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ASSIST/UNA Project

**Spec Doc conference: Updates and Recommendations**

* Use references inside the Spec Doc
* Remove the caveat of the developers having to adapt to the constraints of the Visual C# programming language and the .NET framework (line 106)
* Line 107, the mention of the modified text field needs work
* Add a definition or flow chart in the appendices to better explain the backend and frontend separation or take it out of the spec doc entirely
* Specify what registers will be displayed (general purpose registers needs to be specified)
* Specify that in processing it builds an object program and then we “simulate an execution of the object program on the IBM mainframe”
* In processing, make a reference to the machine operations that are to be implemented
* Format file of a .PRT file in the appendices
* NOTE: Leaving off the address line of the .PRT
* Remove section 2.4, place in design document
* Line 445, consider “The delivery method will be negotiated later after this document is approved by both parties”
* Line 476, consider changing updated to “amended upon negotiating and approval”
* The appendices should only hold information that is referenced
* Line 346 should mention that it would print the errors more explicitly
* Add a section on testing and testing plans
* Client needs to finalize the color scheme
* Two Pass Assembler:

**Pass 1:**

* 1. Maintain Location Counter
     + Make use of machine op table
     + Process DS and DC statements
       - Know sizes
       - Enforce Boundary Alignments
     + Process literals
       - Create a literal table
  2. Construct the symbol table
  3. Create Intermediate File for Pass 2
  4. Process assembler directives
     + START
     + END
     + USING
     + SPACE
     + TITLE
     + EJECT

**Pass 2 (Using Intermediate File from Pass 1 OR original Source):**

1. Create object code for each line
   * Use machine op table
   * Use symbol table
   * Use Literal table
2. Create listing line in the PRT file
   * LOC
   * Object code
   * Line number
3. Print any errors in Pass 1 or 2
4. Create an object program