Automation Of Generic Prescription.

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Abstract : *An "Automated Generic Prescription" System Is Developed To Assist The Patient By Eradicating Outdated Paper Based System In The Era Of Fast Technology And Big Data Management. Its Prime Objective Is To Make Masses Aware Of The Cheaper Generic Substitute To The Medicines Their Doctors Prescribe, To Make Sure Everyone Is Able To Afford Their Cure Of Disease Or Illness Irrespective Of Any Shortcoming In Their Lifestyles. And To Make This A Stringent Possibility We Come With A Universal Token As A Reference To The Patient's Data To Be Stored In Our Database Which Would Be Used By Our System To Get Secured Access Of One's Details When They Go To Any Of The Medical Fraternity To Avail Their Services. We Maintain And Fetch Every Previous History Of The Patient's Visit To The Doctor With A Single Reference Id For The Doctors To Help Them Check And Evaluate The Patient's Health Accordingly And Reach To A More Significant And Precise Decisions.*

Keywords– Automation, Generic.

I. INTRODUCTION

The Present Medical System Focuses On Prescribing Branded Medicines To The Patients By Disregarding The Available Generic Substitutes To The Branded Ones. Moreover The System Currently In Use Focuses On Paper Based Data To Map A Patient's Medical History Making It Very Tedious To Maintain Medical Record In The Long Run For The Patient. The Advantage Of Proposed System Is That It Is Able To Map The Generic Medicines To The Entered Symptoms Thus Providing An Option To The Patients In Availing Cheap And Effective Medicines; The Mapping Is Based On Real Time, Thus Saving Time And Assisting The Patient Financially. The Digitalization Of Medical History By Linking It With A Patients Aadhar Card Will Help In Retrieving Medical Records As And When Demanded, Eradicating The Need To Use And Maintain Medical Files.

Present System Puts A Major Hindrance In The Country's Push Towards Digital India As Well As Serves As A Opportunity For A Medical Pharma Monopoly In Organized Loot. Hence Our System Could Provide A New And Efficient Way To Tackle The Problem Of Paper Based System. Also The Root Cause Of Doctor Pharma Monopoly Would Be Effectively Over Once Our System Establishes Automation Of Generic Medicines.

II. SCOPE

The Undergoing Project Work Is To Be Used For Prescribing Generic Medicines, To Assist Common People Across Country Using An Integrated App Based Medical Diagnostic And Prescription System. The System Can Be Further Modified To Keep A Check On The Restricted Medicines With A Researched View On The Compositions Of The Medicines That Might Affect The People Across A Given Geographic Condition. The Government's Medical Council Can Monopolize And Gain Complete Authority Of The System For The Good Of The Masses. These Governmental Bodies Can Easily Implement And Regulate The Medical Laws In Interest Of The Citizens Through This Common Platform.

The System Maintains The Track Of The Patient's Medical History Framed With The Support Of The Stored Data Of Medicines From Which The Doctors Would Prescribe, By Judging Proper Symptoms Of The Patients. This System, Thus, Could Also Be Easily Complemented In Future With Various Medical Benefits That A Patient Could Avail With Ease Of Quick Transaction And Transparency.

III. LITERATURE SURVEYED

[1] Developed System Is A Comprehensive, Integrated Information System Designed To Manage The Administrative, Financial And Clinical Aspects Of A Hospital. As An Area Of Medical Informatics, The Aim Of The System Is To Achieve The Best Possible Support Of Patient Care And Administration By Electronic Data Processing. This Encompasses Paper-Based Information Processing As Well As Data Processing Machines. Laboratory Information System Is A Class Of Software Which Handles Receiving, Processing And Storing Information Generated By Medical Laboratory Processes. [2] The Web Based EMR System Is Proposed Based On Security And Privacy Features Defined By HIPAA.

There Are Health Care Laws Like Personal Information Protection And Electronic Document Act (PIPEDA), Health Insurance Portability And Accountability Act (HIPAA) Etc. To Protect The Health Information And Govern Their Dissemination. In This Study, We Have Focused On HIPAA. We Have Developed The System Based On Its Privacy And Security Features. We Have Also Analyzed About Storage System That Could Be Used To Manage Large Volume Of Health Care Records. [3] Today, The Usage Of Information Technology (IT) In Healthcare Sector Including Public Hospitals Has Become More Widespread. IT Tools Such As Electronic Medical Records (EMR) Have Been Found To Improve The Efficiency Of Hospital Services Especially In Terms Of Patient Data Management. However, Only Several Public Hospitals In Malaysia Are Using The EMR System To Manage Their Filing System. Therefore, This Paper Discusses The Issues That Arise In Adopting The EMR Among Public Hospitals, And Proposes A Framework Of EMR Adoption For Malaysia's Public Hospitals. In This Paper, The EMR System Is Discussed In General. Theories Related To Technology Adoption Are Also Discussed In General. Moreover, Issues Concerning The Adoption Of EMR System In Previous Studies Are Also Discussed. These Issues Include Cost-Related Issues, Technology-Related Issues, Knowledge-Related Issues, Human-Related Issue, And Legal Issues. These Issues May Influence The Adoption Of EMR To Improve Healthcare Quality Service. Consequently, EMR Adoption Model For Public Hospitals Is Proposed.

