# **Make Long Trip Easy**

#### Introduction:

## **Project Aim:**

Our aim is to lessen people's suffering when they wish to travel or journey in distance places. Sometimes people find difficulties to travel distant places for work field related purposes especially in different occasions and festivals. They face problem to find correct vehicle for long route. Collecting tickets during festival is also a burning issue in our country. So we are introducing an application to the people of Bangladesh which will reduce this problem with the tap of a button.

## **Project idea:**

The project idea was mainly focused on developing such an app which will reduce long trip related issues. For this purpose we have worked on people's miseries and what difficulties they face, when they want to travel. So our idea was to develop such an application which will contain necessary information about bus and train services and make them easy access able to general people and make their journey as comfortable as possible

**Problem Statement**: In a developing country like Bangladesh, people mainly journey by train or bus. They face varieties of problem in this two ways. some are mentioned below

- 1. Most of the time people can not search of available bus and train for journey
- 2. The burning problem is that they don't know the current schedule of buses and trains . There are different bus and train services for different route, so its quite hard to remember them all and their schedules change frequently.
- 3. In many special occasion or festivals, people Waste time to collect ticket as tickets are not not available at festive times. Not just that sometimes they waste time in long line but cant manage bus or train tickets.

4. The most and significant problem is to find location of bus counter and Railway station.

#### **Solution:**

- people can Search bus and train anytime anywhere with our App.
- General people can easily access of available bus and train schedule. They will be also updated with the current schedule
- People can Save their precious time and can collect ticket with a single call or tap of button through our App.
- People can easily find the location of all the bus counters and railway station. we will ensure the maximum information about their desired bus or train service.

## **Target group:**

The target group of our app is generally two types of people. our app is developed to reduce their sufferings. They are

## • People of Bangladesh:

People of our country can easily use our app to find their desired bus /train service. They also can all necessary information about the bus counter/railway station. The scheduling, ticket cost of buses and trains will be included.

## • Tourist/foreigner of Bangladesh:

Every year many tourist and foreigner come to our country .our country holds all the properties of natural beauties and also has many historical places to visit. For visiting this sites many tourist come here with great interest. For them our app can be one kind of travel guide. By entering only source and destination, they will get full information about bus/train services, counter/station location which is fully unknown to them. our App will ensure their safe journey.

## **Present Market Analysis of 10 Worldwide Recognized Travelling App:**

**App Name:** TripView

Rating: 4.6

**Developers: Trip View pty LTD** 

**Target Group:** TripView displays Sydney and Melbourne public transport timetable data on your phone. It features a summary view showing your next services, as well as a full timetable viewer.the target group is people of Sydney and Melbourne.

#### **Features:**

- View times for any saved trip with a single tap
- Trackwork and service interruption information
- Interactive maps (create your trip by clicking on your station/stop)
- Alarms (arrival/departure, time/distance)
- Multi-modal trip editor (customise exact change locations / lines)
- Real-time delay information and vehicle map (subject to data availability)

#### Limitations

- 1. The app serves it's purpose OK. When trains are on time, it's fine, but once the trains are off schedule, the apps supposed live time tracking isn't really reliable. Also the alarm is very disruptive and needs to have other tones selectable as currently the only way to turn it off is to mute the phone.
- 2. Needs the ability to choose your destination point first, and then be given suggestions to the closest bus stop to your location, currently it becomes a guessing game

**App Name:** CITYMAPPER

**Rating:** 4.5

**Developers:** city mapper limited

**Target Group:** The people of below countries and states can use this app

UK: London, Manchester, Birmingham.

ASIA: Singapore, Hong Kong, Tokyo.

EUROPE: Paris, Lyon, Berlin, Hamburg, Brussels / Belgium, Amsterdam /

Randstad, Madrid, Barcelona, Milan, Rome, Lisbon.

USA/CANADA: New York City, San Francisco Bay Area, Los Angeles, Washington

DC, Chicago, Boston, Philadelphia, Toronto, Vancouver, Montreal.

LATIN AMERICA: Mexico City, São Paulo.

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## **Features:**

1-Our mission is to MAKE CITIES EASIER TO USE. We're reinventing the urban transport / transit app in the world's most complicated cities, specifically for Android devices.

