In this work, a Remotely Accessible and Configurable Digital Cathode Ray Oscilloscope experiment system is designed in LabVIEW graphical development platform. The LabVIEW application is used to perform several tasks that include user interface design, publishing and sharing measured data over the web, instrument control and remote access to a system in the campus Physics lab. This paper describes how to control a digital CRO existing in a laboratory via a PC running LabVIEW from National Instruments. In addition, how to turn any LabVIEW application into a remote application accessed via a Web browser without any additional development time is explained in detail. The other instrument used in the work is a non-programmable signal generator. Ensuring instrument control and publishing the front panel on the web, students are allowed to access and control the system variables such as adjusting the CRO timebase, running Autosetup, Reading the Waveforms and acquiring continuous signals from the signal generator by the CRO. A student accesses the website through a web-browser (Internet explorer) by using an URL provided. Once the website is located, the student is required to login by putting in the name and the admission number. Once these details are verified, the user is allowed to proceed with the experiment.