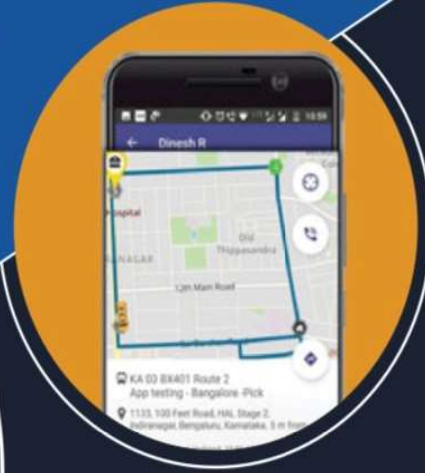


SCHOOL BUS MONITORING SOLUTION

Keep parents informed and children safe



Live Tracking Updates

Bus started from school & boarded, de-boarded push notifications sent to parents.



Directions to the stop location

Navigate from current location to bus stop location with direction option.



Notification Alerts

Bus started from school & boarded, de-boarded push notifications sent to parents.



Bus information of assigned bus

Bus information provides contact details of assigned bus to the parents.



Attendance History

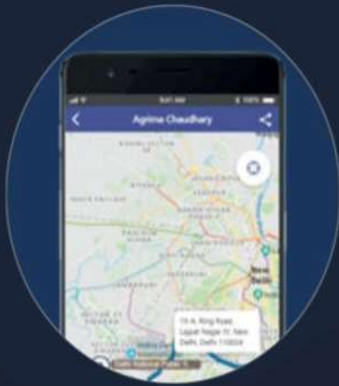
RFID attendance of students with entry and exit time from the bus.



Multiple Language Support

Use this app in your favourite language. This app supports 10 languages.

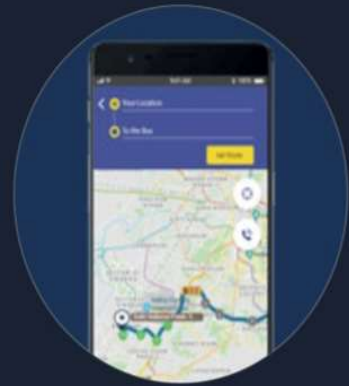
My Kids Mobile App



Live Tracking of the bus



Notification alerts



Direction to the Stop Location

IOT & FINTECH

SOLUTIONS TO IMPROVE **ACCOUNTABILITY,**
EFFICIENCY AND PRODUCTIVITY

How it works



Bus **leaves** the school



Child **boards** the bus from the stop



Child **deboards** the bus from the stop



Child **boards** the bus from school



Bus **leaves** the school



Child **deboards** the bus at stop

School Bus Monitoring Solution

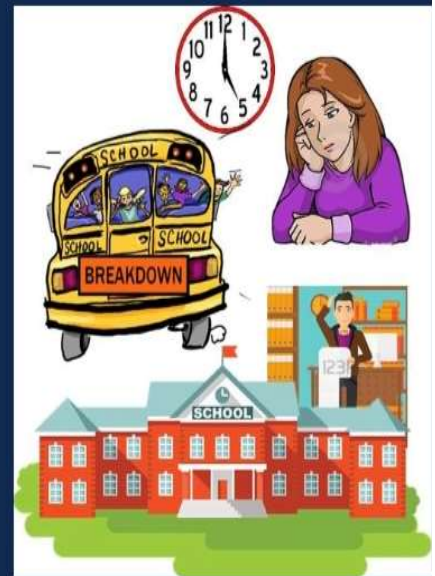
**Powered by
India's Most comprehensive Map Data**

School Bus Solutions

- 1.School Bus Monitoring System & Student Tracking Solution (With RFID)**
- 2.School Bus Monitoring System & Student Tracking Solution (Without RFID)**
- 3.MDVR & Camera Solution – Offline**
- 4. MDVR & Camera Solution – Online**
- 5. Basic Tracking**

Issues faced by School administration and parents

- Parents are not aware of the whereabouts of their children once they are dropped off at the bus stop.
- No information available on Arrival/ Departure of bus from respective stops/ school.
- No means to check if the driver is driving well or not.
- No means of knowing if the child got down at the authorized stop.
- Administration is unable to track the children or vehicle details.



12

School Bus Tracking Solution is specially designed over **MapmyIndia cloud based platform (InTouch)** for School management and parents of the kids using school bus as transport.

