In conclusion, designing a real time system can be a smart way whether we need to make sure that certain aspects of our software run in a certain amount of time, or whether we need to run our job reliably for a long period of time. If we are working on a mission-critical or safety-related project, the need for a real time system is obvious.

The real time system must react to external interactions in a predetermined period of time. Successful execution of the process relies on the proper and timely operation of the procedure. Design the hardware and software in the device to satisfy the real-time specifications. In order to satisfy these conditions, the off-clock detection mechanism and the software communication system concerned must operate under a short time budget. The system must satisfy these criteria for all calls made at any given time While the real-time technology provides rewards to the organization or individuals who used it, there is a time when the system has simply collapsed and caused a horrific tragedy for someone who relies heavily on it.

And where accurate scheduling and long-term durability are not absolute criteria for your project, installing a real time system will offer additional peace of mind that your software can continue to operate without interrupting the calculation or control procedure. If the device you are building will result in repair costs in the event that it is disrupted, the hardware and software costs needed to set up a real-time system could well be worth investing in.

The real-time method would not actually make sense for any calculation or control project. Real-time operating systems usually run only one job at a time, and most real time systems do not have a user interface; in this case, a different system may be used to have user interfaces or user controls. Some projects also include hardware determinism where logic is applied to ASIC or FPGA. Yet, thousands of the real-time solutions are in the service today and will continue to be a feasible option for projects that require accurate scheduling and high reliability.