MEDROID – A Mobile Healthcare Application | Case Study

How mobile technology is transforming health care?

The adoption of mobile technologies in every dimension of life has been phenomenal. In the span of two decades, ever-more sophisticated mobile technology has fundamentally altered the ways in which people communicate and conduct business. The disruptive power of these new technologies and the accompanying waves of innovation they have sparked are transforming the healthcare industry, propelling stakeholders to reassess and repurpose how they provide services.

Mobile apps are enhancing overall consumer engagement in health care by increasing the low of information; lowering costs through better decision- making, fewer in-person visits, and greater adherence to treatment plans; and improving satisfaction with the service experience.

Insight into health care consumers' behaviors and attitudes is critical information in an environment where healthcare is moving rapidly towards patient- centered care, a model premised upon individuals being active participants in managing in their health care.

Evolution of healthcare stakeholders

Previously	Now	Feature
Original Stakeholders : Physicians	Key Stakeholders: Payer now as important as physician	New Stakeholders: Patient more involved in healthcare decision making and choices
In the past physicians were key stakeholders acting as gate keepers to healthcare information and treatment options	As the key budget holders, payers have the most influence today over healthcare treatments and patterns and evaluation of outcomes results	With the rise of the internet and all its healthcare information, patients are better informed and enabled to participate in the healthcare decision making process

{H} HIRE PROGRAMMERS

Case Study

Executive Summary

Our customer is a large Health Care service provider. Hire programmers was approached to develop an interesting app in android and web platform to provide high level assistance in the medical field by providing a health integration system.

Health assisting department including doctors, patients, and labs requires a Device-Based cum Online high level Application System to manage their services by integrating them together and provide service response quickly and efficiently.

Not only did they need a more effective method of secure, mobile physician and patient, but they were also selecting the right technology for a new floor layout designed to help physician spend more time on direct patient care.

About Our Client

Client: Healthcare Services Provider
Location : USA
Industry : Healthcare

The Challenges

The entire system was categorized into specific modules which have to work at various operational units e.g. doctors, patients, and labs. The main challenges were as followed:

- **Device Interface** : To build a device interface on Android platform. Device interface mean to be developed for the doctors to do the following tasks:
  - Write New Prescription for New Patient
  - View Old Patient's Prescription
  - Write New Prescription for Old Patient
  - View Old Patient's Reports

- **Web Interface:** To build online web interface for users such as Administrator, Lab, Doctor, Patient and Chemist.

- To build a backend and front to manage the Patient, Doctor, Lab and Chemist profiles

- To build a centralized server to provide service to all those operational units e.g. doctors, patients, and labs

- Email/Message Alert Configuration

- The system can be expanded to other departments in the fields of medical research etc.

Hire Programmers Solution:

After having a thorough discussion and understanding clearly the various facets of the Clients requirements, which involved multiple discussions with them, Hire programmers preceded with the development of the application.

The Application System was built to operate through 2 interfaces. There was a device interface (Android) and a web interface to interact with the application system.
Device interface built for Doctors only while the Web interface will be used by all users (doctors, patients, and labs) comprising the system.

Technology

- Android SDK
- 3.0, Java
- Eclipse

Customer Benefits

- It was a huge benefit for the customer is getting all the medical record content available in a mobile and web interface.

- This app provides access to unbiased Patient record, Lab record, Prescription, Chemist and drug information which subscribers can rely on to make the best decisions for their patients.

- Facility to remotely manage business and patient information.

- System brings the patient information to point of care.

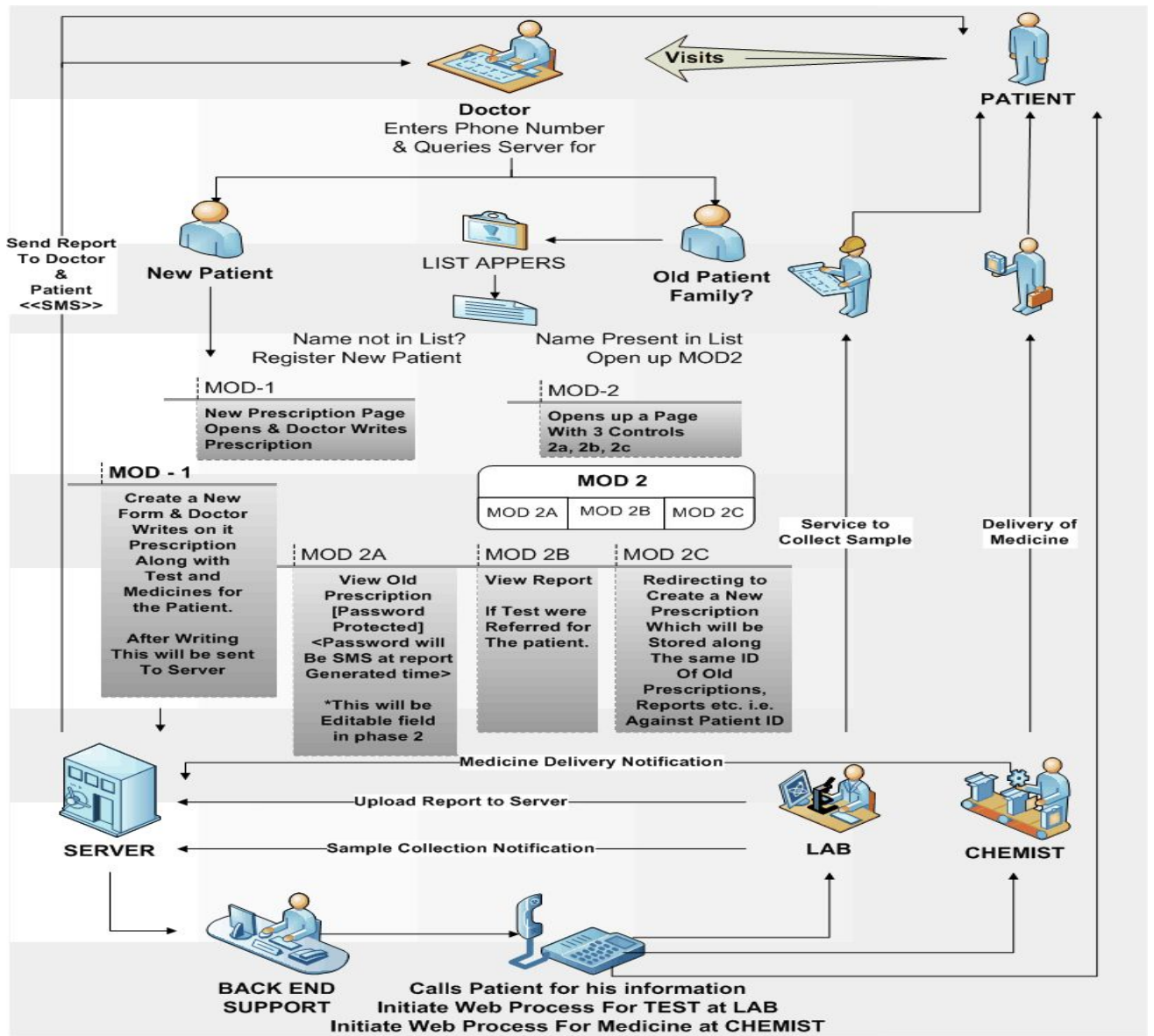- Reduce time required to capture, review, and manage patient information