IV. Proposed System

System Block Diagram I.E. Figure Below Serves As Framework Of The System. The Server In This Framework Acts As A Central Component Of The Entire System And Is Responsible For Indexing The Entered Prescription Accordingly To Get The Generic Output Of Medicines To View.
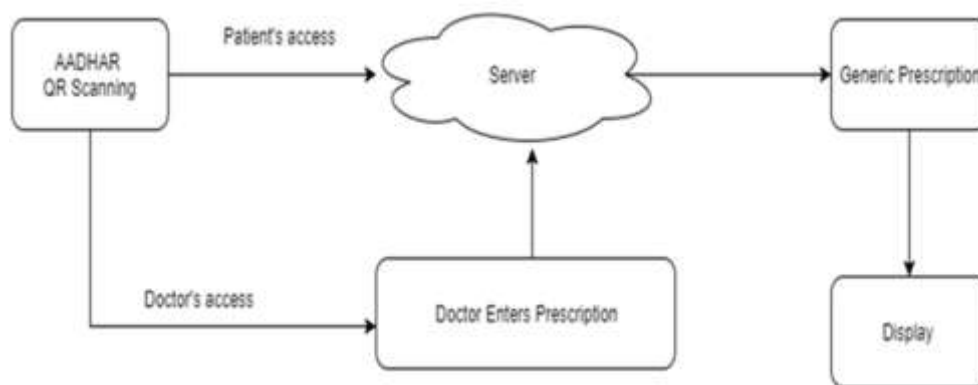

Device/Server

The Server Will Store The Patient Data, With The Help Of His Unique Aadhar Card Number. His Details Will Be Mapped Alongside His Unique ID. The System Will Also Provide Generic Alternatives To The Doctor Entered Prescription Based On Symptoms Arising Out Of The Diagnosis. The System Aims At Providing Alternative Generic Medicines By Indexing And Matching With The Symptoms, With The Help Of A Predefined Medicine Database Stored In The Backend Of The System. It Also Provides A Faster Retrieval Of The Patient's Record With The Help Of QR Code Scanning On The Go, Providing Him With The Details Of His Medical History Whenever Required

Patient/Doctor

The Doctor Will Be Able To Enter The Prescription By Logging Onto The System, With Their Verified Credentials. The System Also Enables Them To Register New Users (Read Patient) By Scanning The QR Code Thereby Making Fresh Registrations. The User (Read Patient) Will Be Granted A View Option Towards His Medical Data. This Feature Will Be Available As And When Demanded By The User.

V. FIGURES AND TABLES

Initially The Application Would Require Registration By The Doctors. The Registered Doctors Would Then Be Able To Access The System And The Diagnosis Readings Would Be Mapped With The Generic Medicines List Stored In Our Database. After Completion Of The Procedure The History Will Be Saved Against Patients Aadhar ID. Hence Readings Would Be Stored In The Database So The User Can Access It With The Help Of Login Details.
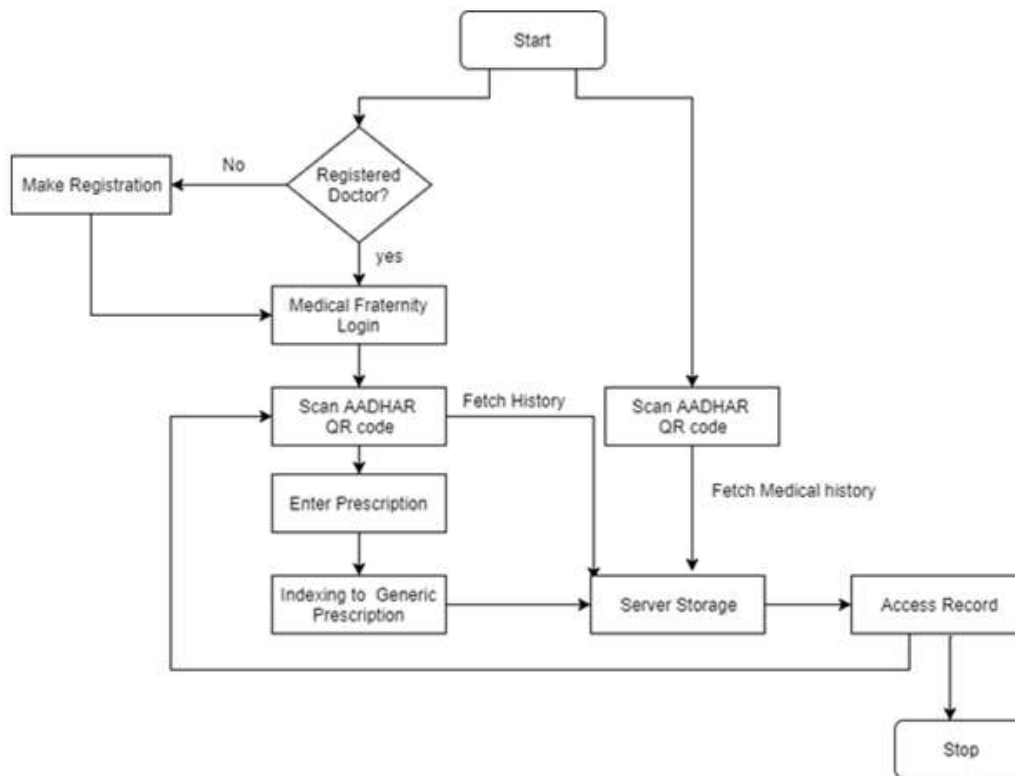
VI. EXPECTED OUTPUT

