Remote Vehicle Tracking and Monitoring (RVTaM) can track and monitor the vehicles remotely at any given time. With different sensors built into the device RVTaM offers a host of capabilities. The product allows for monitoring the safety of the drive based on various parameters.

### Features and Capabilities of RVTaM:

1. **Real-time Tracking**: Track the vehicle constantly with 10 seconds interval through GPRS. The vehicle location is constantly transmitted to the cloud.

2. **Data Storage**: Saves the vehicle location info when there is loss of GPRS signal and transmits it upon the GPRS signal availability. Can store up to 3 days of location data.

3. **Built-in Battery**: The built-in battery can keep the device active for 24 hours without the vehicle power supply.

4. **Drive Data**: Provides the average speed of the vehicle for the entire journey. Also provides

5. **Anomaly Detection**: Any irregular / aggressive acceleration and braking can be easily identified against the time and location information.

6. **Route Mapping**: The entire movement of the vehicle will be mapped on Google Maps in real time providing a very good visual depiction of the vehicle position at any given time.

7. **Geo-Fencing**: A virtual perimeter can be set for the vehicle and monitored. Any violation / close to violation by the vehicle from the set perimeter will be instantly alerted to the admin.

8. **Road Condition Depiction**: The condition of the road used by the vehicle will be graphically depicted showing potholes, humps, etc thus giving an idea about the smoothness of the ride.

9. **Analytics**: Precise analytical insights from the vehicle drive data collected can be provided for improved decision making.

10. **SMS Ping**: At any given time in the loss of GPRS signal, the location of the vehicle can be checked by the admin by pinging the device. An instant SMS with the vehicle location info
will be sent by the device.

11. Temperature Monitoring: The temperature of the device environment can be continuously monitored. Any anomaly will be instantly alerted to the admin.

Reporting Capabilities:

1. Customizable Dashboard: A very user intuitive dashboard that can be customized to show different information of the vehicle ride as per the user requirement in a single view.

2. Real Time Reporting: All the data can be seen and downloaded in real time.

3. Multiple Formats: The report can be provided in different formats like Excel, Pdf depending on the user needs.

4. Driver Report: A detailed report providing info on the driver’s performance like average speed driven at, number of times harsh braking / acceleration done, etc can be provided.

5. Off Route Report: A detailed report on how many vehicles violated the set perimeter with time and date stamp can be provided.
Fast In Fast Out Solutions (FIFO) is an advanced mobile application technology company that uses next generation smart phone technologies and big data analytics in multiple ways to enhance the customer experiences while travelling in a bus, at parking lots, road tolls and various other business places. Fast In Fast Out helps customers buy tickets in a bus in a faster and easier way without the hassle of tendering the right amount (change). This mobile technology helps organizations go-green by eliminating the need for physical paper tickets and passes and also eases the cumbersome money management processes. FIFO analyses unstructured data to create valuable insights that help the organization reach out to its customers through our mobile applications to enhance its customer experiences.

Fast In Fast Out Solutions has set up a smarter entry and exit technology at R E Rogers, a logistics company in Bangalore. The seamless mobile technology helps the employees of the organization use their mobile phones as ID cards while entering and exiting office premises. This has helped the company go-green by eliminating the need of physical ID cards and get a complete visibility into the employee entry and exit records. FIFO also provides customized and detailed reports using different analytics techniques that give valuable insights to the organization.

FIFO can help organizations achieve:

- Easy and efficient ticketing process in the buses easier and efficient by allowing the customers to purchase tickets inside the bus with just scanning their mobile phones upon entry into the bus, eliminating the change tendering hassles. The tickets would be sent as an SMS as well as a transaction history to the passenger’s phone immediately.
- Quick and paperless issue of Student passes / Annual and Monthly passes at any time convenient to the student / customer. With just a few steps the passenger can buy the required pass through the app at any time convenient using Paytm, credit card, debit card or net banking facility.
• Better money management in a more simple and transparent manner. Each ticket amount deducted from the customer account is directly credited to company instantaneously.

• Green initiative through mobile passes and paperless tickets. Monthly / Annual passes can be purchased through FIFO app without the need for the physical paper pass.

• Effective people management. With FIFO app the conductor need not struggle to issue tickets to so many passengers onboarding the bus. The whole process can be streamlined and made smoother for the customer thus making the conductor’s work easy.

• Intelligent insights on the performance of various bus routes. With the built-in analytics capability, FIFO can generate customized reports that can provide information about the money collected in different buses on different days and times.

Scope for advanced capabilities in the future with FIFO application:

• Automated entry and exit of passengers into and out of the bus. Using FIFO app the passenger can scan his mobile phone on entering the bus and then scan it again before exiting at the desired stop. FIFO app automatically deducts the right fare from the passenger’s account and then opens the door of the bus. This is based on the GPS mechanism built into the application.

• Clear visibility into the bus traffic and control. With FIFO app that integrates with GPS technology, organizations can have a complete real-time information from a single centralized location about which bus is at what point and with how many passengers on it.

• Informed decision making based on the reports provided by the FIFO analytical engine. The reports can offer details on various bus routes about the time taken by the buses at different times of the day, number of passengers using a particular route, money collected from a specific bus in a specific route on any given day, etc.

• Information delivery to the passengers about the time of arrival of the buses to a particular stop. Based on the GPS technology integrated in FIFO app customers can
find out what would be the average time taken for their bus to reach a particular stop. This can help customers reduce wait times.