**DTC Bus Tracking**

Management of buses of public transportation systems is the main problem nowadays. Based on the current system, there is no such system which provides information about the DTC buses, its expected arrival time and the expected waiting time. Delhi transportation corporation (DTC) is the main public transport operator of Delhi. DTC operates on many routes in Delhi and neighbouring states which aims to provide efficient, economical , reliable and properly coordinated road transport systems. In the context of a properly coordinated transport system , the majority of the passengers prefer to use buses, but there are some issues with the arrival and departure of buses from their respective areas, because of that they have to waste their valuable time standing on the bus stops and waiting for the bus. Sometimes, buses reach to the empty bus stands which wastes a lot of time and energy. So, neither do people know when their particular bus will arrive at their bus stands. Although the DTC bus system has a specific time table usually this service doesn’t follow this which leads to unreliability on DTC buses and passengers don’t prefer to travel through buses and therefore prefer their own vehicle which is leading to uncontrollable pollution in the city.

Lack of a real time platform is the serious communication problem between the bus users and the bus management team. Without a real time platform, the bus management side is unable to update the latest bus traffic information for passengers. Passengers also cannot check on the updated bus schedule if there is a bus delay.

Our application provides the relevant information regarding all the bus numbers going from user’s source & destination along with the route details and real time location. Our application is a two way application: one for the passengers where passengers will know the location of the buses in their vicinity and one for the bus system where the bus system can update its location.

Our app will have the following features:

**For Passengers:**

1. Track Location : Any passenger availing our services would be able to locate the buses from a particular source to a particular destination.

2. Searching: This will provide the Users with the list of Buses running from that particular Source to a Particular Destination. It will also allow the user to sort the data as per the time slots.

3. Notifications: The app will require a permission from the User regarding the notification. Users will be updated and served with frequent notifications via Push Notifications Services, SMS, and Email. Notifications that will be sent would have information regarding:

* Bus Arrival
* Bus Delay

**For Bus:**

* Update Live Location of the Bus.
* Time for the Bus to reach the Particular Bus Stand.