- 2- Comprehensive. A to B journey planner including all transport modes (walk, tube/ metro/ underground, bus, cycle/ bike, cab/ taxi, train/ rail, tram, ferry).
- 3- Real-time data. Live info on all modes of transport where available.
- 4- Simple, fast, usable and award winning design.
- Full of features. Disruptions/ status info, notifications, calories burned, metro map, saved routes, weather, Meet Me Somewhere.
   Personalization: ability to tailor the app around your needs. All sorts of things you need or may not even realize that you need to manage your life in the city.
- 2. Rapid updates. We will keep improving this app until its the best one on your phone.

#### **Limitations:**

1. Very few settings. Can't even set preferences to minimize walking, which is often necessary when you can't walk a lot. Overall, good foundation; but missing too many simple functions.

2 It took a while to track this app down as the cause. If you turn WiFi off, that seems to stop the drain. The battery stats show Android OS keeping awake constantly. Maybe it is a marshmallow issue, or maybe it is playing up in combination with Android Wear.

**App Name:** Ride Chicago - CTA, PACE

Rating: 4.1

**Developers:** Dattan Labs Travel & Local

**Target Group:** Ride Chicago is an easy to use transit app for tracking Chicago CTA buses, L trains and PACE. It provides real-time PACE bus, CTA bus and 'L' train directions, arrival times, alerts, nearby stops.

#### **Features:**

- •You can add bus and train stops or routes to your favorite list for quick access.
- •View all stop schedules in a group simultaneously. If there is more than one train/bus stops near you, you can add bus and train stops to a group and then you can view all the arrival times in a single screen. This feature helps you get more than one train/stop arrival times at the same time.
- •Search and filter by stop name or route number.
- Displays train stops in travel direction order instead of alphabetical order.
- •Provides arrival time estimates in minutes, local Chicago time, distance to stop in miles or feet, travel direction, destination name, route name, vehicle number.
- Provides a functionality to display all routes at your stop and filter arrival times by train destinations.
- Provides search bus/train routes and stops option.
- Provides bus & train status and alerts (route changes, stop relocation etc)
- •View nearby bus and train stops in list or map.
- View bus schedules and real times locations on the map.

#### **Limitations:**

1. Can't get to select routes for the bus.

- 2. This app is anothere cta tracker not pace. So downloading another tracker when we all know its not needed.
- 3. Doesn't work when I really need it to , it helps some days but the glitches are just annoying
- 4.does not work for surban pace bus.

**App Name:** TripGo

Rating: 4.1

**Developers: skedgo pty LTD** 

**Target Group:** TripGo is a city trip planner app that helps you travel smarter. With TripGo it's super easy to find your way around and get from A to B on time. It's the only app that let's you combine any (really, any!) public transport in your city with taxis, your own car, car share, bike share etc. The target group are city people.

#### 3. Features:

- 1. With TripGo you can plan your ride, check fares & times, bus and train tickets, transport directions, timetables and get live service alerts. One of our best features: Connect your calendar to get automatic trips & leave alerts.
- 2. Combine local public transport (bus, train, railway, tube, underground) with private and other transport such as taxi, cabs, ride share, shuttle services, car routes and car sharing, motorbike, cycle routes, bike sharing and walking.
- 3. TripGo delivers results in real-time: Up-to-the minute information on predicted departure/arrival times, GPS locations and service alerts make for accurate trip planning TripGo keeps you up to date & on time.

#### **Limitations:**

- 1. No live bus location.
- 2. Unavailability of information.

**App Name:** Train times, travel & tickets

4. Rating: 4.4

5. **Developers:** GWR(Great Western Railway)

6. **Target Group:** The GWR Android app makes planning travel simple for all travelers - from busy commuters, to train travelers exploring the vibrant cities and countryside across the Great Western Railway network.

