



TECHNOLOGY TO SERVE YOU

Getting Started:

About ARTS:

ARTS is Android Rapid Travelling System. ARTS is fully featured Bus travelling system that provide tracking the exact location of bus and with ticket booking and other many facilities as well. Those are detailed in following sections. There are lots of application available so now question is what is innovative, what is new in this. Objective our system is “TECHNOLOGY TO SERVE YOU”. ARTS application comprises the utilization of all latest technology that includes GEO Fencing (with GPS), QR Ticket, Digital Wallet and instant notification leading the new era.

What is Geo fencing?

A geo-fence is a virtual perimeter for a real-world geographic area. A geo-fence could be dynamically generated—as in a radius around a store or point location, or a geo-fence can be a predefined set of boundaries, like school attendance zones or neighborhood boundaries.

The use of a geo-fence is called **geo-fencing**, and one example of usage involves a location-aware device of a location-based service (LBS) user entering or exiting a geo-fence. This activity could trigger an alert to the device's user as well as messaging to the geo-fence operator. This info, which could contain the location of the device, could be sent to a mobile telephone or an email account. Geo fencing used for Track the current location of any Vehicle notify when entering / exit into the geo-fence boundary



Fig. Geo fencing

QR Ticket:

What is QR code?

QR codes are **Quick Response Codes**, a type of two-dimensional code that can be read using smartphones and dedicated QR reading devices, that link directly to text, emails, websites, phone numbers and more! QR codes have come a long way since their creation, having first been developed to help track parts in the manufacturing process of vehicles. Today they have a number of purposes, including transport ticketing, entertainment, commercial tracking, and product labeling/marketing, just to name a few. You can find QR codes being used to send audiences to a website for browsing, to bookmark a webpage, to initiate phone calls, send short messages, send emails, produce links to web URL's, connect to WI-FI networks, access information, get coupons, view videos, purchase items, process orders, advertise products, etc.

QR code integration to Bus Ticket (QR Ticket):

Bus tickets embedded in a QR code is use-reliable and efficient ticketing system. It will lead to new era of ticketing. This would help to prevent paper waste happening today of paper tickets. And it is secured by making unique QR ticket for each new ticket.

Digital Wallet:

People usually suffer from problem of changing and need of money in emergency. To design digital wallet for easy, portable, secure and efficient online payment. The E-wallet is Easy Way to Transaction of Money.

Steps to enroll our Application and How to proceed?

➤ How to get ARTS Application:

You just need to go to Google Play store. Search with ARTS (Android rapid Travelling System).

Download it from there. Welcome to ARTS

➤ How to join our App?

You need to create account by providing your valid details. And you're now in ARTS world.

It is one time login. So you don't need to sign in every time when you open the app.

➤ ARTS facilitates following functionality:

- Track Bus (Current Location)
- Ticket Booking (with Seat map)
- View Booking
- Secure Digital Payment
- Bus Search
- Bus Between Station
- Lost and Found
- New Bus Actions
- Cancelled Bus Actions

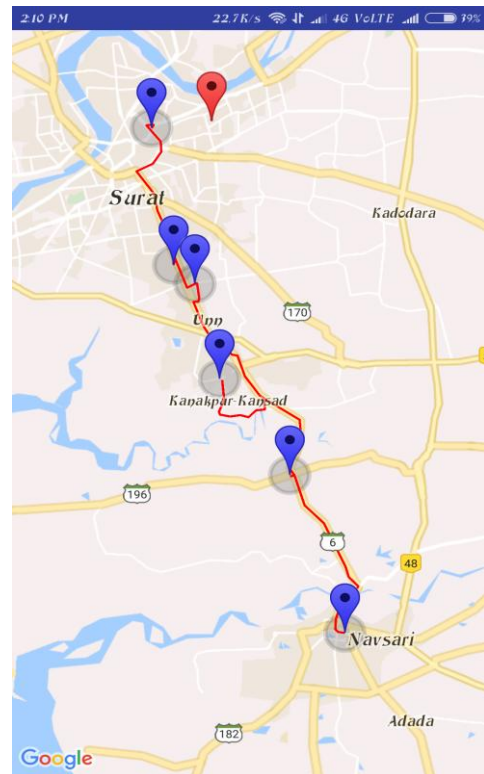
➤ How to Track the Bus:

To track the bus you're given two options.

1. By search using Bus number
2. By scanning QR code

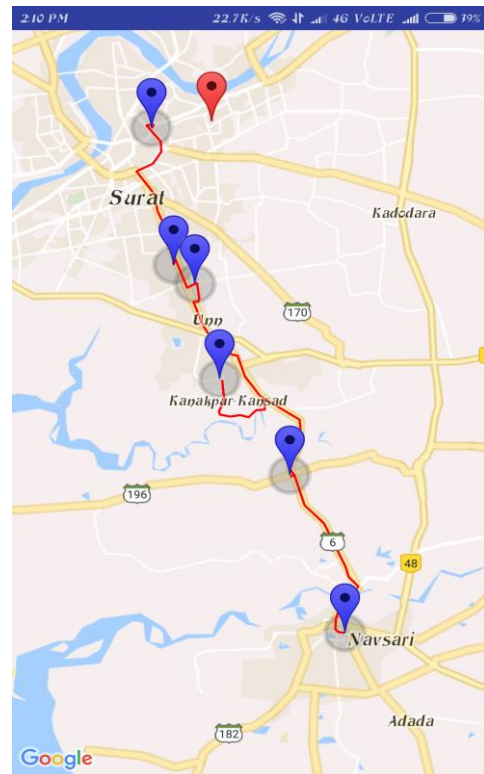
1. By search using Bus number:

