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The development of smart coupon using Quick Response (QR) code in JSON parser and Android operating system

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Abstract — *The Smart Coupon is an android application which uses the JSON parser. In this proposed application Service provider will be able to manage customer and scheme easily using Prototype model and will also be able to interact in different languages using JSON parser. In this system, service provider can use either QR code or customer name to manage customer scheme using Prototype model interact with different language using JSON parser. Quick Response Code (QR Code) is a machine readable code which consists of an array of black and white squares. It uses to store URLs or other information for reading by the camera in a smartphone.*

Keywords- *Smart Coupon; Android app; QR code; JSON Parser; Prototype model.*

I. INTRODUCTION

The Smart Coupon is the proposed android based application which uses Quick Response Code (QR code) and JSON parser. In current existing systems, Service providers have to manage all file and documents and all the users. Administrator has to pay charge for schemes, marketing and aware to existing user and new user for the scheme.

Using proposed system web application and android application using QR code or user name service provider easily manage customer scheme using Prototype model interact with different language using JSON parser. Customer can also view new offers trough android application in the android device. They can also add new customer in tree channel format for multi-level marketing and get incentive on that basis.

QR code (abbreviated from Quick Response Code) is the trademark for a type of matrix barcode (or two-dimensional barcode) first designed for the automotive industry in Japan. A barcode is a machine-readable optical label that contains information about the item to which it is attached.

The rest of the paper is organized as follows. Proposed work is explained in section II. System specification is shown in section 2.1 and result and implementation details are shown in section 2.2. Benefits are explained section III. Concluding remarks are given in section IV.

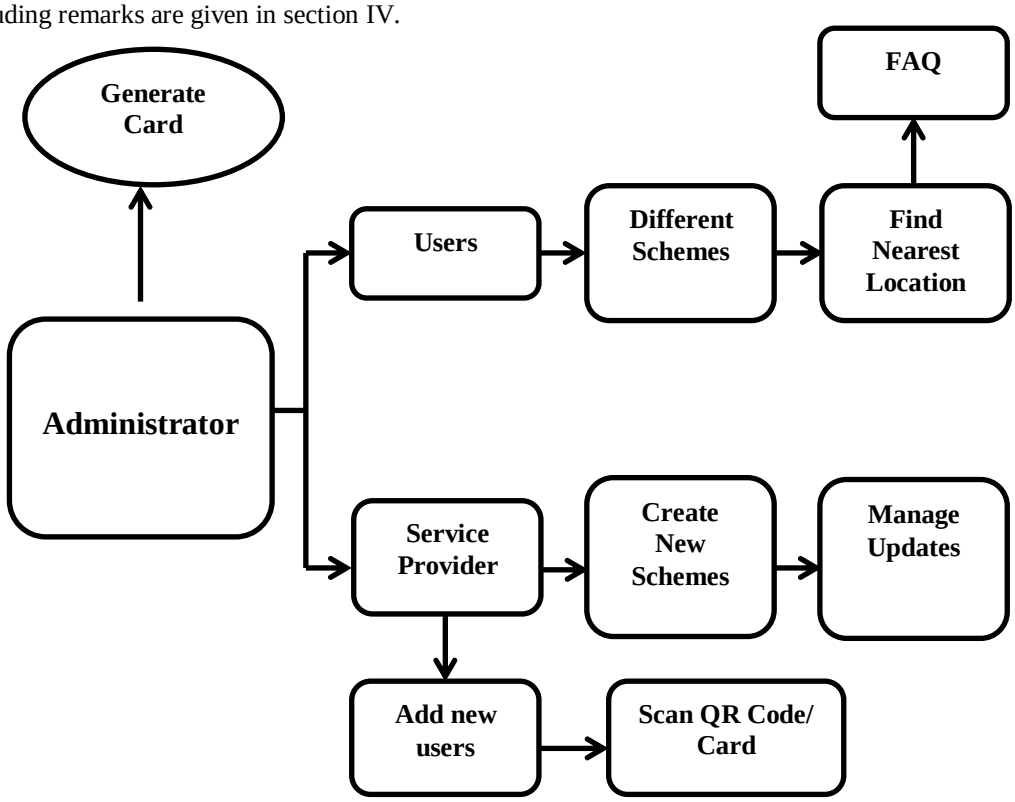

Fig. 1 Flow Diagram of application

II. PRAPOSED APPROACH

Now a day the normal scenario is people are doing done on paper. Users miss new scheme alerts. For activation of the new scheme they must have to visit office. Customers have to manage all paper of scheme. Service providers also have to manage all file and documents and all users. Admin has to pay charge for scheme marketing and aware to existing customer and new customer for the scheme. This paper purposed an application that can manages all mentioned problems and provide solutions.