#### 7. Features:

- FIND TRAINS: Find Trains helps you find your next train journey.
  Choose from any UK train station. The app remembers your last
  and most frequently travelled train journeys. Choose a train fare
  from the available Off-Peak, Anytime, standard or First Class fare
  options and buy your train tickets using the app. If you have a
  railcard, simply add which railcard you have (i.e. Family & Friends
  Railcard, Network Railcard, 16-25 Railcard) to get access to cheap
  train tickets
- LIVE TRAIN TIMES: Live Train Times shows train departures and train arrivals from any train station in the country. You can also see which platform your train will be at without having to check the departure board. The app stores the most recent live train times you have chosen. You can always get quick access to your important train platforms, running schedules, departure times and train arrivals.
- NECTAR POINTS: You can get Nectar points by linking your Nectar card to the GWR app. Enter your Nectar card number into the NECTAR section of the app and you can start collecting Nectar points today. Look out for ways to boost your Nectar balance when you see the "bonus points" sign.
- LATEST SEARCH: Latest Search stores the last journey you looked for. We know you don't always have time to look at the departure boards so we store the latest search to make sure the most recent train journey you looked for is displayed on the first page of the app.

- MY TICKETS: My Tickets is your mobile ticket wallet and displays all the mTickets you purchase. These mobile tickets are marked with a barcode symbol and are delivered direct to your phone. When travelling you may be asked to present your Ticket at any time.
- NEXT TICKET: Next Ticket shows your upcoming tickets. Keep your journey planning close to hand with full details of your next tickets.
- MY ACCOUNT: Log in to your GWR account here or sign up with your first time purchase. Signing up means all your details are stored safely and securely to make buying train tickets easier and quicker.
- INFORMATION: The Information part of the app is your train ticket help manual. Access all you need to know about the app. Check the latest Tube Status from TfL so you can plan your Tube or DLR journey. From here you can also sign up to our Inbox Inspiration where you can get exclusive travel news, Nectar promotions and fantastic First Great Western offers sent direct to your inbox.

The GWR app is more than just a train time travel companion, it's also your gateway to exciting UK destinations.

## 8. Limitations:

- When trying to check live departures the information can't be seen because a list of menu options appear as an overlay on screen. I can't find a way to make this disappear, so can't access/read the info below.
- ii. This app will not give you all travel and/or ticket options available, meaning you will not get cheapest ticket with app. GWR web site will sell those cheaper options as will other ticketing apps.
- **iii.** No information about the journeys.
- iv. Every time you try to go back one screen, it returns you to the main menu and is so infuriating to use.

v. Has no via station option which can often give you fares half the cost.

**App Name:** London Transport Planner

1. Rating: 3.8

2. **Developers:** LondonNut.com

**3. Target Group:** People eager to travel by bus, plan, cab & train in London.

#### 4. Features:

Simple, Lightweight London Travel & Transport App - easily accessible Travel For London Tools:

London Tube Map 2014 (works offline)

Live Tube Status / Train Updates (tube.lu)

Live Bus Status / Bus Schedules (TFL)

Live Tube / Train Departure Times (TFL)

Plan A Journey/Route(TFL)

Call For A Taxi (Call-A-Cab)

Pay Congestion Charge (TFL)

Top Up Oyster Card/Check Oyster Balance (TFL)

(TFL) services require internet access for up to date information and are provided directly by Transport For London.

#### 5. Limitations:

- i. Interface Needs Improvement Putting lists of stops or locations on a small phone screen, without and space between them means constantly having to zoom in to select text, which could so easily be overcome with some additional spacing. Also if I search for Dulwich Library I am told it does not exist, but it does as can be seen in arrival screens. Needs sorting out.
- ii. The timetable isn't correct.
- iii. This app is getting successively worse at its key function. Giving you travel info to get you to your destination asap. It gets worse with every update. Now it gives just two options (so viable choices have to be hunted down). If I didn't already know there were

better choices I wouldn't even start looking for later options. Very poor. Instead of trying to throw in every iota of tfl info, the developers need to get back on track and focus on making am effective travel App. Citymapper is better.

iv. This app got always same problems with services and lots of the time show wrong times.

**App Name:** Opal Travel

1. Rating: 4.0

2. **Developers:** Transport for NSW(New South Wales)

3. **Target Group:** Opal Travel lets you plan an end to end public transport trip within Greater Sydney, right across NSW, and interstate to Melbourne, Brisbane and Canberra. Opal fare estimates are calculated for services that accept Opal cards across NSW. The Opal card is accepted on public transport in the Sydney metropolitan and greater metropolitan areas, including the Blue Mountains, Central Coast, Hunter and the Illawarra.