- ✓ ARTS application enter the bus number you want to track and check where is the bus at this moment.
- ✓ Our App also facilitates Map with current location of the bus as well as whole route of individual bus. So we provide complete user friendly interface in our app.



2. By scanning QR code:

- ✓ In ARTS app, use of QR code is for tracking purpose.
- ✓ A QR code is created for each individual bus. And those QR codes are placed at each bus depot, each code besides the bus name.
- ✓ We are provide the QR scanner in ARTS app at bottom Action button on Home page.
- ✓ Now whenever user want to track the bus (at bus depot) just go to there and scan the QR code placed in front of that bus name.
- ✓ On admin side updating the current location of the bus time by time. It will redirect to the Map with current location of the bus. QR code will be same but the content (i.e. location info.) will be change time by time.



➤ How to Book Ticket?

- ✓ To book the ticket go to Book Ticket module. Enter details about your journey and search. It will display all buses that matches to your criteria.
- ✓ You can book for single trip as well as round trip. **Single lady** option is also available.
- ✓ After selecting appropriate bus choose your seats on **seat map** and proceed to payment.
- ✓ After payment your QR ticket has been generated.

2:11 PM 9.36K/s 4G VoLTE 79%

← Ticket Genrate

source *surat*

destination *navsari*

status ☐ Local ☒ Express

single lady ☐ Single lady

passenger *2*

ONE WAY ROUND TRIP

onward date *16-05-2017*

return date *17-05-2017*

DONE

2:12 PM 0.08K/s 4G VoLTE 79%

← Ticket Genrate

1234 surat → navsari

Toward 16-05-2017 12:00 - 13:00

Return 17-05-2017 03:00 - 03:30

Bus no = **1234**

surat - navsari

toward_date 16-05-2017 12:00 - 13:00

return_date 17-05-2017 03:00 - 03:30

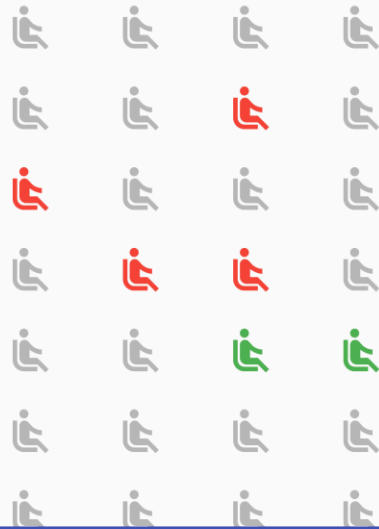
Single lady -

passenger 2

Price 240

SELECT SEAT

240



Book [19, 20] seats

BOOK & PAYMENT

➤ View Bookings:



- **Upcoming Bookings:**

This section will display all your upcoming booked tickets. You can see each ticket in detail. And QR ticket is displayed here.

So whenever you started journey, you have to display QR ticket from here to the conductor for validating and authenticate yourself.

- **Past Bookings:**

This section includes ticket records of your past bookings. That is your journey has been completed.

- **Cancelled Bookings:**

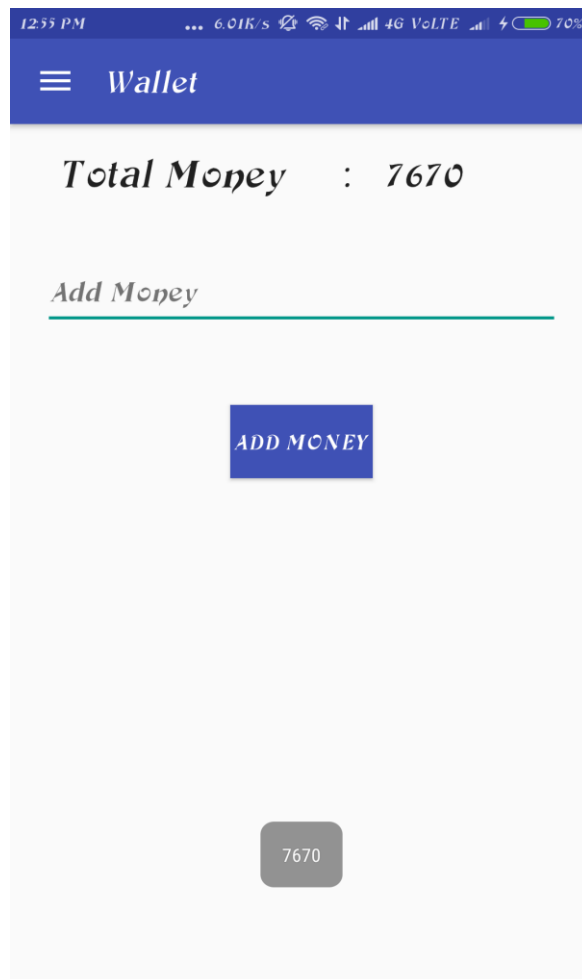
If you have booked ticket and for any circumstances you can't journey on that booking, you can cancel the ticket and refund will be processed.