Our goal is to develop android application and web application so that Service provide easily manage customer scheme. Service provider use these Prototype model interact with different-different language using JSON parser. Users can also view new offers trough android application and they can also add new customer in multi-level marketing and get incentive on that basis .In these system customers can also share the through multilevel marketing and view the location of different- different customer that multilevel connected with them. Figure 1 shows the flow diagram of application.

2.1. System Specification

The minimum system requirement for the application is shown in following table. Here we develop android application for users as well as web site which can be managed by system administrator.

Operating system:	Microsoft Windows XP/VISTA/win7/8, ANDROID
Processor:	Intel core i3-32/64 bit
Memory :	1 GB
Browser:	Mozilla Firefox, Google Chrome/Opera
Web Sever:	Apache Server or IIS
Front End Tool:	ECLIPSE (LUNA) , PHP , Dreamweaver
Back End Tool:	MYSQL 5.5, SQLite

2.2. Implementation Detail and Results.

The following figures show the implementation details and results. Fig 2 shows the administrator panel in which all schemes, products and users are managed. Figure 3 and figure 4 shows the scanning of QR code.

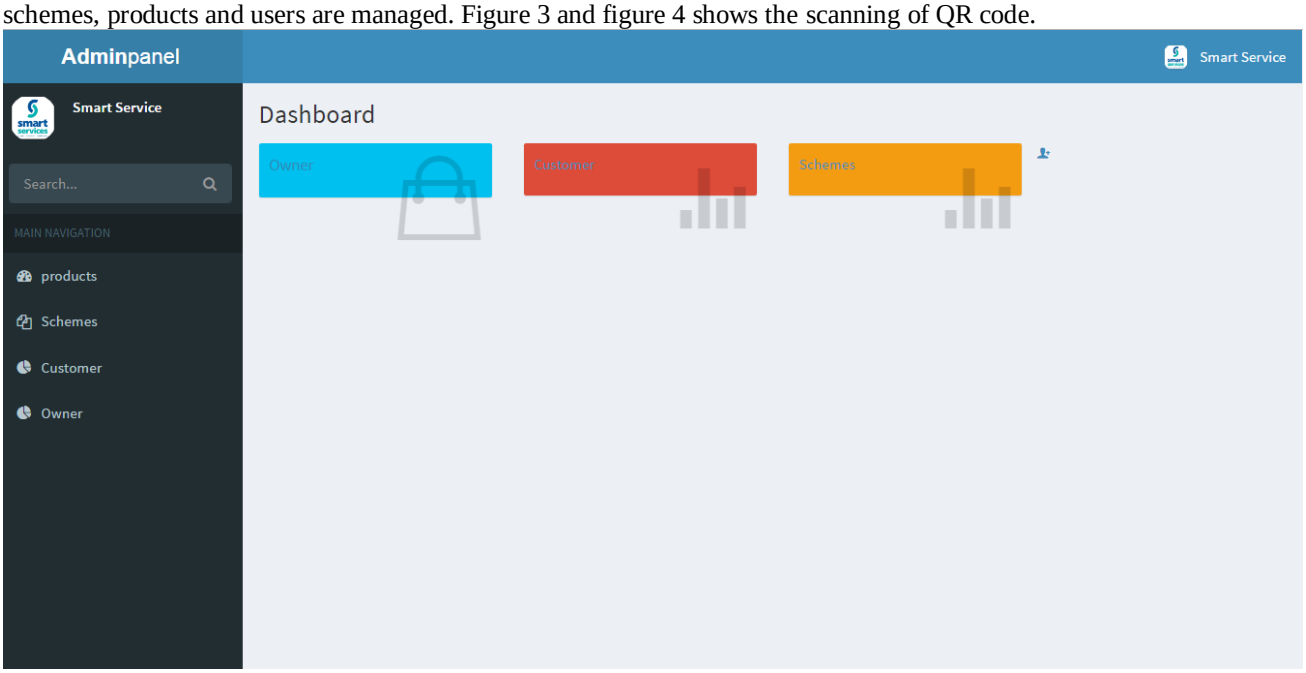

Fig. 2 Admin Panel

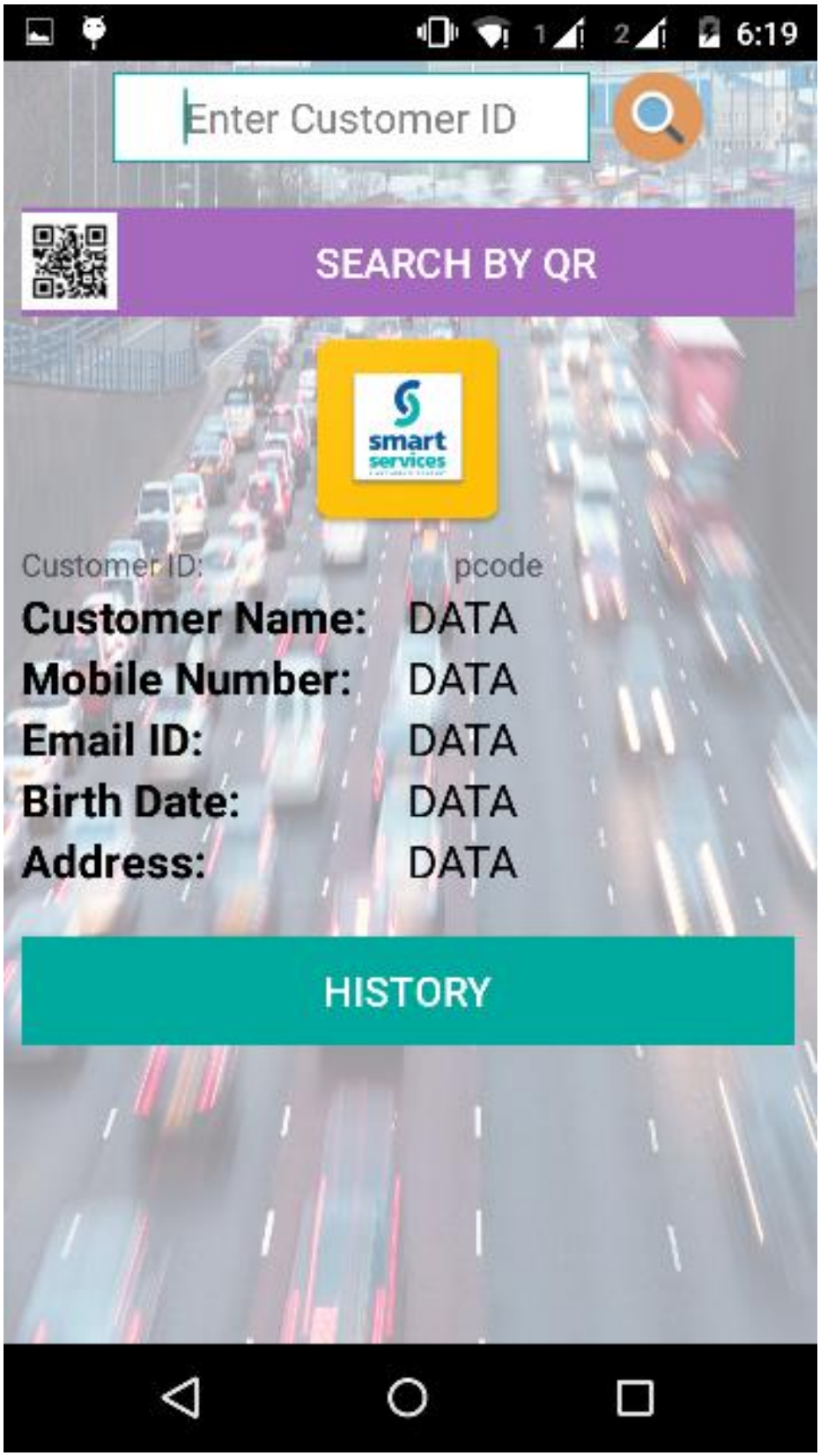

Fig 3 Searching using QR code

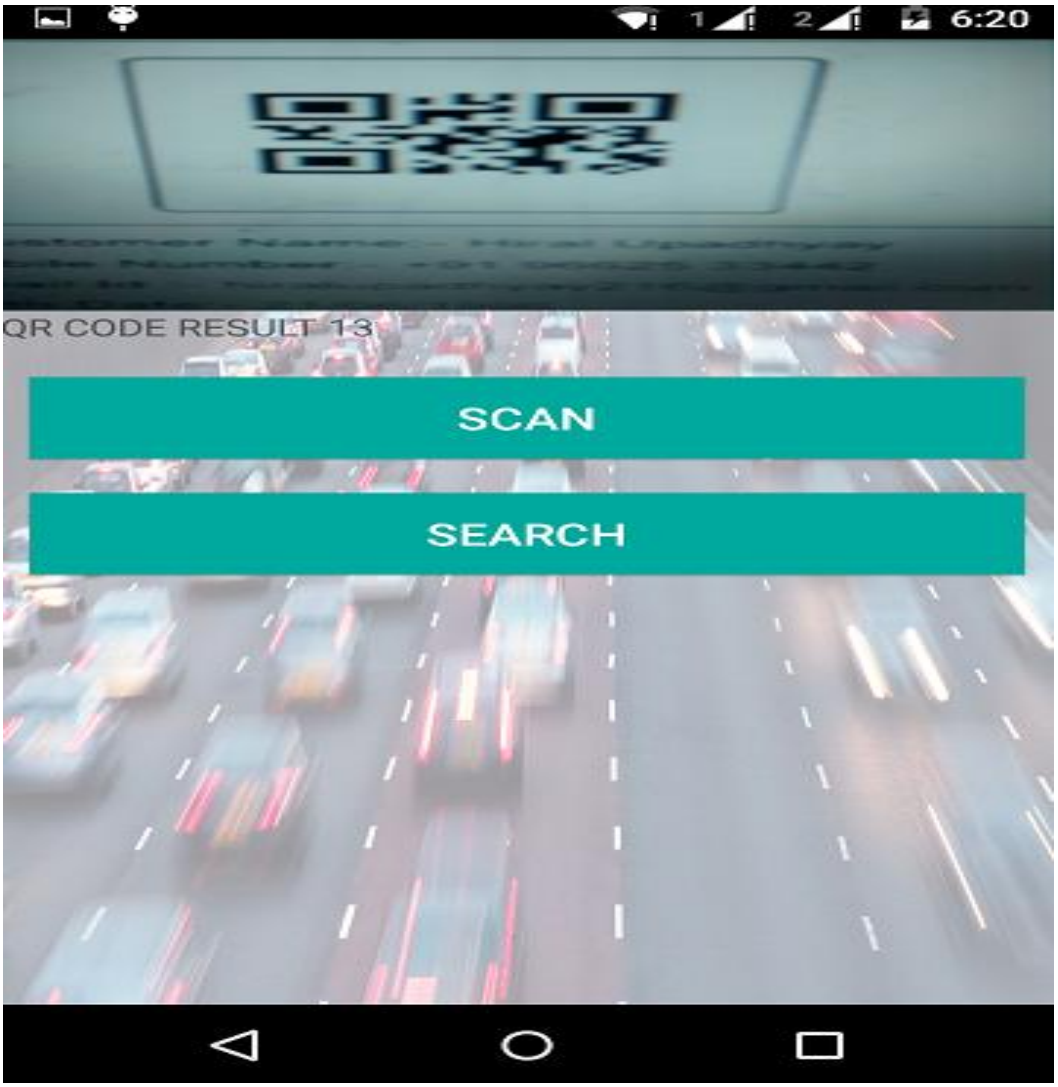

Fig 4 Scanning of QR code

III. BENEFITS

The benefit that hey provide is that we give QR code for each ever customers who are going to use this system. The android application finds nearest service provider or calls them and also navigates. To the nearest service provider or sub admin. Users can also create new customer working on Multi-Level Marketing .It is benefits for customer to share multi-level. It gives them incentive.

Our project implements a unique and user friendly application user interface that meets the requirements and needs of the users. Our application also provides a map to display the location of the nearest service providers. Some of the websites and applications on other platforms do not have this feature. It is also gives the QR code that is highly secure, and reliable. The most unique feature we have is multi-level marketing.

IV. CONCLUSION

Based on the result of our application the people who have multiple shop coupon cards it's difficult to manage that cards so we can provide smart coupon which include multiple shop schemes. We will generated QR code uniquely per customer which shown the detail about the customer and their related schemes. Customer also can find nearest location by that location they can find the nearest service provider.

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