One QR code for Ticketing System

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Abstract— In our day to day routine life,we realize each work is effortlessly done by our cell phones utilizing their applications like shopping, study, online bill installments, business, and so on. Thus, everybody needs rapid and simple to utilize versatile applications that don't hang their telephones or not utilize a lot of extra room or need to take their business on the web. In this paper, the authors have developed two Android Apps as My Event Ticket and My Event Maker by using QR code. These two Apps check all necessities of things everybody needs in their applications like these Apps utilize less RAM, Storage, and Power of the telephone. The three main features of using QR CODE venture is First is utilization of One QR method right now just need their lasting QR code (that is made when the client makes the record right now) this QR Code clients can get the passage in each occasion the main need is the client purchases the ticket for those occasions. The second element of this venture is the utilization of constant database by this kind of database each adjustment in the application is done continuously or the application is quick and work on everybody telephone without giving overwhelming burden to the telephones and the third element of this application utilizes less calculation power on both the server and the customer side.

Index Terms—authentication, event module, real-time app and data base .

I. INTRODUCTION

We have targets of these two Apps to show that the work that requires overwhelming computational power and additional time should handily be possible by utilizing less computational force in less time and the other goal is that this task is to make it simple to purchase online neighborhood occasions or projects tickets. Not at all like some other online tickets buy an application on
android stage that just transfers huge occasions directed yet
This application shows neighborhood occasions like
school fest rivalries, classes, meetups, and so on., and this is anything but difficult to utilize or neighborhood occasion is additionally transferred by occasion directors or coordinators effectively by utilizing this undertaking by booking tickets online[2].
Another target of this venture is to incorporate new highlights that make handling quick and utilization of these applications available to everybody in light of the fact that these applications are attempting to have any kind of effect between how the other application forms the information

and book the tickets by changing the method for ticket booking and how the ticket or information is prepared out of sight by the servers.

The new features introduced in these two apps are:
  I.   Simple Interface
 II.   Fast Processing
III.   One QR code
IV.   Use of Real-time database
 V.   One ticket for all Events
VI.   Use of AuthStateListener

II. ARCHITECTURE DIAGRAM

In this section, we have outlined a different architectural overview of the proposed system. For example, in Fig.1 and Fig.2 there is authentication between apps by using the authstatelistener function of the firebase realtime database by this user only needs to log in one time in the app and create and retrieve event data respectively.
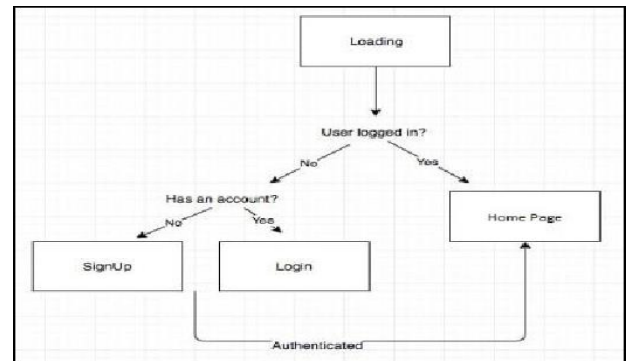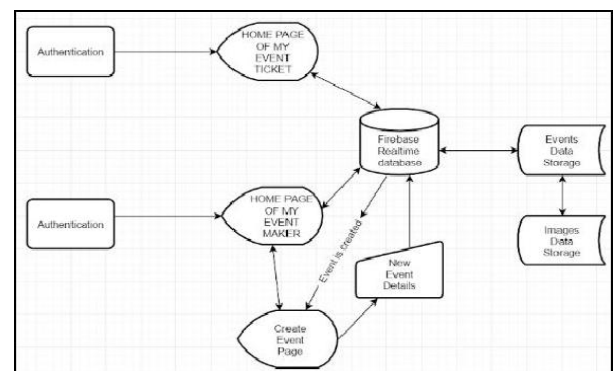