#### 4. Features:

Opal Travel is the easiest way to find out which train, bus, ferry or light rail to catch and how much the Opal enabled services will cost.

- 1.Allows you to plan your trip from your current or chosen location to your destination
- 2.Shows you when your service is scheduled to depart Provides your detailed trip plan in text or on a map Gives you the ability to save and manage your favourite trips and locations
- 3. Gives you the ability to scan your Opal card and display your card balance, Weekly Travel Rewards (journey count) and last tap details
- 4. Shows peak or discounted off-peak train fares depending on the time of travel
- 5. Includes fare estimates for adult, child/youth and senior/pensioner Opal cards
- 6. Shows alerts or disruptions that may impact your trip
- 7. Indicates wheelchair accessible transport services

- 8. Helps you find a nearby Opal retailer to purchase or top-up your Opal card
- 9. Indicates where other fares are payable when a service does not accept an Opal card.

#### 5. Limitations:

- i. Interface needs improvement.
- ii. This app doesn't even let you view you're Opal account without opening another web browser.

App Name: TRAFI: Bus & Train times

- 1. Rating: 4.4
- 2. **Developers:** TRAFI group. Simonas(Android).
- 3. **Target Group:** Travelers all over different countries of the world.
- 4. Features:

Find your way around in the city with punctuality in mind! Use all transport types in one place! TRAFI, unlike other public transport apps, shows only accurate and up to date bus, metro, ferry and minibus schedules. We even track where your bus is in real time, which allows us to detect traffic jams and offer the most optimal route to your destination.

## Route search

- Schedules and timetables
- News feed with live information
- Interactive map of nearest stops
- Real-time information
- Next arrival times for your stop
- Favorites you can save your frequently used stops, home, and work locations for quick access

#### 5. Limitations:

i. When trying to check live departures the information can't be seen because a list of menu options appear as an overlay on screen. I can't find a way to make this disappear, so can't access/read the info below. ii. Interface needs improvement.

## Why our App is better then Existent App:

Users can plan their trip and get information of counter/railway in a single app. Usually there are two different app for these two features. So it is easy for a user to do the work of two app in one.

The user can book bus/train ticket through our app by call, online ticket booking or SMS which is included in our App.

They can get all the bus counters, railway station information, address, contact information, ticket cost and all other essential information.

## Platform and requirements:

- Android studio
- Notepad
- Dream weaver

## Requirement:

Internet connection is necessary.

## **Our Application Features:**

- A selection option whether the user wants to travel by train or bus.
- Schedules & timings.
- Counter/railway location and contact information.
- Online ticket booking information.
- Significant cities to travel.

#### **UI Design:**

To develop a App UI (User Interface) is very important .If a user cant relate with the App, then he/she is not going to use that app. We have spend a huge time on UI designing to make our App user friendly. Main focused of our UI are

- Special background images were used sothat at first glance user can connect with it.
- Special Imagebuttons
- AutoComplete textview was used for better choose option
- Navigation draware
- Listview was implemented
- Call option
- Web browsing option for online ticket booking
- Attractive color combination

## **Process:**

## Step-01: Splash Screen

When a user enters the app, a splash screen pops up on the screen of his mobile. The splash screen is given here in fig-01. The screen gives the user primary view of the app. After seeing the screen, he knows that it is a travelling app. We used the name of our app "Make Long Trip Easy" in the screen. There is also a famous dialogue of Thomas S. Monson. That is "Find joy in the journey". We also choose the picture of the screen related to our app.



Fig-01: Splash Screen

## Step-02: Home Page

The home page of our app shows its user the main feature of our app. It is our page to choose the vehicle the user wants to travel. He needs to choose either bus or train. We used logo of bus and train so that the user can understand which vehicle he is going to select for his travel. The page is shown in fig-02.



Fig-02: Vehicle Selection

## **Step-03: Navigation Drawer**

We also have a navigation drawer in our home page. If the user press the icon beside the heading, the navigation drawer will get out.

It is shown in fig-03. We kept different option for the user in the navigation drawer.

# **Option-01: Available Cities**

It will show the user all the available cities for which he can get the required travelling information.

## **Option-02: Available Bus Service**

It shows the user available bus services is that the name of the buses for which he can get the information(fig-04).

