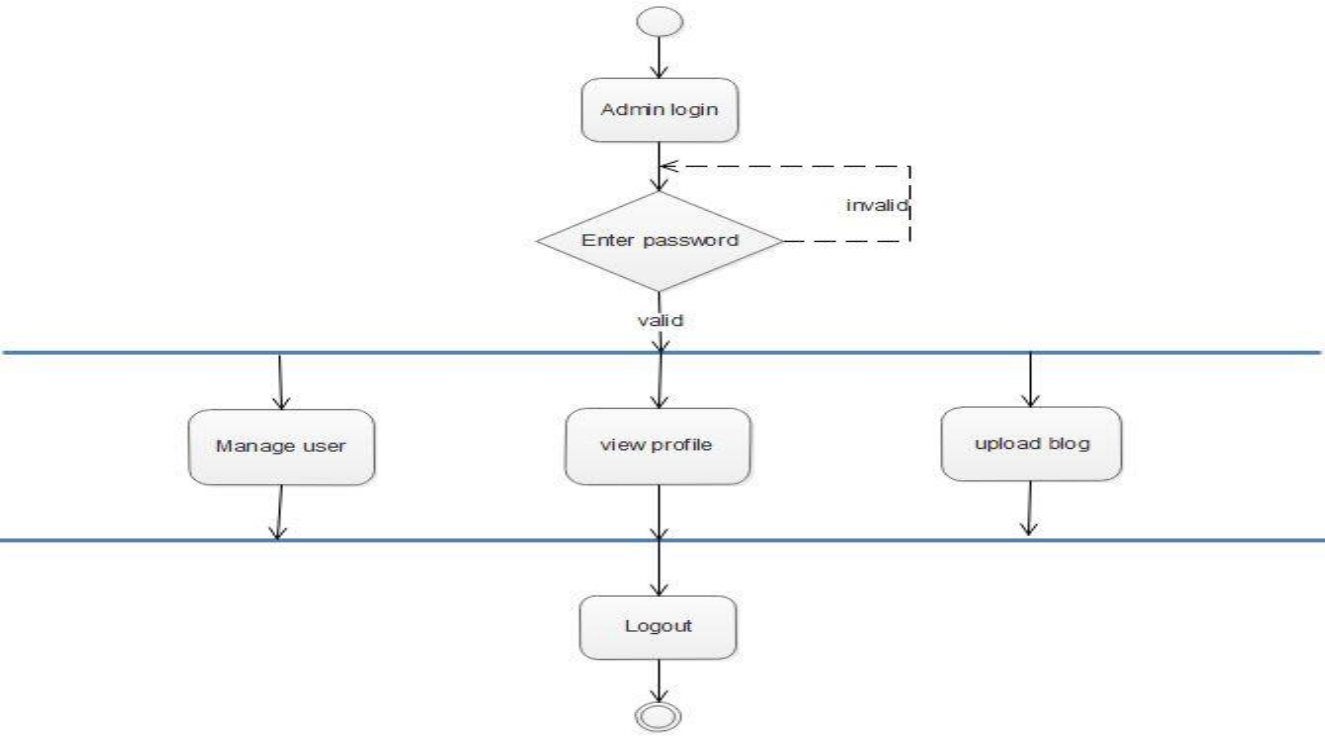

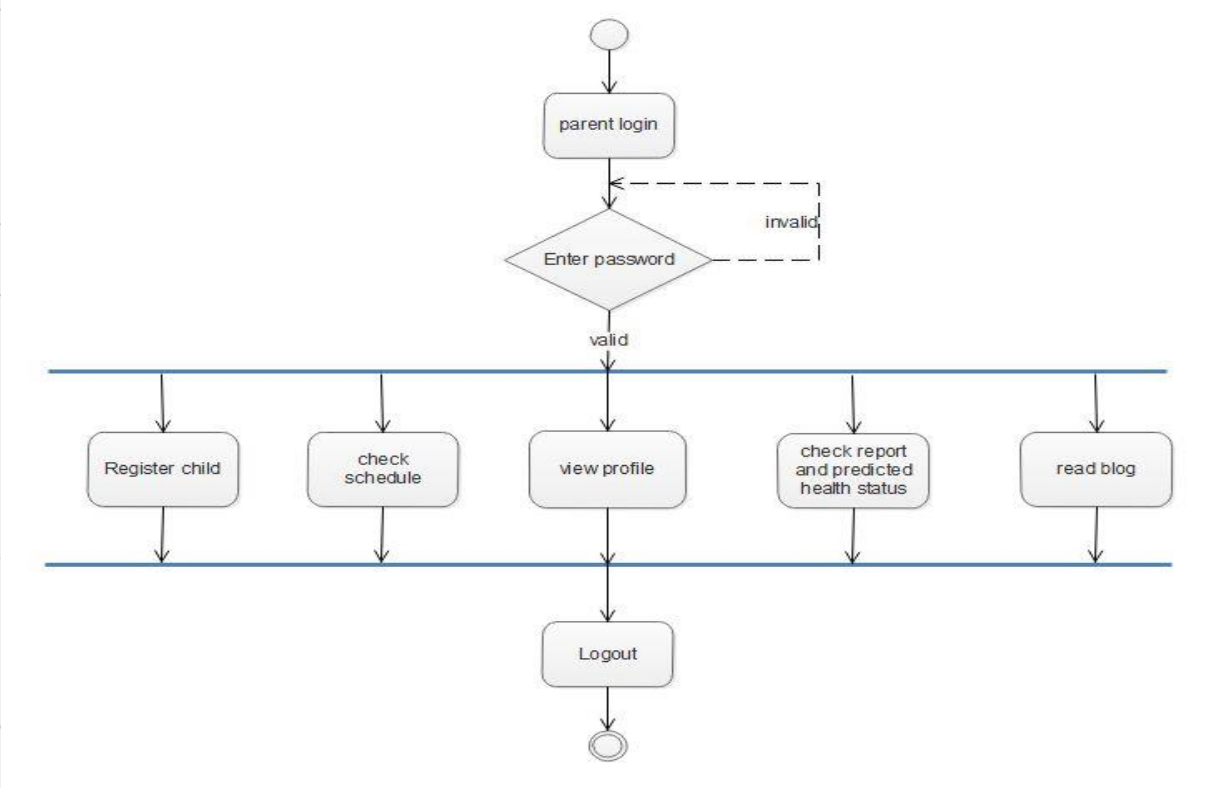FIG : DFD Level 1

Use Case Diagram

FIG : Use Case Diagram
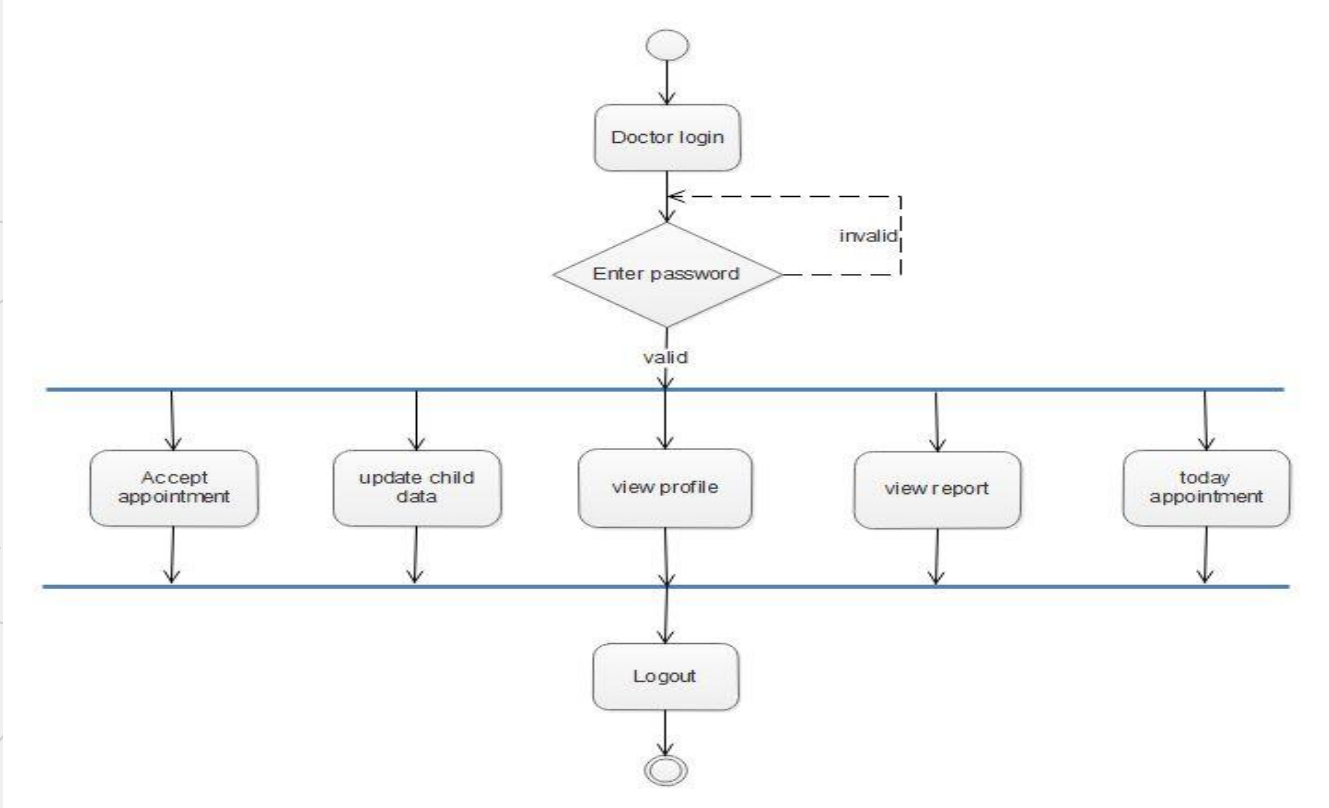
Activity Diagram
　　i)Admin Activity Diagram

ii)Parent Activity Diagram

iii)Doctor Activity Diagram

CONCLUSION

A system is proposed with an idea of providing a common platform to store and retrieve medical records of child with mandatory vaccination schedule details to start with as the child mortality rate due to vaccine preventable diseases are significantly high in numbers. As the mobile and internet technology continuous to evolve rapidly, regular alerts to parents for providing timely vaccination to their child/children for giving protection from vaccine preventable diseases are implemented using SMS and E-Mail messages. The facility to view previous medical records can help in speedy diagnose and action.

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THANK YOU

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