CLD Exercise 6: Comma Separated File Utility

Objective

Develop a VI that reads and writes comma separated variable (`.csv`) data to and from a UI data structure. Use the provided cluster and the application front panel (Figure 1).

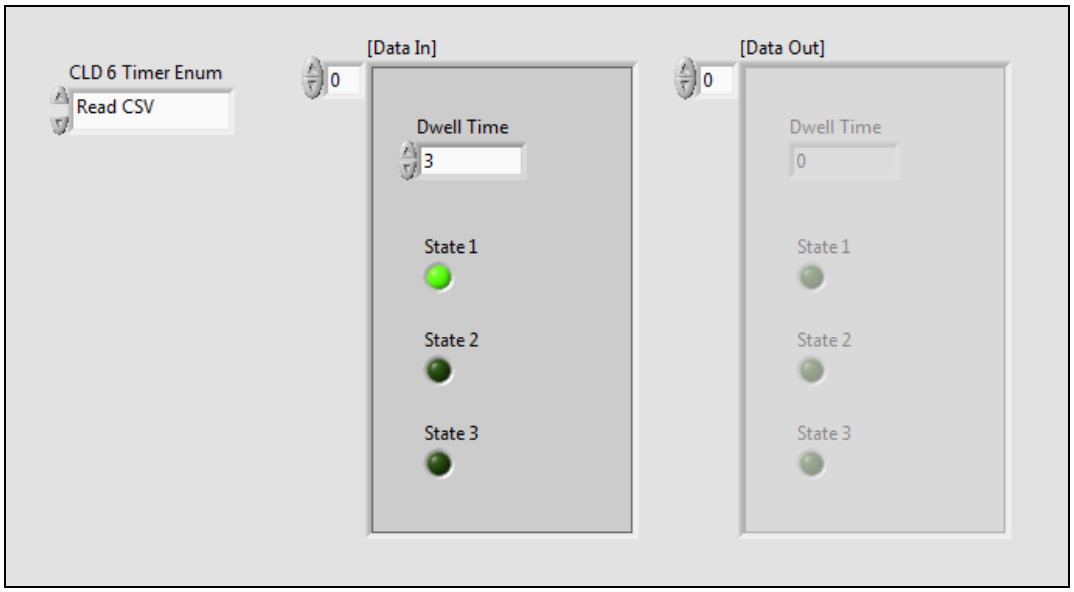

Figure 1. Application Front Panel

General Operation

The application will open a CSV file and either read the contents and put the values into a cluster array, or it will take values from a cluster array and save them in the file. The application will not be case sensitive.

Application Terminology

Read/Write

The action for the VI.

Dwell Time

The **Dwell Time** is the time that would be used for a timer.

VI File Structure

The path to the configuration file must be relative and must not be hard coded. See the configuration file `CLD 6 CSV File.csv` for the data format.

The **Dwell Time** and Boolean values for each state are as follows:

Time	Bool1	Bool2	Bool3
3	TRUE	FALSE	FALSE
4	FALSE	TRUE	FALSE
5	FALSE	FALSE	TRUE

Table 1. CSV file format

Initialization

There are no specific initialization requirements. The **Array In** control is defaulted to contain three cluster elements.

Operation

VI Run

- **Set:** The application will read the file data and sequentially place the four data elements as clusters into the cluster array.
- **Get:** The application will read the input array and sequentially write the clusters as rows of CSV data.