

Summer Semester Special 2021-22

ECE1901

Technical Answers for Real World Problems (TARP)



**VIT<sup>®</sup>**

**Vellore Institute of Technology**

(Deemed to be University under section 3 of UGC Act, 1956)

## **Assessment – 1**

### **Smartphone Application-based Shuttle tracking System**

#### **Team Members**

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## **Motivation**

Our college is a vast campus spread across more than 300 acres. In such a big campus a mode of transportation plays a vital role. We have college shuttle cabs that take students from one place to another throughout the day. But the biggest problem most of the students face is that they don't know when exactly the cab will come. Due to this, they might end up getting late to class. Which may lead to a lot of frustration as well.

If somehow the student gets the location of the cab nearest to him. Then he can decide whether to wait for the cab or move ahead without taking a cab.

## **Problem Statement**

To solve the unnecessary waiting of students for catching a shuttle cab in VIT. Smartphone Application-based Shuttle tracking System

## **Abstract**

We propose a model which can eliminate the waiting period for Shuttle cabs. The solution is based on a mobile application. It has two interfaces one for students and the other for drivers. The student can access the location of the shuttle through the location of the driver. This enables the student to find different cabs nearby.

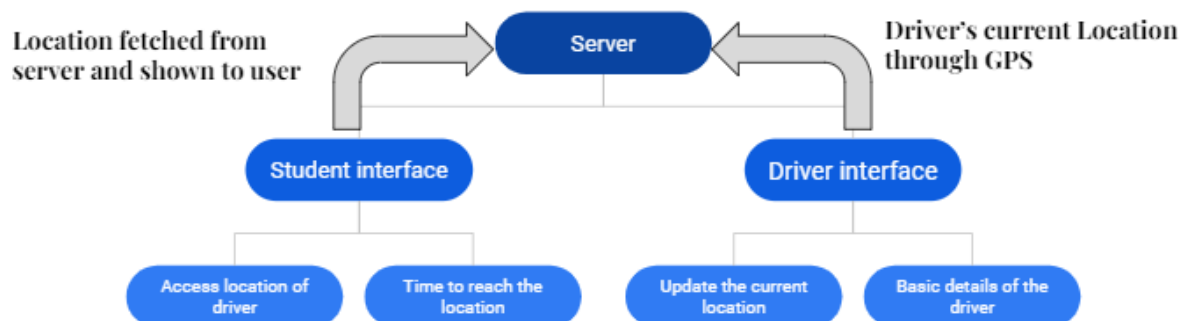
## Solution Methodology

Our solution is to make a mobile Application having two interfaces

**Student Interface** - It will show nearby cabs along with the time it will take to reach the destination.

**Driver Interface** - Driver's current position will be updated in the which the student will be able to view

## Block Diagram



## Timeline

**30<sup>th</sup> July 2022** – Planning the working of the App, with the necessary features and making an architecture of the whole system with UI/UX.

**15<sup>th</sup> August 2022** – Implementation of the Idea. Programming the app and to make sure it works as expected debugging it. Performing necessary checks. To come up with a basic working model.

**19<sup>th</sup> August 2022** – Incorporating additional features and making any changes as per requirement.

**26<sup>th</sup> August 2022** – Completion of the project followed by Report submission.