**Requirements Document**

**Date Submitted:**

**Application Title**

**Purpose:**

**Program Procedures:**

**Algorithms, Processing, and Conditions:**

**Notes and Restrictions:**

**Comments:**

Kenny Coltharp

May 31, 2015

Problem3

This application calculates the distance a vehicle has traveled. Then display that information in a table format with the hour(s) listed in one column and the distance traveled from the beginning of the vehicles journey in another column. Each row will be in sequential order of the amount of hours the vehicle has been traveling.

The user should be prompted for the filename and path (location) where to write the data. The user should be continually prompted for the speed of vehicle until a valid nonnegative numeric number is entered. The user should be prompted for the amount of time in hours the vehicle has been traveling until a valid nonnegative numeric number is entered. The application should then make the appropriate calculations, display them in table format to the user, and write the table formatted data to the file of the user choice.

1. The user must be prompted for the filename and location to write the file.
2. The user must be prompted for the speed, in MPH, of the vehicle traveling.
3. The user must be prompted for the amount of time, in hours, the vehicle has been traveling.
4. Once the speed of the vehicle and the amount of time the vehicle has been traveling has been gathered, the calculations will begin.
5. Calculations for the amount of the distance the vehicle has traveled are completed.
6. Once the calculations are complete, these calculations will be displayed to the user in the form of a table and written to the file with the name and location of the user’s choice.

1. If the user enters a value that is not a valid Internet package, the user should be advised and asked for a valid entry.
2. If the user enters a value that is not numeric, the user should be advised and asked for a valid entry.
3. If the user enters a value that can’t be converted to an integer, the user should be advised and asked for a valid entry.
4. If the user enters no data, the user should be advised and asked for a valid entry.
5. If the user enters a negative number or does not enter a number, the user should be advised and asked for a valid entry.

None