

Case Study: The Pediatric Network

Client Information: The Pediatric network as the name suggests is a web based application designed especially for Pediatricians. The Pediatric network is the brain child of Dr. Atish Laddad. Realising the time taken by the process for consultation being long and manual including the paper work i.e. registration, prescription, and payment, The Pediatric Network was conceptualised. This portal helps the doctors to shorten the consultation time as well as automate the process right from registering the patient till the prescription of drugs and referring the patient to other doctors if need be. The Pediatric Network provides an end to end solution for the automation of prescriptions, patients' historical records, appointments, vaccination records as well as schedules, child patient's milestones. This information gets stored and can be accessed from anywhere at any time by doctors and parents. The Pediatric Network allows log in for doctors, nurse, receptionists, and parents. The solution enables the users i.e. parents to schedule appointment for their child with the Pediatrician registered on the portal online. The parents can either be a guest user or a registered member on the portal. The parents can be a member by paying the annual fee of Rs. 500 per child per year online and by registering their name and their child's name on the portal. Post scheduling the appointment the parent can visit the doctor and the nurse can then enter the necessary information of the child viz. weight, height, allergy etc. Through this the profile of the child is created on the portal which is accessible to the doctor with whom the appointment is scheduled. This allows the doctor to examine the child and based on that the doctor can prescribe medicines or tests. All the information gets stored in the system, by the end of it the doctor will create a prescription. This prescription will be sent to the parent on their cell phone, for which the mobile application has also been created.

Client Brief: Delivering this project with the desired features, within the specified timelines was crucial. The application which was pre-developed had issues in terms of functionality, UI consistency as well as user friendliness and the project was not delivered under the pre-decided timelines. Hence, Dr. Atish Laddad approached Josh Software considering their history and expertise in the field of developing web based application for healthcare sector. Being a platform that deals with the Pediatricians where every minute of the doctor as well as the patient counts the response time of the application needs to be fast, enabling the Pediatrician to attend as many patients as possible during his schedule.

The Josh Edge: *Building a high performance solution to change the Pediatrics scenario of India*

Due to the Josh Software team's expertise and experience in building a NICU product in India, Kimaya NICU, as well as WE3 Health, the team's understanding of the requirement was the biggest edge that allowed developing a great solution. Process was the key with The Pediatrics Network which allowed Josh Software to deliver a scalable and high-performance solution. Dr. Atish Laddad wanted this product to be ready in six months i.e. the project started in the month of January 2016 and the application should be ready by June 2016. Apart from scheduling online appointment with the doctor, this portal also provides the parents with a detailed calendar of vaccines that needs to be administered to the child. Doctors who are registered at this portal can also access the information and can make changes in the vaccination chart as per the child's condition. All the data of the member on the portal can be accessed by registered doctors who have been authorized by the patient to access it. The portals also have alerts for drug allergy of the child patient which restricts the doctors from prescribing medicines containing the compound which can cause allergy in the child. The Pediatric Network also helps in keeping the track of fees paid by the patient at the desk or the reception, the alert of the payment appears on the dashboard of the doctor as soon as the payment is done and a digital receipt is automatically sent on the parent's smartphone. Doctors can also upload the dimensions of their official prescription pad along with logos and digital signature. This enables the doctor to get the print of the prescription similar in the format of the physical prescription pad. Doctors can put their own availability at the clinics/hospitals registered on the portal which gets displayed on the dashboard of the parent. Therefore, the parent is able to schedule the appointment between the times mentioned on the calendar of the doctor. The parents and the doctors can access the information on The Pediatric Network through their smartphone as well. Josh Software has also developed a mobile application which makes all the information on the platform available on smartphone. This application helps the parent in keeping tab of vaccination time table, forthcoming appointments, changes in the schedule and pending visits to the doctor through regular alerts. This application was developed using Rails APIs on Angular framework and the mobile application is developed on Ionic framework.

Impact:

Since the developmental stage of this application 12 Pediatricians have registered with the portal to test it out on real time basis. The web based application has simplified and streamlined the process and reduced the time of consultation to a significant amount, earlier the doctor used to take 5-7 minutes for one consultation. The application is ready to go to market and currently under beta testing.