Create a windows based GUI environment for the development, debugging, saving, editing, and printing of assembly language programs written for the "ASSIST" assembler which emulates System/360/370 execution. **ASSIST**, an acronym for the "**Assembler System for Student Instruction and Systems Teaching**", is an IBM System/370-compatible assembler and interpreter. It was developed at Penn State University by John Mashey and a group of Mashey's student assistants in the 1970s. In the beginning, ASSIST was made available only to universities. It was implemented at several hundred of them and it was occasionally used outside the university setting. In 1998, Penn State declared that ASSIST was no longer copyrighted. The program is now freely available.

Referring to the DOS version, all actions given within the currently used emulator (or equally useful actions) should be supported along with additional windows oriented IDE tasks. These actions should be delineated extremely early in the process. This software is to be developed for use by future CS 310 classes at the University of North Alabama. Other features which may be desirable can be found in the MARIE Machine Simulator system used in CS 311.