Parents Tracking

IoT Devices fitted in

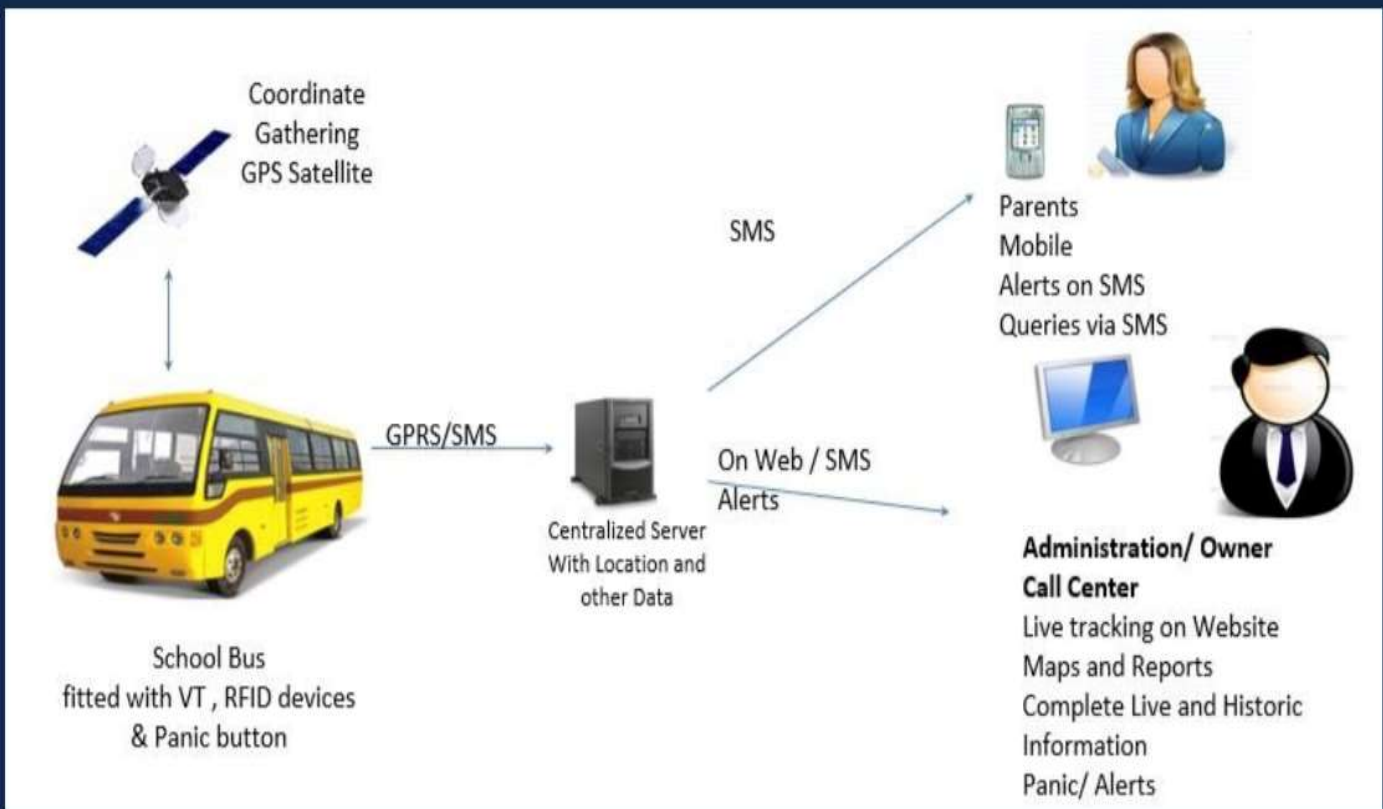
Dashboard for School

App

School Bus

Authorities





Amalgamation of these two component will together cover the problem statement and will help provide a robust solution

- **MapmyIndia School Bus Application contains**

- Dashboard for Administration
- Parents App
- Admin App

- **MapmyIndia Hardware - IoT Devices.**



Features of AIS 140 / Non AIS certified Hardware device as follows:

- Ignition on/off alert.
- Panic button alert.
- Vehicle Tracker tamper **proof** alert.
- Driver Behaviour Alerts.
- Over Speeding Alert.
- Internal GPS and GSM Antenna
- Device unplugged alerts.
- RFID Reader for attendance purpose.
- ABS casing with IP65 Compliant.



