Project Phase 1:

1. Send at least one team member to the Center for Handicapped Children and meet with Nancy Godson or Dale O’Toole, to discuss the needs of teachers and therapists. The school is located at 80 Lawrence Bell Drive, Williamsville (near ECC North). Dress nice. Please wait until we talk about the center’s students in class. The tour times are on the class web site, but we can arrange additional times if needed.

2. Find at least 10 web sites that offer information or products dealing with augmentative input devices or other hardware related to the problem that you have chosen to address. List those sites.

3. The document that a potential customer presents to you, the software system designer, requesting a problem solution and system design is called the System Specification. Write the System Specification for your chosen project. One typical template, but by no means the only, is as follows (Hint: its intent is usually to request help solving a problem. It has a fixed budget and schedule. The allocation of hardware and software is usually specified.):

   Overview, Introduction, or Scope

   Assumptions / Limitations / Constraints

   Functional Requirements (remember, the customer writes this)

   Configurability

   Execution Hardware

   Documentation

   Security

   Testing

   Reliability

   User Profile

   Training

   Managing Changes
     Maintenance
     Enhancements
     Flexibility
     Requirements Changes

   Schedule Limits
     Calendar
     Status and Reviews

   Budget Limits

   Risks
Cross Reference Listing - This is a simple list of the individual capabilities of the end system, nicely numbered for reference later. Construct the table. This table, will serve you later in the design phase, to assure that all items that need to be designed and coded are included.

4. The document that you would submit in response to the customer’s System Specification is called a Software Requirements Specification (the “SRS”) and tells a potential customer how you intend to solve his problem. It must be approved before specific design begins, but will give in general terms enough details to get a customer to agree to a contract. Write the Table of Contents for the SRS (not the document, only the Table of Contents).

5. Central to the finished SRS is a block diagram of the hardware / software architecture. Draw a block diagram of your architecture as you see it today (although it will likely change), in any format (UML, Visio, anything).

6. Knowing that the customer may change his requirements as the project progresses, and that new operations may need to be added, suggest an integration thread, or first-pass partial design, containing a subset of the requirements. Explain why your integration thread can serve as a foundation for the remainder of the system to be built upon. For an explanation of what, exactly, constitutes an integration thread, read the essay on Objects and Modeling on the web site.