# Problem Summary

Due to the safety concerns of commercial ride-sharing and driver-for-hire systems (e.g. Uber), the CIO of OIT has requested the development of a technology platform that OIT faculty, students, and personnel can use to find transportation. In addition to improved safety, the motivation for this technology platform is to reduce OIT’s environmental carbon footprint.

The system should support three types of users: system administrators (the technical and non-technical personnel that can oversee the operation of the system), drivers, and riders.

# Resources

You may work on this project as a two-person team or you may choose to work alone.

# Requirements

You are required to implement the minimum functionality. The following is a summary of the minimum transactions that the system should support. The data from each transaction should be persisted in a database.

* Ability for a rider to register as the user type: rider
* Ability for a driver to register as the user type: driver
* Ability for a rider to submit a request for a ride by providing at a minimum, his/her physical location and the desired time
* Ability for a driver to browse unfulfilled ride requests and to accept a request
  + As part of the acceptance, the driver shall be required to provide an estimated time of arrival
  + As part of the acceptance, the rider should receive notification of the acceptance, the driver’s information including first name, vehicle type, and license plate number as well as the estimated time of arrival
* Ability for a rider to provide payment details and submit them upon arriving at his/her destination

Note that you can receive full credit on the project by implementing just the basic capabilities specified above, and a simple user interface (web, mobile web, mobile, etc.). Example frameworks you can use include, but by no means limited to:

* .NET, ASPX, C#
* Java, JSP, JPA
* Android, iOS, Windows Phone, Xamarin
* Python
* PHP
* Ruby on Rails

The focus of the project is the database design and the use of any system framework. A sophisticated or comprehensive interface is not the purpose of the project.

You project will be graded on the following:

**1) Project Demo** – a demonstration of your project to the class.

**2) Project Submission** - submission should include:

* team members
* E/R diagrams
* database code, such as SQL, DDL, DML, stored procedures, and triggers
* a summary of the system framework and technologies used in the project
* screenshots of the user interface illustrating all transactions
* other source code