Visualizations README

This document summarizes some of the important aspects of the six Visualizations that support the text *Discrete-Time Systems: Fundamentals and Applications* by Donald E. Kirk and Robert D. Strum, National Technology and Science Press, 2013.

The Visualizations are the LabVIEW Virtual Instruments (VI s):
1. Sampler
2. Convolution
3. RealPole
4. CCPolePair
5. CirConCor
6. FilterDes

Each of these VIs has its own README file that the reader should consult before using the VI.

Some general aspects of all of the VIs include the following:

- Once LabVIEW is installed, a VI can be opened by double clicking on the file named <VIname>.vi, for example, to open the Sampler VI, double click on Sampler.vi.

- The window presented to the user upon opening a VI is called the *Front Panel Window*. This window is locked on all VIs to prevent the user from inadvertently changing the items in the Front Panel Window (FPW).

- To execute an open VI select "Run" from the "Operate" drop-down menu on the Front Panel Window. "Run" must be selected for the user to enter input data and run the VI.

- Another window available to the user is the *Block Diagram Window*. This window can be opened by selecting "Show Block Diagram" from the "Window" drop-down menu on the FPW. Most users will not want to display the block diagram unless they want to view the underlying LabVIEW graphical code or if they want to alter a copy of the VI for their own needs.

- Once a user is finished with a VI the "Stop" button should be selected on the FPW or from the "Operate" menu on the DPW.

- To close a VI left click the × icon at the upper right corner of the FPW or select "Exit" from the "File" menu. If you see a menu asking "Save changes before closing", select "Don't Save".

- Once you have executed a VI it will appear on the "Getting Started" window for LabVIEW in the "Open" list. To open a VI on the list just double click it.

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