18

Panic Button is to send an alert for safety or notify when help is needed in case of any emergency. GPS bundled with the solution will send location details to the pre-programmed contacts immediately.



Panic Button : Alerts In case of Emergency, Single Button Press, Instant SMS Relay to Concerned, Instant Alert in Control Room, MIS Reports, Helps in Quick Response to Stranded

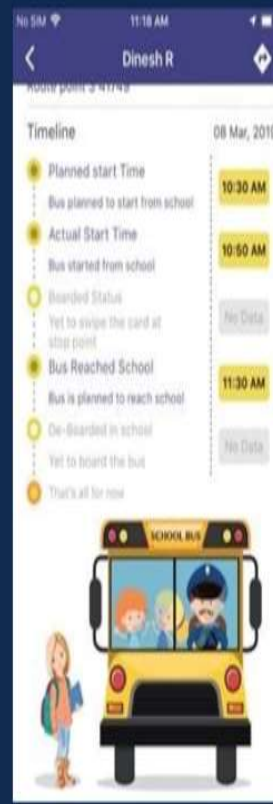
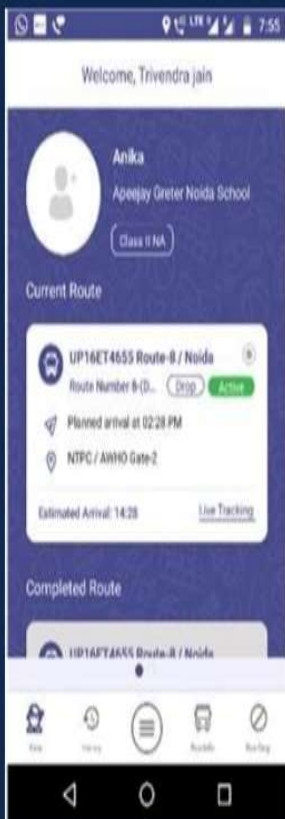
Device Name	Alert Type	Date Time	Lat Long	Address	Description	Acknowledged By	Remarks
IPF011010-0000	Ignition	21-07-2018 06:22	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:23	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:24	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:25	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:27	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:28	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:29	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:30	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:31	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:32	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:33	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:34	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:35	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:36	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:37	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:38	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:39	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:40	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:41	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:42	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:43	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:44	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:45	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:46	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:47	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:48	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:49	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:50	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:51	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:52	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:53	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:54	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:55	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:56	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:57	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:58	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 06:59	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark
IPF011010-0000	Ignition	21-07-2018 07:00	01750 7:00N	India-Chennai,Chembay Road 2, Sector 17, Plot 2, Madhav Nagar, 600 036, Tamil Nadu, India	Engine started OK		add remark

20

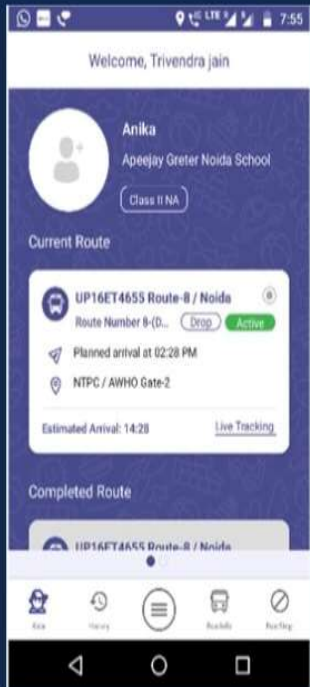
For Parents

21

Parents of a student can monitor the school bus movement by using the MyKids – School Bus Monitoring App using their favourite language.



After the successful login school bus Kids home page will appear.



ETA (Estimated Time of arrival) - It will be shown until bus moves out from school or first stop of the assigned route.

UP16ET4652 Route -3 - Bus Name

Jalvayu Vihar - Assigned stop where child will be picked or dropped

5th Route 12.30 –Drop only– This is the route name which has been assigned to the student

