**ISTE 500 and 501: Senior Development Project**

**Project: Ride Request and Assignment System**

**Brief description of problem to be addressed:**

Senior citizens who are no longer able to drive need transportation to get to and from medical appointments, grocery stores, and other essential locations. In order to fill this need, volunteer organization exist that will match volunteer drivers with the senior citizens (clients) needs for transportation.

Several years ago, one of the RIT Senior Project Development teams developed a system for one such organization. This project will use that system as a model, but will be designed so that it is customizable and therefore of use to multiple organizations.

**Primary goals of the project:**

This work is currently being carried out through a combination of spreadsheets, emails, and phone calls. The purpose of the new system is to make it easier to enter, maintain, and report on the necessary information for the clients, drivers, and organization administrators.

The interface for the system must be very easy to use. All the parties involved will be using the system on an infrequent basis. The interface must be clear and intuitive. Documentation must also be provided so that new users can be brough on board and so the system can be maintained/enhanced.

**High-Level Functional Requirements:**

• Maintain names and profile information of clients.

• Maintain names and profile information regarding volunteer drivers.

• Provide ability for a client to request a ride.

• Provide automation or supportive utility for matching drivers and clients based on availability and other parameters, to be specified.

• Maintain a searchable history of all trips scheduled, made, or cancelled.

• Generate encrypted confirmation emails to driver and client when an appointment is made. • Provide ability for drivers to log time and mileage for completed trips.

• Generate necessary reports for review.

• Export certain data subsets to an Excel spreadsheet

• Provide a mobile interface for drivers to enter their completed trip information.

• Generate confirmation emails to driver and client when an appointment is made.

• Provide the ability for clients to donate money as a thank-you for the ride.

**High-Level Business Requirements:**

• Support roles and associated permissions for clients, drivers, dispatchers, and administrators.

• All personal and health-related information storage and transmission must be secure.

• Allow permissions for each role to be customizable during installation of the application.

• Allow customization of all “dropdown information”, e.g., Purpose of Ride, during installation of the application. • Allow dynamic customization of permissions for each role.

• Allow dynamic customization of all “dropdown information”, e.g., Purpose of Ride.