Hire Programmers Mobility Services

Hire programmers is focused on enabling its clients to achieve breakthrough growth throughout the rapidly changing mobile ecosystem.

Hire programmers Mobility Services offers five mobility services including consulting, software services applications, software services devices and platforms, managed services, and business integration services.

Hire programmers offers mobility and embedded software services across a wide range of industries and platforms, including Android, Apple iOS, Blackberry, Linux, Symbian, Windows Phone and Windows 10.

Workflow Diagram

Visits — PATIENT

Doctor Enters Phone Number & Queries Server for

Send Report To Doctor & Patient <<SMS>>

New Patient — LIST APPERS — **Old Patient Family?**

Name not in List? Register New Patient — Name Present in List Open up MOD2

MOD-1 — New Prescription Page Opens & Doctor Writes Prescription

MOD-2 — Opens up a Page With 3 Controls 2a, 2b, 2c

MOD 2 — MOD 2A | MOD 2B | MOD 2C

MOD - 1 — Create a New Form & Doctor Writes on it Prescription Along with Test and Medicines for the Patient. After Writing This will be sent To Server

MOD 2A — View Old Prescription [Password Protected] <Password will Be SMS at report Generated time> *This will be Editable field in phase 2

MOD 2B — View Report If Test were Referred for The patient.

MOD 2C — Redirecting to Create a New Prescription Which will be Stored along The same ID Of Old Prescriptions, Reports etc. i.e. Against Patient ID

Service to Collect Sample — Delivery of Medicine

Medicine Delivery Notification

Upload Report to Server

Sample Collection Notification

SERVER — **LAB** — **CHEMIST**

BACK END SUPPORT — Calls Patient for his information Initiate Web Process For TEST at LAB Initiate Web Process For Medicine at CHEMIST

About Hire Programmers

Hire programmers is a one stop Information Technology Services provider. Hire programmers is involved in providing world class IT Services to its customers in the US, UK and other parts of the world in varied

domains. Being promoted by the first generation IT professionals, Hire programmers is very professional in its

approach in delivering services and solutions to its customers. It understands the technology side of the business keeping in view the specific business needs of its customers.

Hire programmers is the preferred transformation partner across product and vendor evaluation; business process re-engineering; outsourcing and off-shoring; product implementation; custom solution development and IT professional services for several Fortune 1000 companies.

For More Information on how to drive your business result with Hire programmers, contact us at twoodfin@berkeley.edu or visit our website at www.hire-programmers.com

Our Core Services

Enterprise Data Management

Our EDM approach leverages the value of business-ready data to drive operational effectiveness and business intelligence (BI) initiatives. We offer unparalleled EDM experience across a range of systems and a proven methodology for identifying and delivering an end-to-end enterprise data management solution that meets your needs.

Analytics

Hire programmers enables its clients to build comprehensive business intelligence, analytics and performance management solution that encompasses sales, marketing, customer, human resources, finance, supply chain and other functional areas across multiple industries.

Infrastructure Management Services

Hire programmers offers focused solutions in core infrastructure territories for building and managing the enterprise IT infrastructure comprising lifecycle services in remote server management, application support and database administration. Our space skill compasses a diverse set of systems and technologies within an organization's enterprise IT infrastructure

Legacy Modernization

Over a span of three decades, Hire programmers has developed extensive expertise in providing a range of Legacy Modernization services to Financial Services, Banking, Insurance, Manufacturing, Telecom, Retail, Energy, Utilities, Transportation, and Logistics companies worldwide. Our best-of-breed solutions include a complete analysis and assessment of the need to go in for Legacy Modernization.