Upon Doctors Registration And Rightful Authentication With The System , The Doctor Would Be Authorized To Assess And Create A New Record Of Any Given Patient Through His/Her Aadhar Card Scan. The Doctor Would Then Diagnose And Enter The Symptoms Which Would In Turn Assist In Selecting The Right Cure Of The Symptoms And Also Suggest The Cheaper Generic Substitute To The Doctor's Prescription To Be Finally Stored For Later Access At The Pharmacy Stores Or In Further Follow Up To The Doctors.
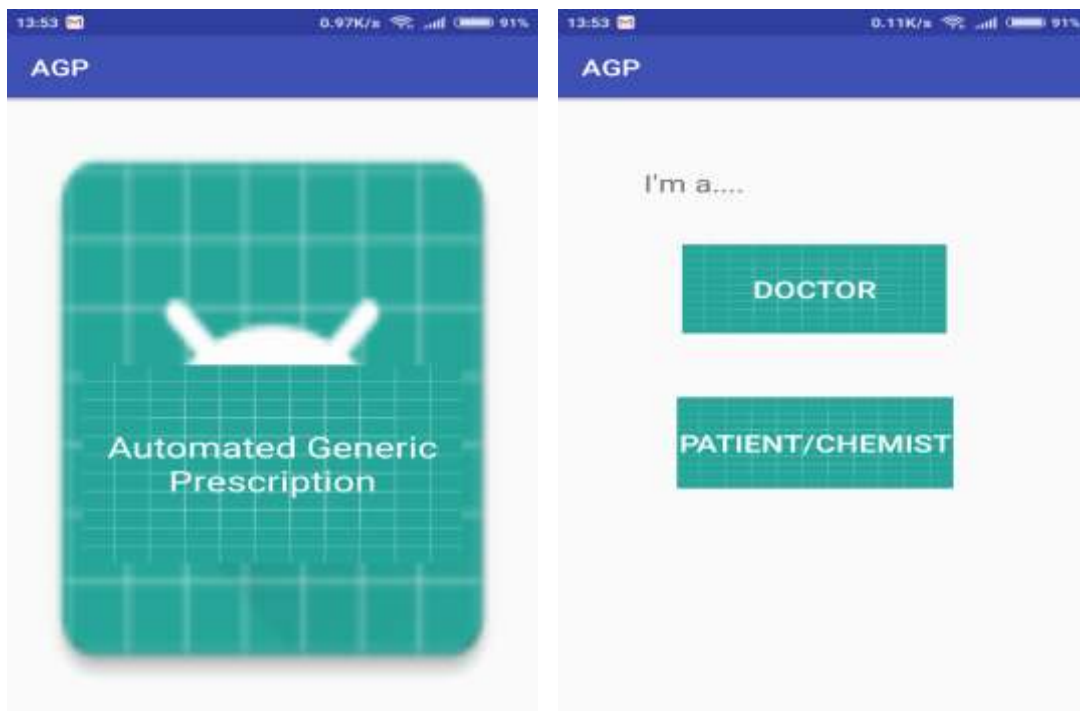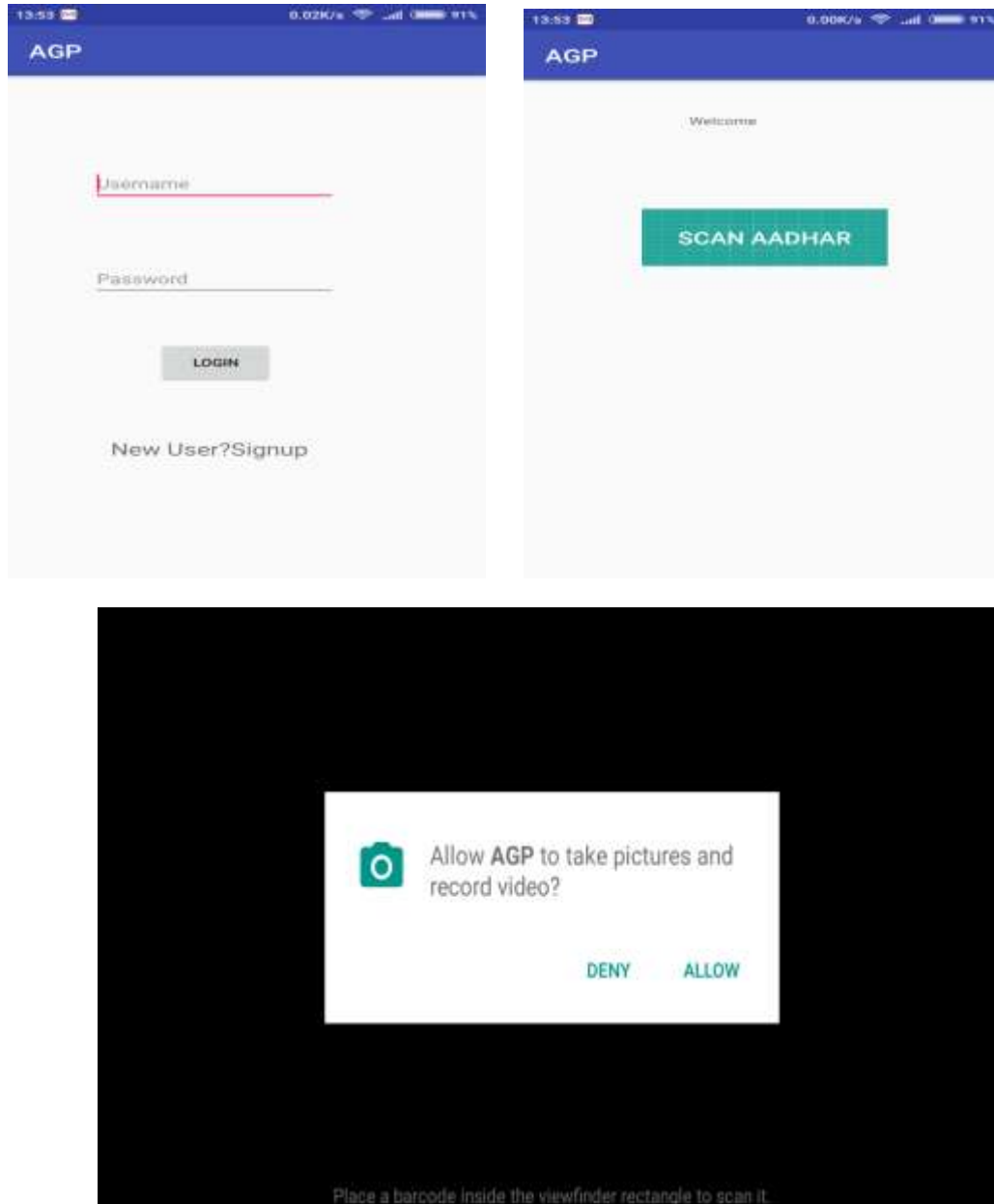
VII. Conclusion

The Use Of Generic Medicines, Compared To Their Branded Counterparts, Has The Potential To Substantially Reduce Out-Of-Pocket Expenditure On Drugs For Patients With Chronic Diseases. Generic Substitution Of Brand Prescriptions Is An Accepted Practice In Many Parts Of The World, And This Is Often Done For Economic Reasons. The Major Advantage Of Generic Medicine Use Is The Cost Benefit. Generic Medicine Cannot Be Marketed At A Price Higher Than The Branded Medicine, So It Is Often A Cheaper Option, Both For The Consumer. Thus This System Makes It Possible For The User To Search For Such Generic Substitutes With Respect To The Branded Ones. A Medical Record Is The Property Of A Patient & Just Like Any Property Its Value Depends On Proper Identification, Accurate Documentation, Easy Transferability And The Rights To Access It. Our System Has The Potential To Create A Universal Health Record For Any Patient Using Our System Of Software Ensuring That There Isn't Any Kind Of Business Manipulation Over Such Critical Domains Of Health Sector For Personal Or Evil Benefits. Patients Can Access Medical Records From Their Digital Locker Anywhere At Any Time. This Will Lead To Democratization Of Health Care Delivery.

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