

GENERIC COMPONENT CLASS IN JAVA FOR CYCLOTRON CONTROL SYSTEM

S. Dasgupta, VECC

Variable Energy Cyclotron Centre Department of Atomic Energy 1/AF, Bidhan
Nagar Calcutta -700 064 INDIA

For use in the universal MMI[1], a generic Java class-structure comprising of a no. of Cyclotron oriented control components with effective control features, has been constructed. The usable Components are of four distinct categories e.g. Boolean Monitor, Boolean Control, Analog Monitor and Analog Control. They can be interlinked in tree structure. Operational safety interlocks can be implemented in the tree-riding. An important Component "Multi-channel selectable Graph", with some of the above functionalities, has been implemented. Boolean components are usable as digital control components for switching of Pumps, Valves and to monitor status of components like Pressure switch etc. Analog components are meant for set point control and measuring equipment to monitor Voltage, Current, Pressure and Temperature etc. Object declaration is uniform for all kinds of controls, needing only Type, Name and tree position to be passed as arguments.

S. Dasgupta, "Sharable GUI Objects for the Operator's Console" p.p.528, Proc. of ICALEPCS'97, Baijing