Fig.1 AuthStateListener Diagram

Fig.2 Create Event and Retrieve Event Data

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After the details have been retrieved about the event QR code is used to proceed for further processes like scanning and verification overall process of QR code generation and scanning is depicted in Fig.3.
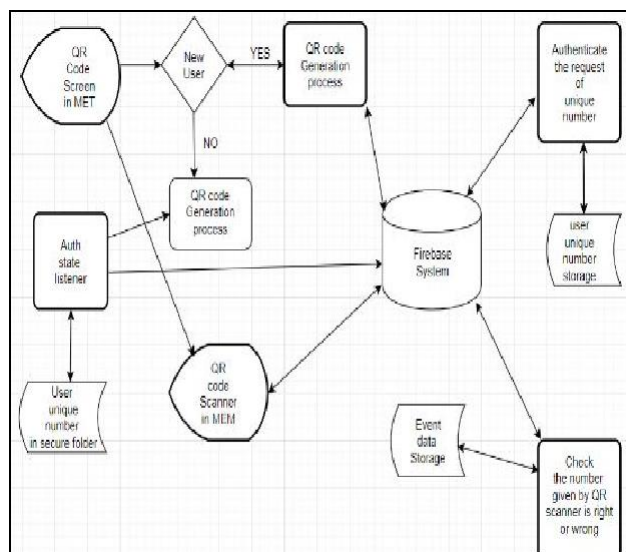

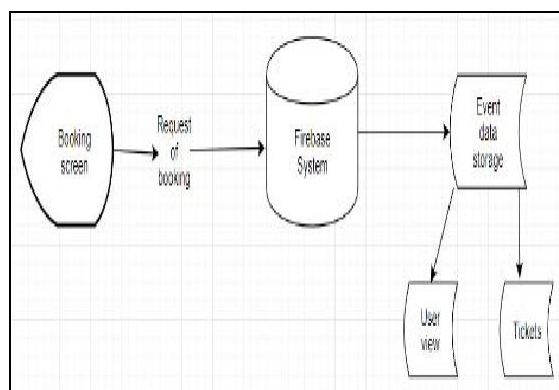Fig.3 QR Code Generation process and QR Code Scanning

Fig.4 Event Ticket Booking

At last, Fig.4 explains event ticket booking in the form of a diagram.

III. RELATED WORK

The web-based ticketing framework utilizing QR code[1] is as of now executed by organizations like BookMyShow, Paytm, and so on. The main downside is that it generally makes new QR code each time subsequent to booking another ticket due to this more calculation power is utilized for age of new QR code and furthermore use web information to send QR code picture to client portable or organizations need to store QR code picture in server or the QR code isn't burden or show if the client turns off the web access of cell phone.

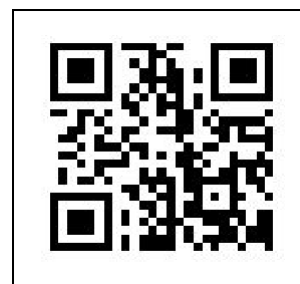### IV. INFORMATION ABOUT QR-CODE

Fig.5 Sample of QR Code

We use QR code for check and verification of tickets. Right now, there is a mysterious code that is utilized in the making of the QR code. This QR code is produced when the client makes another record right now utilizing their email id and different subtleties. This QR code is filtered or confirmed by utilizing an exceptionally made QR code scanner. QR Code is these days utilized for good client's experience especially for retailing [4].

A portable Camera and Android outsider libraries will be utilized to examine the QR code. When QR code is effectively checked, we will have the option to get all the ticket related data of the client just as approve the client. The data brought by checking will be confirmed by the constant database framework and utilized for verification [3].

V. PROPOSED SYSTEM

The proposed framework is created to defeat the disadvantage of the now existing ticketing framework. This framework is a versatile based application.

To get online advanced ticket clients need to experience numerous techniques for that client to download the application where clients need to round out an enlistment structure. In enrollment clients need to give total insights concerning him/her to make another record, subtleties, for example, first name, last name, email address, portable number and secret key produced by him/her as it were. The email address entered by the client at the hour of enrollment is utilized as a one of a kind ID and secret phrase to login to the framework.

Fig.6 Registration Page

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This project is comprised of seven modules:

I.   Authentication module :

This firebase Real-time database framework gives assurance of data through the instrument of a one of a kind id (substantial email address) and secret word subsequently just approved individuals can get to the database. After effectively enlisting, clients log in to the framework by utilizing their special id (email address) and secret key. In the event that id and secret words are right, at that point, just he/she will have the option to get to the applications.
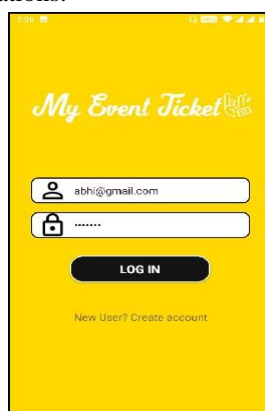