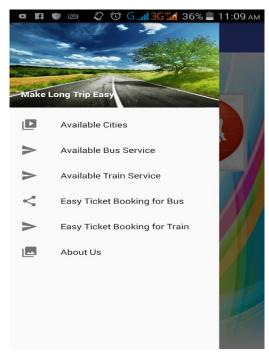


Fig-03: Navigation Drawer

## **Option-03: Available Train Service**

The user can see the available train services that is the name of the trains which information (fig-05) is provided in our app.



Fig-04: Bus Services



Fig-05: Train Services

## **Option-04: Easy Ticket Booking for Bus**

Here the user can book ticket for his desired travelling place if he wants. In this activity we kept two easy way for his booking bus ticket. He can book or purchase the ticket seating in his home.

First one is the number of 'shohoz.com'. If the user press the call button of shohoz.com, a call will go to the number of shohoz.com and he can directly talk to their customer service agent for ticket.

Another one is the online ticket booking service. If he clicks the button of 'Ticket Booking Website', he will directly go to the page where he will get all the information about how he has to book bus ticket (fig-06).

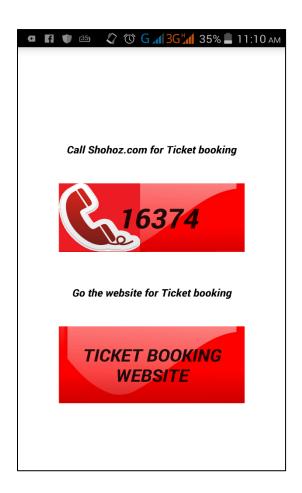


Fig-06: Bus Ticket Booking

## **Option-05: Easy Ticket Booking for Train**

In this page we provide a number that is \*131#. By dialing the number with Grameenphone or Robi sim, a dialog box will appear on the mobile screen with several options. If the user want to book train ticket, purchase train ticket after booking or purchase train ticket, three options will came in the box. All the required thing are given in the app with the screenshots. If the user want to buy train ticket, he can easily follow the rules given in our buy and buy train ticket seating in home with a click of button.



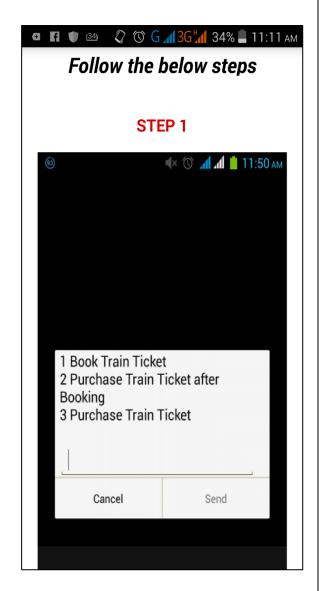


Fig-07: Train Ticket Booking

# **Search Page and Detail Information of Bus Service:**

The user will give his source and desired traveling destination he wants to go. There will be drop down according his input. He can choose from the dropdown option. Then when he clicks the search button, he can see the available buses for the route he entered. When he will click a bus, all the information of the bus counter which is available in his city will be shown. We basically provide schedule, counter name, counter address, counter contact number, route, journey duration and ticket cost.

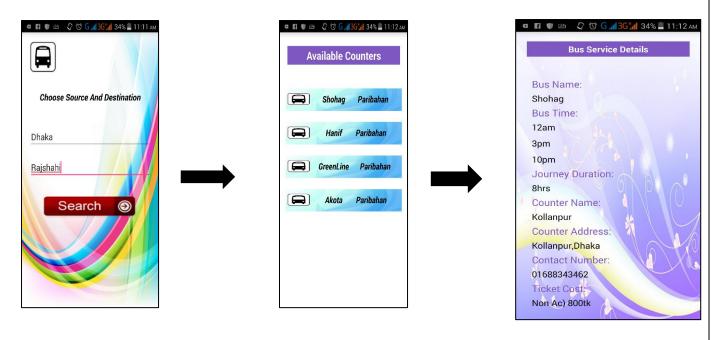
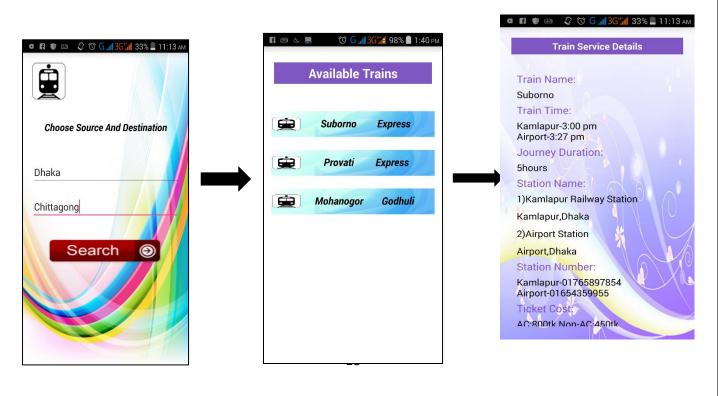