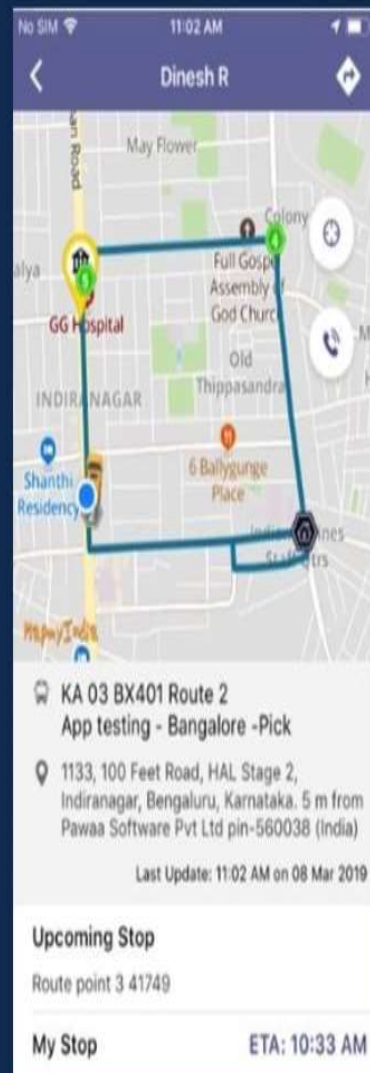
23

1. Live Tracking page provides live location of the bus.

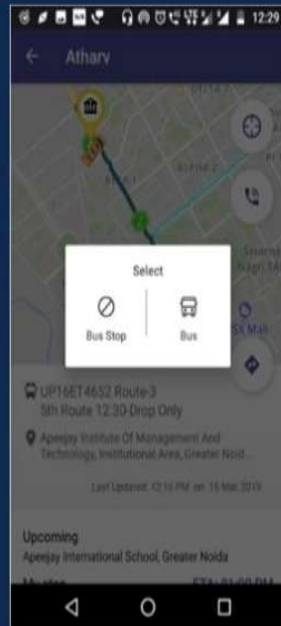
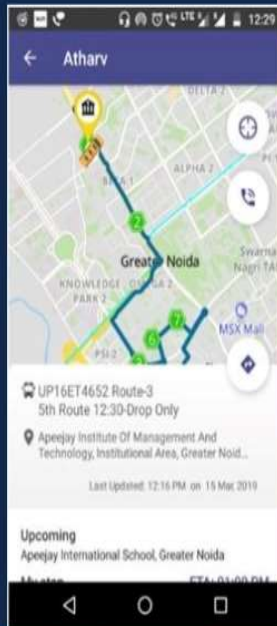
2. Stop and the school locations are highlighted

3. Completed stops are differentiated using gray color

4. Upcoming stop detail has been shown.



During the active route time, user can navigate from their current location to bus stop location using direction option.



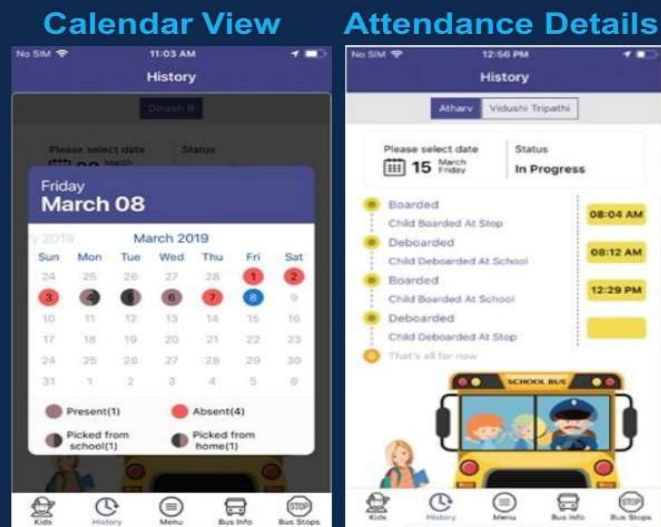
Timeline provides the Important events timings.

1. Planned Start time
2. Actual start time
3. Boarded Status
4. Bus Reached School Time
5. Deboarded Time



Last 30 days Attendance details of the child will be shown based on the RFID Card Swiped by the child.

