PROJECT:

Real Time Data Acquisition System

- Main elements: Server and Client
- Code at each side contains a 2 threads i.e. a parent thread and child thread.
- At the server side, the parent thread collects data samples i.e. digital data from the DT9816 module, processes the commands received from the client and performs the necessary data processing/filtering.
- At the client side the parent thread accepts user input and sends the commands to the server. The client side is responsible for controlling the entire system.
- The child thread on both the sides is responsible for receiving data from either side via a full duplex UDP connection.
- The parent child on both sides is responsible for sending data to either side via the full duplex UDP connection.
- A network connection is established using Windows Socket.
- Multithreading is done by using the Win32 API.
- Programming language: C++.
- IDE: Visual Studio 2010.
- Team project with 2 members in each team.