



DataAcquisition

It fetches needed data by API calling Pi's API address. After that, it will download a JSON formatted data collection, which includes SCADA's configuration file and up-to-date system status.

DataProcess

It processes fetched data so that the data is coherent to display on the screen. (e.g., truncation of data) What's more, it deals with exceptional cases. For example, when the transmission from the SCADA system is unstable, instead of providing blank data, it continues to serve the driver with its old cached data and warns the unstable connection.

DisplayRender

It is responsible for drawing the UI on display. It renders the display according to data and warnings from DataProcess.

AudioBroadcast

The audio is to accompany the display. The audio module plays voice files that correspond to warning messages so that Dashboard can provide more well-rounded warnings.