



# SHUTTLE TRACKER

For CODECHEF IDEATHON 2023 batch  
under Track:- VIT related products



# TEAM MEMBERS

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# PROBLEM STATEMENT

Less number of students using benefit of shuttle service due to non availability of reliable shuttle location and frequency information in user-friendly manner. Lower ridership reducing the number, frequency and income from shuttle service. Crowding of campus walkways due to more pedestrians.

# CURRENT SITUATION



Shuttles are currently plying on the routes but at a given time location of shuttle is not available for students.



Students wait as the shuttle does not arrive at the notified times given on the sign board.



Especially inconvenient for far distances between hostel blocks for and academic blocks leading to it increases the risk of reaching late to classes.  
For example :  
J block to PRP , M-N-P Block to GDN , TT and similar situations for back girls hostel students as well.



It makes it difficult to reach on time in scenarios where students have back-to-back classes scheduled across distant academic blocks.  
For Example:  
PRP->MGR->PRP

# PROPOSED SOLUTION

- Enable VITians to provide **mobility web-based solution** and later app-based which can be downloaded from App store/Google play store.
- This app will be effectively **tracking live location of the shuttle** using Google Maps API.
- Enabling students to take an informed decision based on **availability of information** regarding ETA(Estimated Time of Arrival) of shuttles to their respective location.
- This will help us to find **optimized shuttle routes** and **number of shuttles** required.
- Recommendation to drive for shuttles during **high-demand-times**.  
For example: 7:50 AM for morning class students, 5:20 PM for evening lab sessions.

# BENEFITS POST IMPLEMENTATION

- Less number of students reaching late for classes.
- Increase in revenue for shuttles as more students will ride the shuttle which would have otherwise been lost.
- Making campus travel more-safe by reducing the number of VITians walking on roads inside the campus.
- Food and courier orders that are being delivered at Main gate now can be collected with ease.

# FUTURE UPDATES

- Conversion of current website into more convenient app.
- Looking to provide **“Alert functionality”** using push notifications to VITians based on classes schedule and alternate options at less crowded timeslots .
- Enable app to **receive voice inputs**.
- Based on ridership data captured suggestion to shuttle operators for **future planning of timings, frequency and best possible routes**.
- Looking into adding functionality **beyond VIT campus to travel routes** to Airport, Railway stations and nearby areas.

# LINK TO DEMO SITE

<https://kaushalvarunkv.wixsite.com/ride-shuttle-1>

Please accept the demo site as a basic implementation (Design for our proposed idea, Shuttle Ride). In demo site we have been able to capture the high-level design of tracking/monitoring of Shuttle service within VIT Campus area.

Our team is diligently working on the organic version of the website. We are confident to complete the task by the time the interviews commence.

<https://black-sirius69.github.io/>

(Organic Site under construction)



# THANK YOU