BUS OCCUPANCY FINDER

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APPROACH

1.) Ticket Information Gathering:
   a. There will be a common cloud where the information of tickets sold from both ticket vending machine as well as mobile app will be gathered.
   b. Cloud will contain Seat no., source station, destination.
2.) Calculation of availability:
   a. Information of seat availability will be updated at each stop (tracked using GPS Tracker) by calculating no. of seats vacated plus no. of seats which was vacant prior minus no. of seats filled & withdrawn.
   b. seat no. allocated as well as vacated will be stored in cloud.
3.) GPS Tracker(**Requirement):**
   a. A GPS tracker will be installed in the bus that track the location of bus and will compare with the bus stops fed priory in the cloud.
   b. As soon as the location of bus matches with the bus stops mentioned in the cloud the new data of available seats will be updated in the database.

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TECHNOLOGY STACK

FRONT END:

- CSS
- Javascript
- HTML5

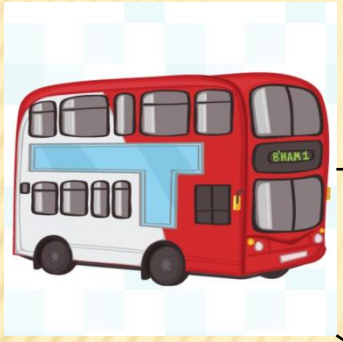
DATABASE:

- MySql

Back END:

- PHP

USE CASE



- Start of bus from the Bus Stop

Updating of Location to CLOUD

Analysis of Difference in path between bus and next bus stop

At next BUS STOP

Updating Of Seat Vacancy to CLOUD

Displays the Information regarding BUS and seat availability

App finds the nearest bus and checks seat availability

Opens app or webpage

Uses GPS of mobile

- Selects Destination
- Selects route

DEPENDENCIES

- For Cloud Service, dependence will be on cloud providing companies .
- Bus conductor to update information if any seat is withdrawn in between a journey by any passenger.
- GPS Vending:
  The only hardware required is GPS vending (tracker) that will track the location of bus and send location to cloud for comparisons when it approaches any bus stop.