Fig-08: Search and Details of bus

## **Search Page and Detail Information of Train Service:**

The user will give his source and desired traveling destination user wants to go. There will be drop down according his input. He can choose from the dropdown option. Then when he clicks the search button, he can see the available trains for the route he entered. When he will click a train, all the information of the railway station of the train which is available in his city will be shown. We basically provide schedule, station name, station address, station contact number, route, journey duration and ticket cost.



# **WEB VERSION**

Required Tools:
Text Editor :
1) Sublime text2
2) Dreamweaver
Softwares:
1) Wampserver (For Database)
Languages:
1) HTML
2) CSS
3) Java script
4) Jquery
5) PHP
For Database we have used MySQL.
UI Design:
Header:
For the index page we have used a header. In header dropdown has been used. There are two options in the header section Home and contacts.

In the right corner there is a menu option. There are available bus,

available trains, about us, why choose make long trip easy option.

Sidebar- navigation:

## **Preloader:**

There has been used preloader which will appear before the page is loaded.

### Parallax:

The phenomenon of parallax scrolling website design is growing in popularity across the internet, bringing the user experience to a new interactive level of online viewing. With web designers and developers constantly exploring new ways to make their web presence more appealing to their sites' visitors through engaging visuals and functionality, parallax scrolling has taken hold as the new frontier.

#### Form:

There is a form for both bus and train. There are two input type one is "source" and other is for "destination". There is a dropdown where user can select a city for source and destination. Here we used select picker. For form method "post" has been used.

## **Ordered List:**

For ordering list we have used tag.

#### Table:

We have used tables for showing search result. tag has been used.

#### **Breadcrumbs:**

A breadcrumb trail tracks and displays each page viewed by a visitor of a website in the order the pages were viewed. Breadcrumbs are typically placed, in horizontal form, under the masthead or navigation of a website.

#### Accordion:

The graphical control element accordion is a vertically stacked list of items, such as labels or thumbnails. Each item can be "expanded" or "stretched" to reveal the content associated with that item. There can be zero expanded items, exactly one, or more than one item expanded at a time, depending on the configuration.

We have used it to show the steps of ticket booking.

#### **Buttons:**

For button we have used animated button. We used Hover effect. The hover selector is used to select elements when you mouse over them.

# **Responsive table:**

A responsive table will display a horizontal scroll bar if the screen is too small to display the full content. Resize the browser window to see the effect. We used overflow-x: auto.

## **Icons**:

To insert an icon, we added the name of the icon class to any inline HTML element. To use the Font Awesome icons, added the link inside the <head> section of your HTML page.

## Image:

For image we have used <img> tag. We have styled it with height weight pixel.

## Footer:

The <footer> element represents footer for its nearest ancestor sectioning content or sectioning root element. We have added copyright too.

## **Process:**

# 1. Choosing Source And Destination:



Fig 10: Choosing source

At first user has to decide that in which vehicle he/wants to travel. He/she has to choose bus or train. Then from source dropdown user must choose one city. Using same procedure user has to choose destination. Then click search.



