**Meeting Minutes**

**Date:** February 18, 2014

**Start Time:** 6:50pm

**End Time:** 7:40pm

**Members Present:** Drew Aaron, Michael Beaver, Clay Boren, Chad Farley,

Andrew Hamilton, Travis Hunt, and Dr. Patricia Roden

**Members Absent:** N/A

**Topics** **Discussed**

* Software Requirements Specification Document
* GUI Color Scheme

**Decisions and Actions Taken**

The team discussed the Software Requirements Specification Document (SRS) with the client. The client provided constructive feedback. The SRS currently suffers from ambiguities and incompleteness. However, the client’s feedback, when applied, should alleviate at least the ambiguity, in addition to most incompleteness. A summary of the client’s criticisms is attached.

The client provided the team with a lesson in the assembly process. The complete two-pass assembly algorithm is attached.

The client approved the team’s GUI color scheme, but the color scheme needs to be featured in the SRS before it can be formally approved.

The team will supply the client with an updated version of the SRS no later than Sunday, February 23, 2014.

**Supplementary Information**

**Client Feedback**

* The Appendix needs to be referenced within the body of the SRS. Every item in the Appendix must be referenced.
* Line 106: Remove the caveat about developers adapting to the constraints of Visual C# and the .NET Framework.
* Line 107: The mention of the modified text field needs to be relocated to the specific requirements, not the general requirements.
* Better define the frontend and backend.
* Specify that the general purpose (and PSW) registers are being used.
* Specify that “processing” entails assembling and creating an object program and then simulating “an execution of the object program on the IBM mainframe.”
* In processing, make a reference to the machine operations (machine op. table) in the Appendix.
* Include format of the .PRT file in the Appendix.
  + Note: Omit the address field in the original ASSIST/I .PRT listing.
* Remove Section 3.4 and place in the design document.
* Line 445: Consider rewording: “The delivery method will be negotiated later after this document is approved by both parties,” or similar.
* Line 476: Consider changing “updated” to “amended upon negotiation and approval.”
* Line 346: Explicitly explain that errors would be printed (in Pass 2 of assembly).
* Add a section on testing and testing plans.
* In Section 2.4 General Constraints, consider other constraints, such as storage and speed.
* Include a list of error messages within the Appendix.
* Constraint: The interface windows can (or cannot) be maximized (full screen).
* Screen captures should be in color.
* Addresses in ASSIST are 6 digits.
* Remove the backend and frontend diagrams from the Appendix.

**Steps of a Two-Pass Assembler**

Pass 1:

1. Maintain the Location Counter (LOC)
   1. Make use of the machine op. table
   2. Process DS and DC statements
      1. Know sizes
         1. Fullword = 4 bytes
         2. Doubleword = 8 bytes
         3. Halfword = 2 bytes
         4. Character = 1 byte
      2. Enforce boundary alignments
   3. Process literals and create a literal table
2. Construct the symbol table
   1. Anything in columns 1-8 and the LOC go into the symbol table
3. **(Design Option)** Create an intermediate file for Pass 2
4. Process assembler directives
   1. START
   2. END
   3. USING
   4. DS and DC
   5. SPACE
   6. TITLE
   7. EJECT

Pass 2 (using intermediate file from Pass 1 or original source file):

1. Create object code for each line
   1. Use machine op. table
   2. Use symbol table
   3. Use literal table
2. Create a listing line in .PRT file
3. Print any errors from Pass 1 or Pass 2
4. Create an object program (which the simulator executes)