1. Present
2. Absent
3. Picked from School
4. Picked from Home



Bus Stop Details

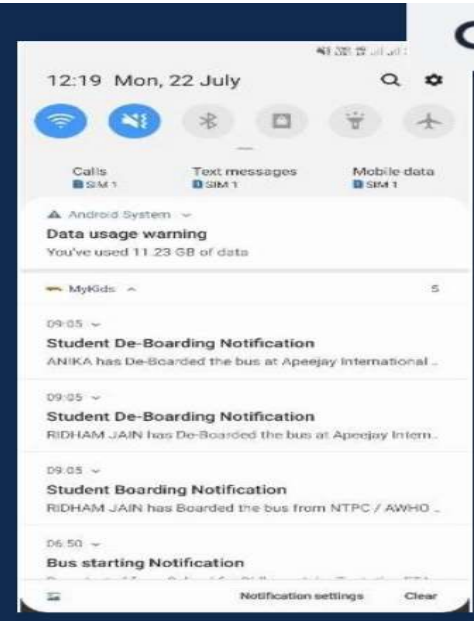
- Stop sequence and the detailed stop address will be displayed.
- Green color Indicated the Upcoming stop.
- Gray Color denotes the completed stop.
- Planned time , Planned sequence, Actual Sequence, Actual time will be displayed over Stop Info Card.



Push Notifications

For the following Scenarios Parents will receive the push notifications.

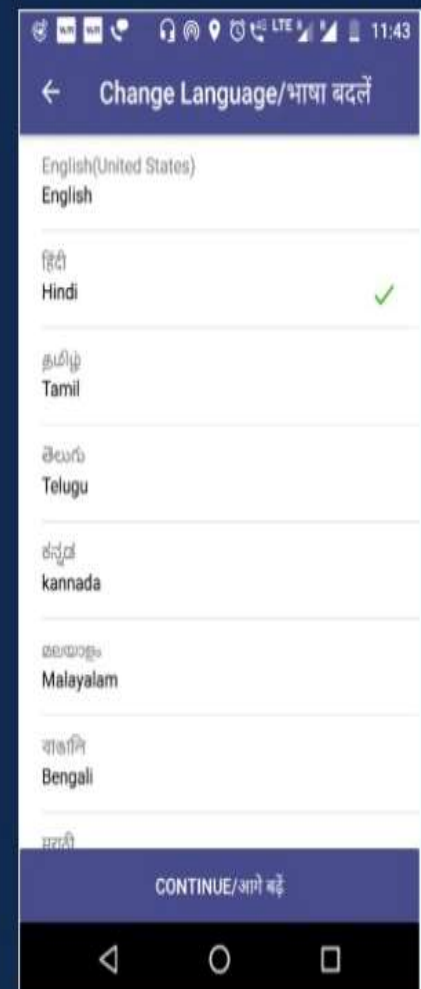
1. Bus started from School/Stop
2. Boarded bus
3. Deboarded Bus.
4. Additional SMS will be received by parent, In case of any need to sent from school side.



Multi Language App

Mykids App supports the 10 Regional Languages.

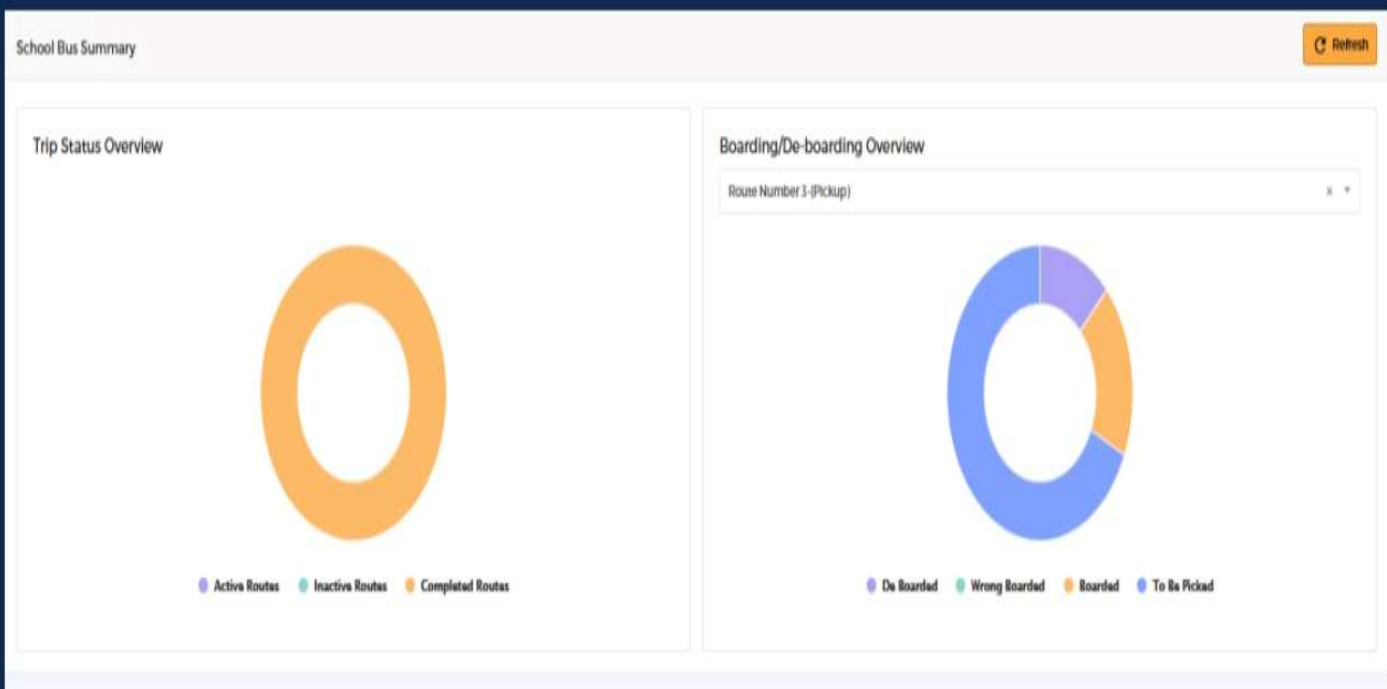
- Hindi
- English
- Tamil
- Telugu
- Kannada
- Malayalam
- Marathi
- Bengali
- Oriya



