HimSAR software is developed to estimate the parameters of snow like wetness, density, surface dielectric. This software is controlled through a graphical user interface (GUI) written in Microsoft Visual C++.Net (MSVC or VC++). MSVC is a programming environment used to create graphical user interface (GUI) applications for the Microsoft Windows family of operating systems. HimSAR software is basically an MFC (Microsoft Foundation Classes) Application developed under Visual Studio 2010. The MFC is used for creating Windows Applications. The MFC provides a common application programming interface (API) for Windows programs. It provides all of the features we expect from a Windows program: menus, minimize and maximize buttons, text boxes, checkboxes, list boxes, combo boxes, radio buttons, graphics and multimedia. The MFC Library saves a programmer time by providing code that has already been written. It also provides an overall framework for developing the application program.

HimSAR software contains one common single document interface (SDI) mainframe window. This window incorporates title bar, menu bar, status bar and dialogs. The dialog will be displayed when the end user triggered the menu in menu bar. In the dialog box, multithreading technology is implemented in order to speed up the execution of the process while handling large images. Multithreading is an ability of a platform (Operating System, Virtual Machine  etc.) or application to create a process that consists of multiple **threads of execution (threads).** A **thread** of execution is the smallest sequence of programming instructions that can be managed independently by a scheduler. These threads can run parallel and it can increase efficiency of programs. Multithreading is used when the parallel execution of some tasks leads to a more efficient use of resources of the system. This software has many user defined functions and that can be re-used. Also pointers and array in C++ have been implemented for the dynamic memory allocation and deallocation for huge images. It will reduces the processing time and handle the system resources efficiently. For executing the HimSAR software in end user system, the components like .Net Framework 4.0 should be installed.