Fig.7 User authentication page

II.   Events Module :

In this module, the app fetches the event's details from the real-time database after the authentication of the user & images is fetched by using a third-party library called glide. This library already downloads below the image in cache memory.
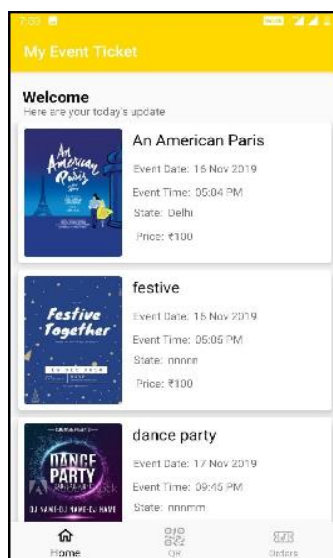

Fig.8 Events Dashboard page

III.   Event Information Module :

This module fetches the other details of the event like the location of the event is to be conducted, timings, etc. By this module, the user can book or buy the ticket for the event.

Fig.9 Event Information Page

IV.   QR Code Module :

This module shows the One QR code of the user. This QR code is used for the verification or authentication of tickets. The QR code shows is available even if the user abstains from the internet services of the mobile phone.

Fig.10 User Permanent QR code page

V.   Orders Module :

This module shows the booked tickets or to be bought by the user. The details of the orders are fetched through the real-time database of the apps.
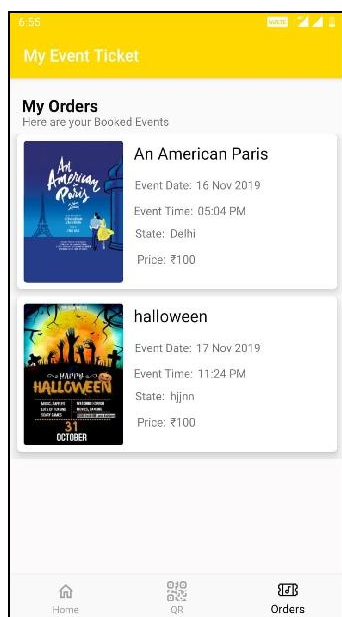
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Fig.11 Order Page

VI.   Ticket checker or Event creation Module: In this module, there are three sub-modules:

1. Ticket Verification Module:- Ticket verification module verifies the ticket by using a QR code scanner. The QR code scanner scans the QR code from the user mobile screen then this verifies the ticket by using the firebase real-time database system to check the ticket authenticity
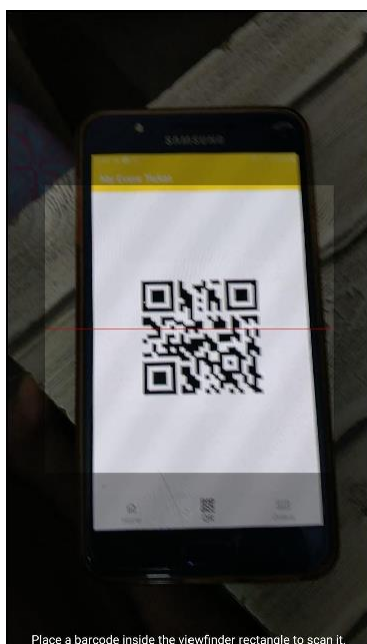

Fig.12 Ticket Verification page

2. Event Creation Module:- This module is used for creating new events in the events real-time database. This module helps the event organizer to create information detail about the event.

Fig.13 Event Creation Page

3. Event Details:- This module is used to show the details of events created by the event organizer until any changes made by him. Also, it helps the organizer by reminding him about his created event.
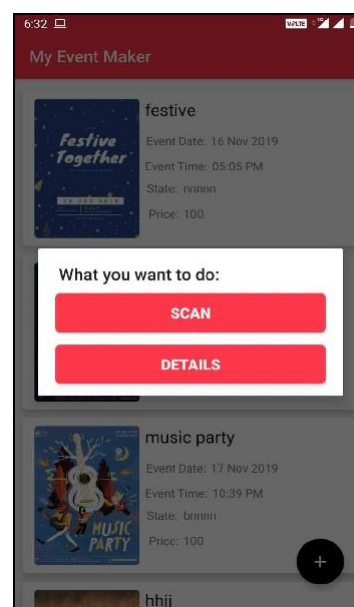

Fig.14 Event Details page

VI. CONCLUSION

It is a real-time project system which is useful for users who are facing problems from the current system of online ticketing. In our system, we provided a smart mobile app using One QR code for all ticket verification related work. Also, this project helps in knowing how an online ticketing system computation can be improved and how to improve storage efficiency.

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