Fig 11: Choosing Destination

# 2) Search result for Bus:

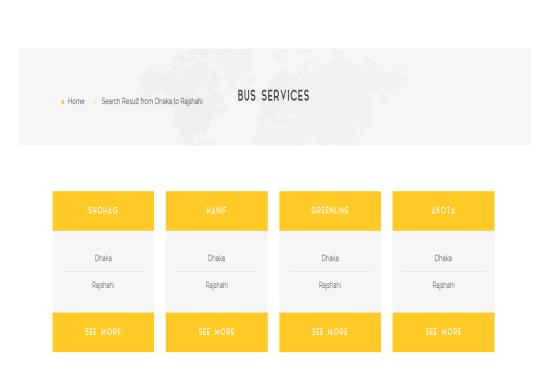


Fig 12: Bus services (Here showing result from Dhaka to Rajshahi)

After clicking search button available bus counters from source (here Dhaka) to destination (Here Rajshahi) will be shown. Then after clicking See more button user will able to see the details of that particular bus.

# 3) Bus Details:

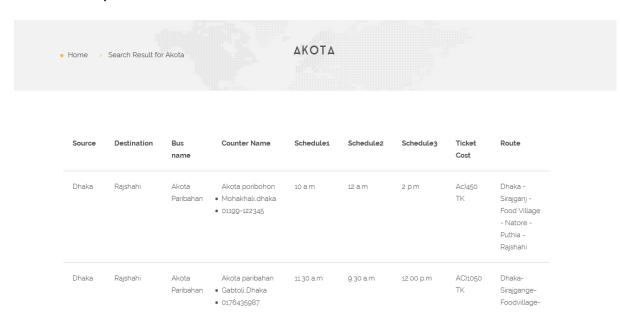


Fig 13: Counter Details (Here showing result from Dhaka to Rajshahi)

After clicking see more of "Akota" button all the info related Akota will be shown. The information is counter name, counter address, latest schedule, ticket cost for ac and non ac if they are available and route.

# 4) Ticket booking Information:

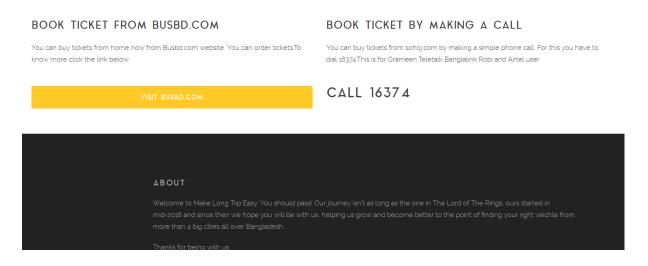


Fig 14: Ticket booking information

User can get the ticket booking information from our websites. From busbd.com user can buy tickets. They can get tickets by making a phone call. By calling 16374 they can buy tickets from sohoj.com

# 5) Search result for Train:

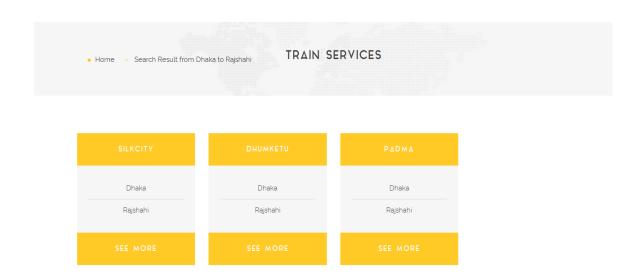


Fig 15: Train services (Here showing result from Dhaka to Rajshahi)

After clicking search button available Trains from source (here Dhaka) to destination (Here Rajshahi) will be shown. Then after clicking See more button user will able to see the details of that particular Train.

# 6) Train services:

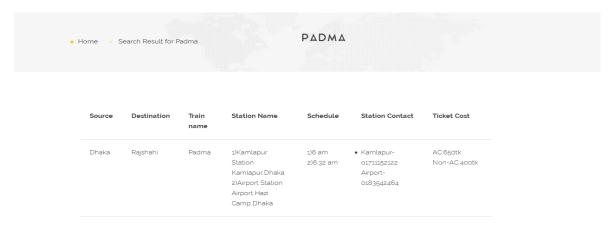


Fig 16: Station Details (Here showing result from Dhaka to Rajshahi)

After clicking see more of "Padma" button all the info related Padma will be shown. The information is station name, station address, latest schedule, ticket cost for ac and non ac if they are available and route.