For School Administration & Transport Team

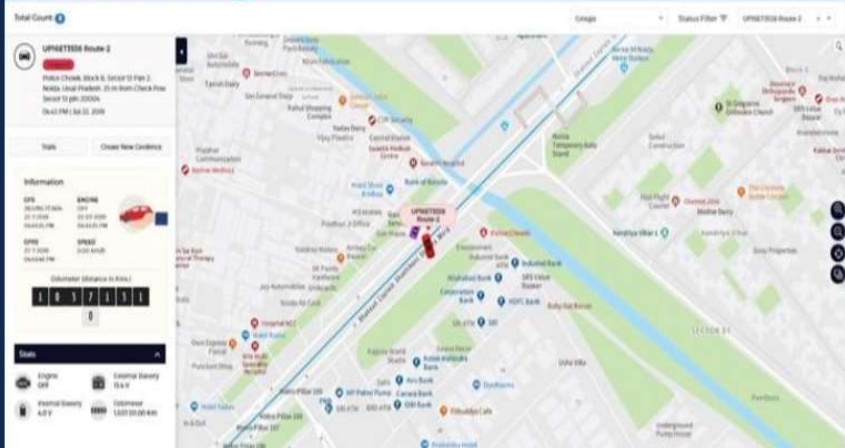
32

Web interface of school bus tracking solution allows the transport admin of a school to get the overview of the kids Route and boarding and De-boarding status for the particular Route.



33

- GPS based live tracking using mobile phone app & web application.
- Platform provides most accurate live tracking to the lowest level detail which is most essential in school bus tracking.



34

Students Module

Students Module allows the admin to maintain the complete dashboard child with Route , stop assignment and parent details.

Student

Home / Student

[Bulk Upload](#) [Add Student](#) [Assign Route and Stop Point](#)

Total Count: **10** [Send SMS](#) [Export](#) [Select a Route from List](#) [Select a class from List](#)

S.No.	Student Details	List of Routes	Parent Details	Activation Status	Actions								
1	<p>Sachin</p> <p>10-C</p> <p>jslc806@mapmyindia.com</p> <p>0112253</p> <p>0009559995</p>	<table border="1"> <thead> <tr> <th>Route</th> <th>Stop Point</th> </tr> </thead> <tbody> <tr> <td>sdfsfs</td> <td>Maruthi</td> </tr> <tr> <td>Pickup</td> <td>Maruthi</td> </tr> <tr> <td>Drop</td> <td>Maruthi</td> </tr> </tbody> </table>	Route	Stop Point	sdfsfs	Maruthi	Pickup	Maruthi	Drop	Maruthi	<p>234</p> <p>Father</p> <p>harsh.chauhan@mapmyindia.com</p> <p>8700874331</p> <p>Add Guardian</p>	Activated	⋮
Route	Stop Point												
sdfsfs	Maruthi												
Pickup	Maruthi												
Drop	Maruthi												
2	<p>kalavanan</p> <p>10-B</p> <p>js06zgb0@mapmyindia.com</p> <p>js06zgb0</p> <p>1233221</p> <p>423323</p>	<table border="1"> <thead> <tr> <th>Route</th> <th>Stop Point</th> </tr> </thead> <tbody> <tr> <td>Welcome to test</td> <td>Route Point 2 77067</td> </tr> </tbody> </table>	Route	Stop Point	Welcome to test	Route Point 2 77067	<p>kalal</p> <p>Guardian</p> <p>schoolbusparent21@gmail.com</p> <p>0123456789</p> <p>kalal</p> <p>Guardian</p> <p>kalavanan@mapmyindia.com</p> <p>7060334321</p> <p>kalavanan</p> <p>Guardian</p> <p>kalavanansj@mapmyindia.com</p> <p>7060334321</p>	Activated	⋮				
Route	Stop Point												
Welcome to test	Route Point 2 77067												

