

## PHASE 2 DOCUMENT SUBMISSION

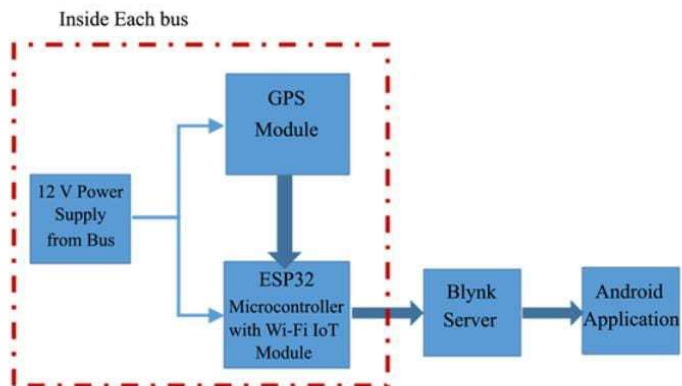
PROJECT: **PUBLIC TRANSPORT OPTIMIZATION**



### INTRODUCTION:

The motto of our project is to create a user-friendly application to track the routes and check the availability of the transports for passengers to save time. And also to reduce the traffic congestion by using these applications. We use C Programming to interact with the IoT.

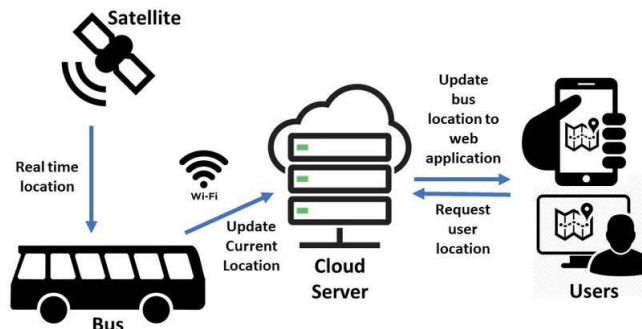
### BLOCK DIAGRAM:



## INNOVATIONS:

1. **Demand Responsive Transit:** we implement on-demanding services like the use of cars and taxis for passengers to reduce their wait times.

2. **Predictive Analytics:** By using real-time data on passenger demand and traffic conditions, we adjust routes and schedules.



3. **Mobility:** we will be integrating various transportation modes (eg, buses, trains, taxis) into a single web application to make it easier for passengers to plan their journey.

4. **Smart Infrastructure:** Implementing sensors and IOT devices at bus stops and on vehicles improves traffic flow and passenger safety.

5. **Passenger counting:** IoT sensors to count passengers as they board and exit vehicles. This helps the drivers to adjust the routes based on demand. And this information will be reflected in passenger's mobile application.