Medheal E-Pharmacy Application

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Abstract- *Medheal is an e-pharmacy application built with the help of Android and Firebase. The purpose of this application is to deal with a possible future introduction of Home delivery of medicine to patients. In order to achieve this it will look at the particular circumstances within the pharmacy retail market under which they would add this distribution channel to their existing single channel distribution system. Then, so as to address the supply chain management aspect, the necessary changes to the existing bricks-and-mortar based supply chain layout in order to meet the requirements of the home delivery service will be analyzed.*

Keywords- E-Pharmacy Store, Medicine Delivery, Healthcare Services

I. INTRODUCTION

proposed a system in e-pharmacy market under Digital India and Make In India initiative. Medheal E-Pharmacy App - an android application will work on all android devices. The purpose of this application is to deal with a possible future introduction of home delivery of medicines and services to patients. Each User/Patients will have an account with their own homepage or a Dashboard. Registered sellers can add Medical Supplies, it's prices, Quantity and also sellers can update and remove items. Provides ease to the medicine business to keep a record of daily business and the revenues they make in an efficient manner. Quick access to innumerable medicine stores thereby helping the customer to a great deal in finding the medicines they need with considerable ease.

ANDROID

Android is a mobile operating system developed by Google, based on the Linux Kernel and designed primarily for touchscreen mobile devices such as smartphones and tablets. Android user interface is mainly based on direct manipulation, using touch gestures that loosely correspond to the real-world actions, such as swiping, tapping and pinching, to manipulate on-screen objects, along with the virtual keyboard for text input.

In addition to touchscreen devices, Google has further developed Android TV for televisions, Android wear for watches, each with a specialized user interface. It is also used in other electronic gadgets too. Android has the largest installed base of all operating systems of any kind. Android has been the best- selling OS on tablets since 2013, and on smartphones it is dominant by any metric. Initially it was developed by Android, Inc., which Google bought in 2005. Professional developers see android as their priority target platform, which is comparable to Apple's iOS. Android's source code is released by Google under an open source license, although most Android devices ultimately ship with a combination of free and open source and proprietary software, including proprietary software required for accessing Google services. Android is popular with technology companies that require a readymade, low-cost and customizable operating system for high tech devices. Its open nature has encouraged a large community of developers to use the open source code as a foundation for community-driven projects. The success of Android has made it a target for patent litigation as part of the so-called "smartphone wars" between technology companies.

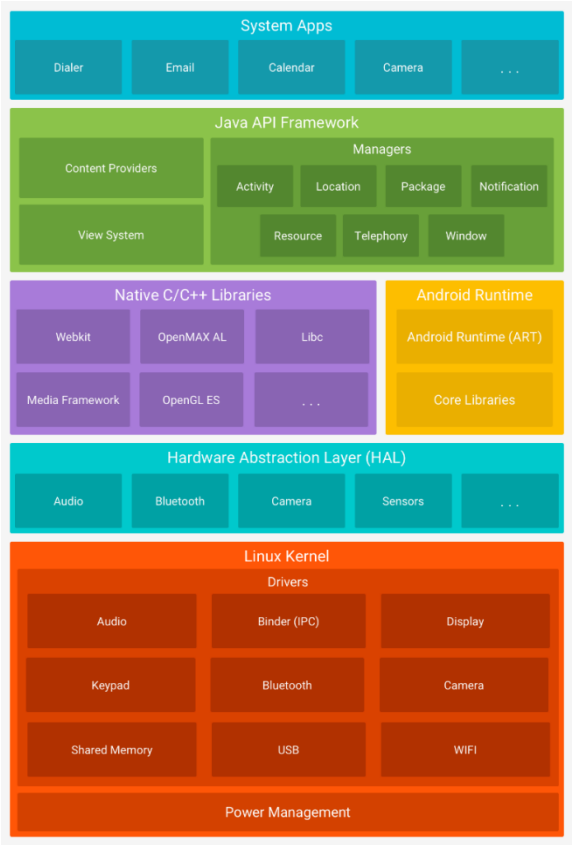

Figure-1 Android Architecture

II. LITERATURE REVIEW

A. E-Pharmacy companies offering the fastest access to an online medical store, the companies allows you to receive your medicines from the comfort of your home. The portal is a one-stop shop for all your prescription medicines and non-prescription pharmaceutical needs.

B. On-demand medicine delivery applications are so easy for the consumers to get their medicines, lab reports and others at their door-steps by simply tapping their smart phones. Support to medicine stores to build a strong online presence, process orders with ease and dispatch them.

III. TECHNOLOGY

Medheal e-Pharmacy app is designed for AndroidOS platforms and is designed using the Android framework. We have implemented an application using Android Studio which serves as IDE for android. As we know, Android is java based framework and uses XML for frontend development. We have used the concepts like fragments, view pagers, floating action buttons, menu, splash screen, etc. We have used Firebase Server for authentication and chat support. Firebase is a mobile and web application development platform developed by Firebase, Inc. in 2011, then acquired by Google in 2014. As of October 2018, the Firebase platform has 18 products, which are used by 1.5 million apps.

Firebase provides us a powerful tool, Firebase Authentication is the most secured authentication among all servers like Php, Django. It provides us the concept of using Google Authentication, Email Verification, OTP-based Mobile authentication, and many more. Chat support is carried out using Realtime Database and using database storage for sending pictures.