- Geofencing the bus stops and school will allow parents and school admin to receive update when bus leaves that stop.
- Multiple bus stops can be geofenced along the route.

The screenshot displays two panels from the InTouch software interface. The left panel, titled 'Geofence Configuration', shows a table of existing geofences. The right panel, titled 'Create New Geofence', shows a map interface for creating a new geofence.

Id	M	Type	Name	In School	Radius(m)
10000			Amelia Crescent	No	80.00
10001			Englewood Park	No	70.00
10002			MWC / Ashby Ct East 2	No	200.00
10003			Yuan Wai 2, Kennedy Street 2, Sector 02	No	70.00
10004			473 Oak Hill 1	No	200.00
10005			Waiman Road (opposite Waiman Road Primary School)	No	200.00
10006			Kapiti (University)	No	100.00
10007			Redwood Road, New Windsor Road Bridge	No	200.00
10008			Yuan Wai 2, Kennedy Street 2, Sector 02	No	70.00
10009			Green Lane, Cambridge College	No	200.00
10010			Waiman Road	No	20.00
10011			Yuan Wai 2, Sector 02	No	200.00
10012			Waiman Road	No	200.00
10013			Yuan Wai 2, Sector 02	No	200.00
10014			Yuan Wai 2, Sector 02	No	200.00
10015			Yuan Wai 2, Sector 02	No	200.00
10016			Yuan Wai 2, Sector 02	No	200.00
10017			Yuan Wai 2, Sector 02	No	200.00
10018			Yuan Wai 2, Sector 02	No	200.00
10019			Yuan Wai 2, Sector 02	No	200.00
10020			Yuan Wai 2, Sector 02	No	200.00

The 'Create New Geofence' panel includes a map with a circular geofence overlay, a 'Geofence Name' field, a 'Choose geofence area type' dropdown (set to 'Polygon'), and a 'Radius' slider set to 100 meters. It also includes a 'Tag' field and 'Cancel', 'Create', and 'Save' buttons.

Route tab allows the transport admin to create the routes which will be followed by buses.

The screenshot displays the 'Routes' configuration screen in the InTouch software. It features a map with a route line and a sidebar with route details.

Route Details:

- Route Name: Route 1
- Service Stop Type: Select Route Type
- Empty: * * * Pick * *
- Distance (km): 21.38 | Time (minutes): 00:36
- Latitude: | Longitude: |
- Tag: |
- Tags: |
- Add More
- Select stop from the list below:
- Geofence: [Select] [Add]
- 1: LAG High, Swanton Vihar Sector - [Edit]
- 2: 87 Unswamed Road, Block D4, Volody Vihar, S. - [Edit]
- 3: Waiman Play School - [Edit]
- 4: 12 In Avenue, Castle Esplanade Block A, Esplanade - [Edit]

The map shows a route starting from the top left, passing through several points, and ending at the bottom right. The sidebar includes 'Add More', 'Submit', and 'Report' buttons.

Following reports shall be downloaded from Intouch Web application

- Bus Attendance Summary
- Student Attendance Report
- Wrong Boarding Report
- Access Card Swipe report

The screenshot shows the 'Devices Report' interface in the Intouch application. The table lists 20 rows of data, each representing a student's attendance record for a specific route. The columns are: S.No, Student Reg No, Student Name, Class & Section, Assigned Route Name, Total Working Days, Present, Absent, and Attendance(%).