But make sure you can cancel booking till **3 hour before** bus departure. After then you cannot cancel out your booking.

Your cancelled ticket records are displayed here in this section.

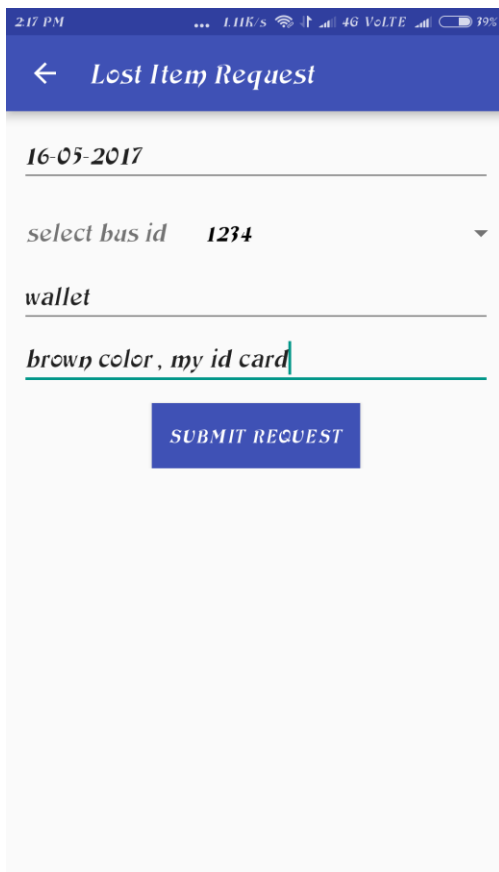
➤ **Digital Wallet:**

- ✓ ARTS app facilitates Digital wallet.
- ✓ After enrolling in ARTS app you will be asked to provide details about your bank credit cards. By providing your valid bank details, you have to recharge wallet of ARTS app.
- ✓ So whenever you are booking ticket, payment would be done from ARTS wallet. At that time you don't need to give your bank details or any other bank interaction.



➤ Lost and Found:

- ✓ If you lost your item like purse wallet, mobile, goggle, or any important item in ARTS bus, then you can send request to admin side for your lost item.
- ✓ It is not guaranteed that your lost will be found, but there is 50% chances that your item maybe found. So receiving your query, bus conductor of that particular bus will inquiry about that.
- ✓ If your item will be there at bus or anyone would return to the conductor, then you will be notified either your item found or not.



2:17 PM ... LINK/S 4G VoLTE 39%

← Lost Item Request

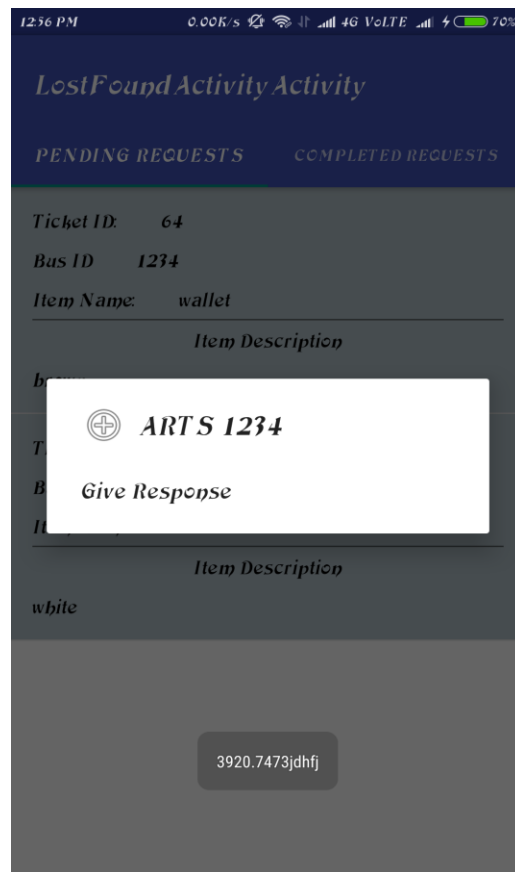
16-05-2017

select bus id 1234

wallet

brown color , my id card

SUBMIT REQUEST



12:56 PM 0.00K/s 4G VoLTE 70%

Lost Found Activity Activity

PENDING REQUESTS COMPLETED REQUESTS

Ticket ID: 64

Bus ID: 1234

Item Name: wallet

Item Description

Give Response

3920.7473jdhfj

➤ ARTS Notifications:

You will get Notification on following situations:

- After Successfully Ticket booking
- Whenever your destination station is to be reached
- When new buses are to be in action in future
- When any buses has been cancelled afterwards
- In response of Lost items