# 7) Ticket booking Information:



Fig 17: Ticket booking information

User can get tickets by following some simple steps. Steps are shown below

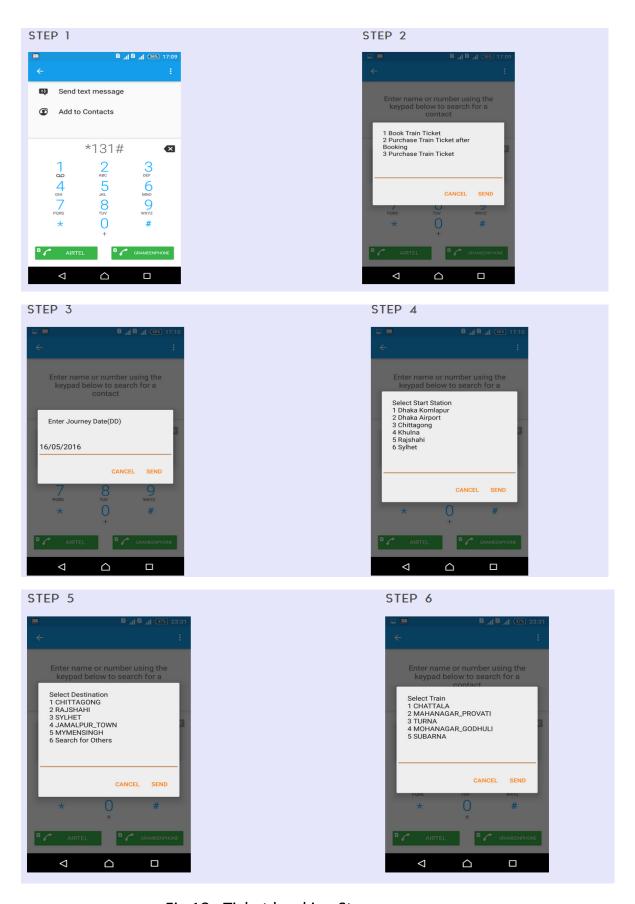


Fig 18: Ticket booking Steps

# 8) Finding Contacts Easily:



Fig 19: Contact Option

At the right there is an option name contact. By clicking this user can get all contact lists of counters and stations.

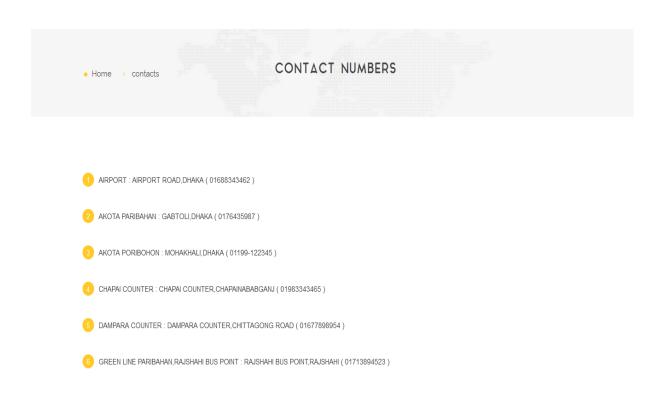


Fig 20: Contact Number for Buses

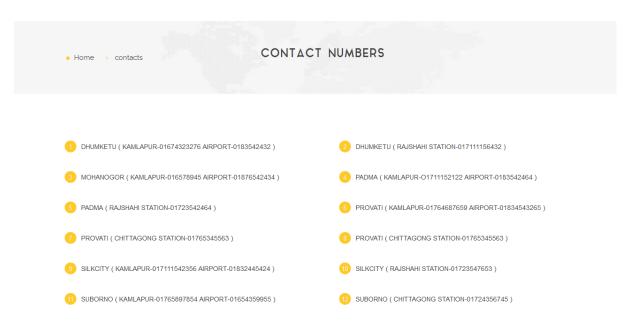


Fig 21: Contact Number for Trains

# 9) Menu option:

There is a menu for user to make our website more users friendly.



Fig22: Sider-bar menu option

#### **Limitations:**

Our database is not fully complete as for limited time we were unable to entry all the data.

## **Development plan in future:**

We will try to produce this App in market. For better user experience we will next add Google Map along with route and fully enriched our database. we will also try to include the live location of bus/train in our App in future. A special feature namely "plan your trip " will also be included ,through which user can plan their journey like to do list.

## **Conclusion:**

We hope that our Application will be benefic able to people. We have tried to include all necessary features so that users can have a great user Experience.