S.No	Student Reg No	Student Name	Class & Section	Assigned Route Name	Total Working Days	Present	Absent	Attendance(%)
1	025	ADITHYAN	VA	Route No 1 (PK) (Phase No 1 (PK) (Rpt))	1	1	0	100
2	026	MARIN CUPP	VA	Route Number 2 (PK) (Phase Number 2 (Rpt))	1	1	0	100
3	024	SHREYA SURESH	VA	Route Number 1 (PK) (Phase Number 1 (Rpt))	1	1	0	100
4	020	SHRANGI RAJESH	VA	Carrolla (L) (Rpt) (Phase Number 1 (PK) (Rpt))	1	1	0	100
5	027	AARAV	VA	Route Number 3 (PK) (Phase Number 3 (Rpt) (Rpt))	1	1	0	100
6	028A	SAH	VA	1st Route (L) (Rpt) (Phase Number 1 (PK) (L) (Rpt))	1	1	0	100
7	029	ANUSHA RUPA	VA	Route Number 2 (PK) (Phase Number 2 (Rpt))	1	1	0	100
8	027	ADITHYAN	BLD/COM/VA	Route Number 1 (PK) (Phase Number 1 (Rpt))	1	1	0	100
9	020	SAH	VA	Route No 1 (PK) (Phase No 1 (PK) (Rpt))	1	1	0	100
10	026	SHREYA SURESH	VA	Route Number 2 (PK) (Phase Number 2 (Rpt))	1	1	0	100
11	021	ADITHYAN	VA	Route Number 1 (PK) (Phase Number 1 (PK) (L) (Rpt))	1	1	0	100
12	027	SHRANGI RAJESH	VA	Route Number 4 (PK) (Phase Number 4 (Rpt))	1	1	0	100
13	029	ANUSHA	VA	Route Number 3 (PK) (Phase Number 3 (Rpt))	1	1	0	100
14	028	SAH	VA	Route Number 3 (PK) (Phase Number 3 (PK) (Rpt))	1	1	0	100
15	020	ANUSHA CHANDRAN	THA	Route Number 7 (PK) (Phase Number 7 (Rpt))	1	1	0	100
16	028	SAH	VA	Route Number 7 (PK) (Phase Number 7 (Rpt))	1	1	0	100
17	028A	SHREYA SURESH	VA	Route Number 1 (PK) (Phase Number 1 (Rpt))	1	1	0	100
18	020	SAH	VA	Route Number 1 (PK) (Phase Number 1 (Rpt))	1	1	0	100
19	026	ADITHYAN	VA	Route Number 3 (PK) (Phase Number 3 (Rpt) (Rpt))	1	1	0	100
20	026	ADITHYAN	VA	Route Number 4 (PK) (Phase Number 4 (Rpt))	1	1	0	100

Customized reports can also be generated as per the requirements of the school administration

ALERT	Benefit
Geo-fence (Area entry/ exit)	A Geo-fence is a feature which allows you to mark areas on the map and give them custom name for easy reference . Get SMS/Email alerts whenever bus enters and leave the areas
Over Speeding	Get a SMS/ Email alert when bus crosses specified speed limit
Engine On/Off	Get a SMS/ Email alert when the Engine turned on and off for the bus
Undue Stoppage	Bus is standing in a particular area for more than the defined duration then SMS/ Email alert will be sent
Current Location of vehicle at anytime by SMS	At any time you can SMS and fetch the current location of the vehicle by sending "FIND (last digits of the vehicle number)" to 56161

Dependencies from School

List of bus routes with Start and End Time

List of Students with the mobile phone numbers on which SMS are to be delivered

Admin Mobile numbers & Email Id's

Availability of buses

KYC Documents & authorization forms from Parents

Case Study – 1

Study for : Eicher

Study Area : Connected School Bus

Problem Statement : Eicher, the commercial vehicle manufacturing company wanted to develop a safe and secure transportation to school-going children by providing telematics solution.

Solution : With MapmyIndia Map API and the hardware, the customers have the option to purchase the Eicher range of school buses equipped with an integrated safety solution developed by MapmyIndia. The solution provides a comprehensive safety veil for children right from the point they board the school bus till the time they come back home safe & sound, and everything in-between.

Case Study - 2

Study for : Apeejay Group

Study Area : School Bus Tracking

Problem Statement : The client wanted to ensure the safety of school children by using the technology and wanted to give parents regular update of the children

Solution : With MapmyIndia Intouch application and hardware solution the school is able to ensure the safety in the best way possible. Now parents can track their children's location and can get update like estimated time of arrival at the bus stop etc.

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