IV. STUDIES AND FINDINGS

Current System Scenario:

1. Only Available for urban area
2. Irregularities in Medical Storage
3. Delivery is not efficient

V. SYSTEM DESIGN

1) Flow Chart

The flowchart is a means of visually presenting the flow of data through an information processing systems, the operations performed within the system and the sequence in which they are performed.

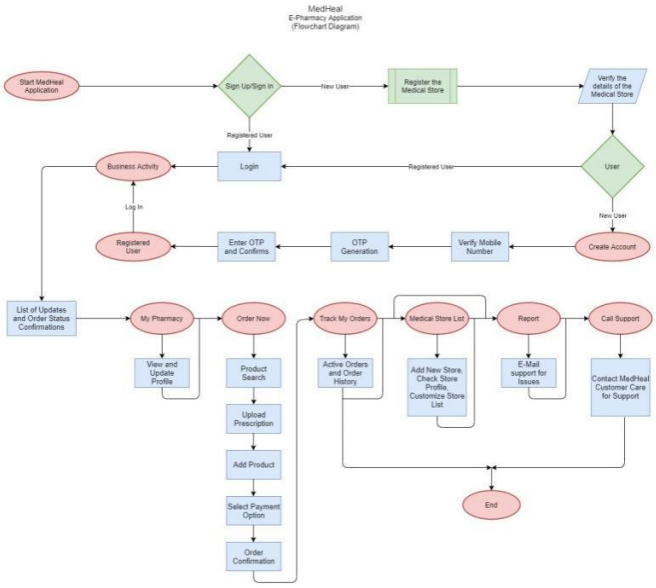

Figure-2 Flow Chart

2) Activity Diagram

An Activity Diagram is a graphical representation of the "flow" of data through an information system, modeling its process aspects. Activity diagrams are graphical

representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. In the Unified Modeling Language, activity diagrams can be used to describe the business and operational step-by-step workflows of components in a system. An activity diagram shows the overall flow of control.

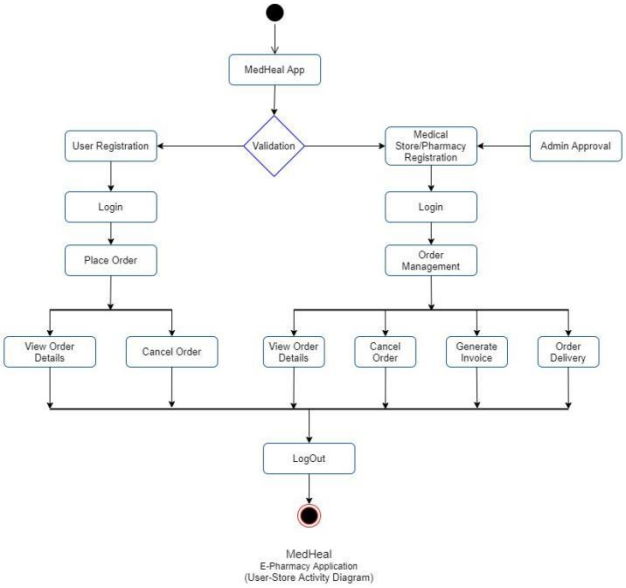

Figure-3 Activity Diagram

3) E-R Diagram

In software engineering, an entity–relationship model (ER model) is a data model for describing the data or information aspects of a business domain or its process requirements, in an abstract way that lends itself to ultimately being implemented in a database such as a relational database. The main components of ER models are entities and the relationships that can exist among them, and databases. An entity-relationship model is a systematic way of describing and defining a business process.

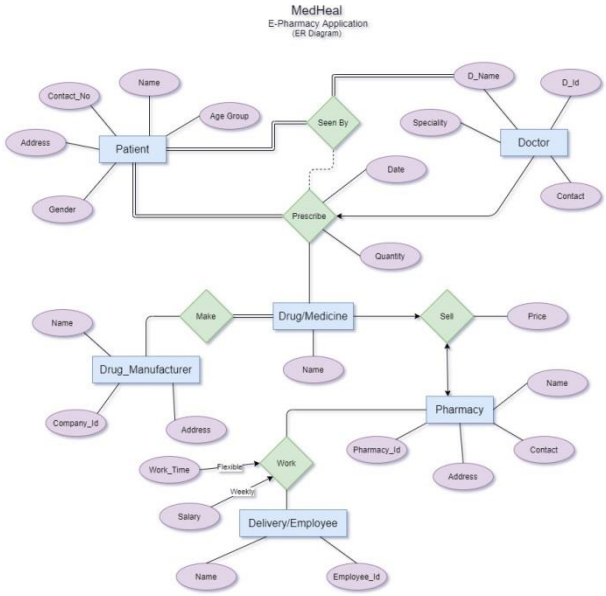

Figure-4 Entity-Relationship Diagram

VII. CONCLUSTION

We will develop an app call MedHeal built with Android and Firebase Database. The purpose of this application is to deal with a possible future introduction of home delivery of medicine to patients. Each User/Patients will have an account with their own home page or a Dashboard. Registered Sellers can add Medical Supplies, it's prices, Quantity and also sellers can update and remove items. Provides ease to the medicine business to keep a record of daily business and the revenues they make in an efficient manner. Quick access to innumerable medicine stores thereby helping the customer to a great deal in finding the medicines they need with considerable ease.

VIII. ACKNOWLEDGMENT

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